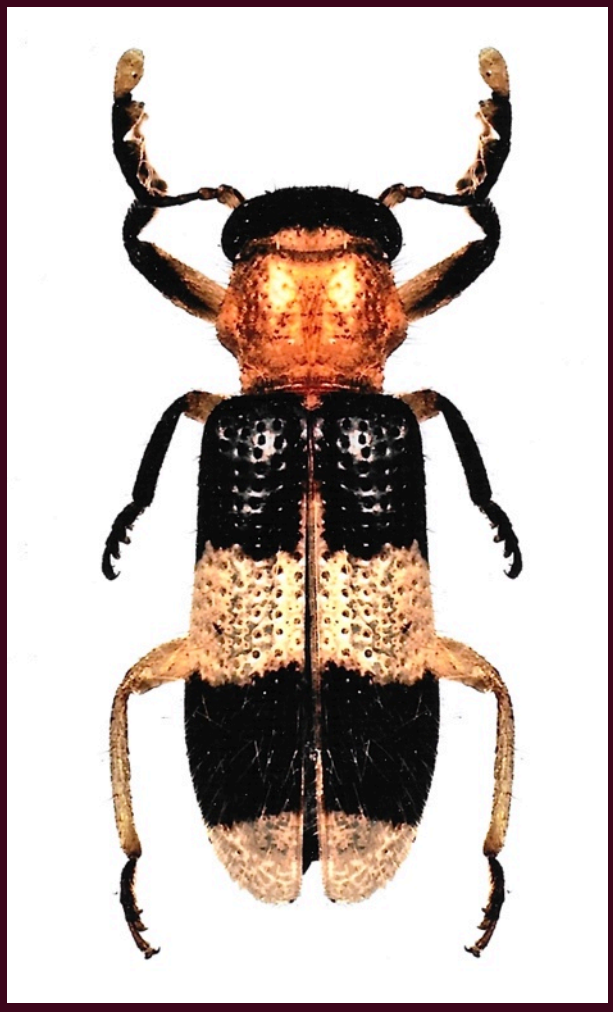
# Faunitaxys

*Revue de Faunistique, Taxonomie et Systématique morphologique et moléculaire*

Weston Opitz



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**Classification, natural history, and evolution of the subfamily Peloniinae Opitz (Coleoptera: Cleroidea: Cleridae). Part XV. Taxonomic revision of the new world genus *Cregya* Leconte**

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# Abstract

The genus *Cregya* LeConte is redefined to include 117 species. There are 89 new species described herein:

(**1**) *C. abacula* **n. sp.**, (**2**) *C. agnosta* **n. sp.**, (**3**) *C. alicula* **n. sp.**, (**4**) *C. america* **n. sp.**, (**5**) *C. ametra* **n. sp.**, (**6**) *C. andersoni* **n. sp.**, (**7**) *C. andros* **n. sp.**, (**8**) *C. apanthesa* **n. sp.**, (**9**) *C. apicula* **n. sp.**, (**10**) *C. aragua* **n. sp.**, (**11**) *C. ardis* **n. sp.**, (**12**) *C. asarota* **n. sp.**, (**13**) *C. assumenta* **n. sp.**, (**14**) *C. atracapitis* **n. sp.**, (**15**) *C. bipunctipennis* **n. sp.**, (**16**) *C. campana* **n. sp.**, (**17**) *C. caraca* **n. sp.**, (**18**) *C. cariari* **n. sp.**, (**19**) *C. caruaru* **n. sp.**, (**20**) *C. castanea* **n. sp.**, (**21**) *C. casusa* **n. sp.**, (**22**) *C. catoma* **n. sp.**, (**23**) *C. cerina* **n. sp.**, (**24**) *C. corumba* **n. sp.**, (**25**) *C. cruzvera* **n. sp.**, (**26**) *C. decima* **n. sp.**, (**27**) *C. decusoris* **n. sp.**, (**28**) *C. diffusa* **n. sp.**, (**29**) *C. dybasi* **n. sp.**, (**30**) *C. egeri* **n. sp.**, (**31**) *C. ekteina* **n. sp.**, (**32**) *C. elegantula* **n. sp.**, (**33**) *C. ferratilis* **n. sp.**, (**34**) *C. furfurosi* **n. sp.**, (**35**) *C. glena* **n. sp.**, (**36**) *C. goias* **n. sp.**, (**37**) *C. gutta* **n. sp.**, (**38**) *C. guttula* **n. sp.**, (**39**) *C. hamatilis* **n. sp.**, (**40**) *C. hedra* **n. sp.**, (**41**) *C. helva* **n. sp.**, (**42**) *C. hexalineata* **n. sp.**, (**43**) *C. infula* **n. sp.**, (**44**) *C. inornata* **n. sp.**, (**45**) *C. jatai* **n. sp.**, (**46**) *C. juxta* **n. sp.**, (**47**) *C. karafucosa* **n. sp.**, (**48**) *C. kreagris* **n. sp.**, (**49**) *C. lenticula* **n. sp.**, (**50**) *C. linea* **n. sp.**, (**51**) *C. linomolina* **n. sp.**, (**52**) *C. lita* **n. sp.**, (**53**) *C. marysearsi* **n. sp.**, (**54**) *C. mekosa* **n. sp.**, (**55**) *C. mexcala* **n. sp.**, (**56**) *C. mocagua* **n. sp.**, (**57**) *C. morrisi* **n. sp.**, (**58**) *C. nebula* **n. sp.**, (**59**) *C. nubilosa* **n. sp.**, (**60**) *C. odonta* **n. sp.**, (**61**) *C. palaga* **n. sp.**, (**62**) *C. pallida* **n. sp.**, (**63**) *C. panna* **n. sp.**, (**64**) *C. pannusa* **n. sp.**, (**65**) *C. paragramma* **n. sp.**, (**66**) *C. pereira* **n. sp.**, (**67**) *C. pictila* **n. sp.**, (**68**) *C. preclara* **n. sp.**, (**69**) *C. rifkindi* **n. sp.**, (**70**) *C. rileyi* **n. sp.**, (**71**) *C. robusta* **n. sp.**, (**72**) *C. sina* **n. sp.**, (**73**) *C. stilastichosa* **n. sp.**, (**74**) *C. stricta* **n. sp.**, (**75**) *C. tambopata* **n. sp.**, (**76**) *C. terapoto* **n. sp.**, (**77**) *C. teretis* **n. sp.**, (**78**) *C. tessara* **n. sp.**, (**79**) *C. tetralineata* **n. sp.**, (**80**) *C. trilineata* **n. sp.**, (**81**) *C. turrialba* **n. sp.**, (**82**) *C. ungula* **n. sp.**, (**83**) *C. urica* **n. sp.**, (**84**) *C. variegata* **n. sp.**, (**85**) *C. versicula* **n. sp.**, (**86**) *C. verticula* **n. sp.**, (**87**) *C. villavera* **n. sp.**, (**88**) *C. yojoa* **n. sp.**, and (**89**) *C. zacapa* **n. sp.**

There are 28 previously described species:

(**1**) *C. abdita* Wolcott, 1927, (**2**) *C. bicolor* (Laporte, 1836), (**3**) *C. bilineicolle* (Chevrolat, 1874) **nov. stat.**, (**4**) *C. casselorum* (Opitz, 2014), (**5**) *C. catarina* (Opitz, 2014), (**6**) *C. chevrolati* Corporaal, 1950, (**7**) *C. confluens* (Gorham, 1877), (**8**) *C. contaminata* (Klug, 1842), (**9**) *C. duodecimpunctata* (Klug, 1842), (**10**) *C. fimbriolata* (Chevrolat, 1843), (**11**) *C. gemina* (Schenkling, 1900), (**12**) *C. guyanensis* (Chevrolat, 1876), (**13**) *C. inscripta* (Gorham, 1883), (**14**) *C. insignata* Pic, 1952, (**15**) *C. insularis* (Gorham, 1898), (**16**) *C. kraatzi* (Schenkling, 1900), (**17**) *C. lineolata* (Gorham, 1883), (**18**) *C. lunulata* (Pic, 1940), (**19**) *C. mixta* LeConte, 1865, (**20**) *C. nigropunctata* (Chevrolat, 1876), (**21**) *C. oculata* (Say, 1835), (**22**) *C. quadrinotata* (Chevrolat, 1874) **nov. stat.**, (**23**) *C. quadrisignata* (Spinola, 1844), (**24**) *C. seabrai* Peracchi, 1962, (**25**) *C. sexnotata* (Klug, 1842), (**26**) *C. vitticeps* (Blanchard, 1844), (**27**) *C. vittipennis* (Schenkling, 1906), and (**28**) *C. withlacoochee* Rifkind, 2012.

New synonymies involve:

*Enopliun crinitum* Klug, 1842 **nov. syn.** with *Cregya bicolor* (Laporte, 1836), *Pelonium conforme* Chevrolat, 1876 **nov. syn.** with *Cregya chevrolati* Corporaal, 1950, *Pelonium subapicale* Schenkling, 1900 **nov. syn.** with *Cregya chevrolati* Corporaal, 1950, and *Pelonium divisum* Gorham, 1903 **nov. syn.** with *Cregya guyanensis* (Chevrolat, 1876).

Lectotypes have been designated for:

(**1**) *Cregya mixta* LeConte, 1865, (**2**) *Enoplium fimbriolatum* Chevrolat, 1843, (**3**) *Enoplium vitticeps* Blanchard, 1844, (**4**) *Enoplium bicolor* Laporte, 1836, (**5**) *Enoplium contaminatum* Klug, 1842, (**6**) *Enoplium duodecimpunctatum* Klug, 1842, (**7**) *Galeruclerus lunulatus* Pic, 1940, (**8**) *Pelonium bilineicolle* Chevrolat, 1874, (**9**) *Pelonium lineolatum* Gorham, 1883, (**10**) *Pelonium quadrinotatum* Chevrolat, 1874, (**11**) *Pelonium quadrisignatum* Spinola, 1844, (**12**) *Pelonium vittipenne* Schenkling, 1906, (**13**) *Pelonium circumcinctum* Chevrolat (nec Spinola, 1844), 1874, (**14**) *Pelonium guyanense* Chevrolat, 1876, (**15**) *Pelonium geminum* Schenkling, 1900, (**16**) *Pelonium nigropunctum* Chevrolat, 1876, (**17**) *Pelonium inscriptum* Gorham, 1883, (**18**) *Pelonium confluens* Gorham, 1877, and (**19**) *Pelonium kraatzi* Schenkling, 1900.

Evidence from morphology and information from specimen labels suggests that *Cregya* are predatory lignicolous beetles involved in Batesian mimetic relationships with galerucine Chrysomelidae. From a computer generated phylogeny, it is postulated that the ancestry of the genus produced seven lines of evolution that correspond to the seven species groups included herein. This work includes French, Spanish and German translations of the abstract, brief discussion about the natural history of the genus, morphological analysis, key to *Cregya* species, treatise of intrageneric evolution, 240 line drawings, 10 electron micrographs, 16 distributional maps, 94 photographs of aedeagi, and 119 habitus photographs.

# Résumé

Le genre *Cregya* LeConte après révision renferme 117 species, dont 89 espèces nouvelles décrites dans la présente étude :

(**1**) *C. abacula* **n. sp.**, (**2**) *C. agnosta* **n. sp.**, (**3**) *C. alicula* **n. sp.**, (**4**) *C. america* **n. sp.**, (**5**) *C. ametra* **n. sp.**, (**6**) *C. andersoni* **n. sp.**, (**7**) *C. andros* **n. sp.**, (**8**) *C. apanthesa* **n. sp.**, (**9**) *C. apicula* **n. sp.**, (**10**) *C. aragua* **n. sp.**, (**11**) *C. ardis* **n. sp.**, (**12**) *C. asarota* **n. sp.**, (**13**) *C. assumenta* **n. sp.**, (**14**) *C. atracapitis* **n. sp.**, (**15**) *C. bipunctipennis* **n. sp.**, (**16**) *C. campana* **n. sp.**, (**17**) *C. caraca* **n. sp.**, (**18**) *C. cariari* **n. sp.**, (**19**) *C. caruaru* **n. sp.**, (**20**) *C. castanea* **n. sp.**, (**21**) *C. casusa* **n. sp.**, (**22**) *C. catoma* **n. sp.**, (**23**) *C. cerina* **n. sp.**, (**24**) *C. corumba* **n. sp.**, (**25**) *C. cruzvera* **n. sp.**, (**26**) *C. decima* **n. sp.**, (**27**) *C. decusoris* **n. sp.**, (**28**) *C. diffusa* **n. sp.**, (**29**) *C. dybasi* **n. sp.**, (**30**) *C. egeri* **n. sp.**, (**31**) *C. ekteina* **n. sp.**, (**32**) *C. elegantula* **n. sp.**, (**33**) *C. ferratilis* **n. sp.**, (**34**) *C. furfurosi* **n. sp.**, (**35**) *C. glena* **n. sp.**, (**36**) *C. goias* **n. sp.**, (**37**) *C. gutta* **n. sp.**, (**38**) *C. guttula* **n. sp.**, (**39**) *C. hamatilis* **n. sp.**, (**40**) *C. hedra* **n. sp.**, (**41**) *C. helva* **n. sp.**, (**42**) *C. hexalineata* **n. sp.**, (**43**) *C. infula* **n. sp.**, (**44**) *C. inornata* **n. sp.**, (**45**) *C. jatai* **n. sp.**, (**46**) *C. juxta* **n. sp.**, (**47**) *C. karafucosa* **n. sp.**, (**48**) *C. kreagris* **n. sp.**, (**49**) *C. lenticula* **n. sp.**, (**50**) *C. linea* **n. sp.**, (**51**) *C. linomolina* **n. sp.**, (**52**) *C. lita* **n. sp.**, (**53**) *C. marysearsi* **n. sp.**, (**54**) *C. mekosa* **n. sp.**, (**55**) *C. mexcala* **n. sp.**, (**56**) *C. mocagua* **n. sp.**, (**57**) *C. morrisi* **n. sp.**, (**58**) *C. nebula* **n. sp.**, (**59**) *C. nubilosa* **n. sp.**, (**60**) *C. odonta* **n. sp.**, (**61**) *C. palaga* **n. sp.**, (**62**) *C. pallida* **n. sp.**, (**63**) *C. panna* **n. sp.**, (**64**) *C. pannusa* **n. sp.**, (**65**) *C. paragramma* **n. sp.**, (**66**) *C. pereira* **n. sp.**, (**67**) *C. pictila* **n. sp.**, (**68**) *C. preclara* **n. sp.**, (**69**) *C. rifkindi* **n. sp.**, (**70**) *C. rileyi* **n. sp.**, (**71**) *C. robusta* **n. sp.**, (**72**) *C. sina* **n. sp.**, (**73**) *C. stilastichosa* **n. sp.**, (**74**) *C. stricta* **n. sp.**, (**75**) *C. tambopata* **n. sp.**, (**76**) *C. terapoto* **n. sp.**, (**77**) *C. teretis* **n. sp.**, (**78**) *C. tessara* **n. sp.**, (**79**) *C. tetralineata* **n. sp.**, (**80**) *C. trilineata* **n. sp.**, (**81**) *C. turrialba* **n. sp.**, (**82**) *C. ungula* **n. sp.**, (**83**) *C. urica* **n. sp.**, (**84**) *C. variegata* **n. sp.**, (**85**) *C. versicula* **n. sp.**, (**86**) *C. verticula* **n. sp.**, (**87**) *C. villavera* **n. sp.**, (**88**) *C. yojoa* **n. sp.**, et (**89**) *C. zacapa* **n. sp.**

Vingt-huit espèces existaient préalablement :

(**1**) *C. abdita* Wolcott, 1927, (**2**) *C. bicolor* (Laporte, 1836), (**3**) *C. bilineicolle* (Chevrolat, 1874) **nov. stat.**, (**4**) *C. casselorum* (Opitz, 2014), (**5**) *C. catarina* (Opitz, 2014), (**6**) *C. chevrolati* Corporaal, 1950, (**7**) *C. confluens* (Gorham, 1877), (**8**) *C. contaminata* (Klug, 1842), (**9**) *C. duodecimpunctata* (Klug, 1842), (**10**) *C. fimbriolata* (Chevrolat, 1843), (**11**) *C. gemina* (Schenkling, 1900), (**12**) *C. guyanensis* (Chevrolat, 1876), (**13**) *C. inscripta* (Gorham, 1883), (**14**) *C. insignata* Pic, 1952, (**15**) *C. insularis* (Gorham, 1898), (**16**) *C. kraatzi* (Schenkling, 1900), (**17**) *C. lineolata* (Gorham, 1883), (**18**) *C. lunulata* (Pic, 1940), (**19**) *C. mixta* LeConte, 1865, (**20**) *C. nigropunctata* (Chevrolat, 1876), (**21**) *C. oculata* (Say, 1835), (**22**) *C. quadrinotata* (Chevrolat, 1874) **nov. stat.**, (**23**) *C. quadrisignata* (Spinola, 1844), (**24**) *C. seabrai* Peracchi, 1962, (**25**) *C. sexnotata* (Klug, 1842), (**26**) *C. vitticeps* (Blanchard, 1844), (**27**) *C. vittipennis* (Schenkling, 1906), et (**28**) *C. withlacoochee* Rifkind, 2012.

Les nouvelles synonymies concernent :

*Enopliun crinitum* Klug, 1842 **nov. syn.** avec *Cregya bicolor* (Laporte, 1836), *Pelonium conforme* Chevrolat, 1876 **nov. syn.** avec *Cregya chevrolati* Corporaal, 1950, *Pelonium subapicale* Schenkling, 1900 **nov. syn.** avec *Cregya chevrolati* Corporaal, 1950, et *Pelonium divisum* Gorham, 1903 **nov. syn.** avec *Cregya guyanensis* (Chevrolat, 1876).

Des lectotypes ont été désignés pour :

(**1**) *Cregya mixta* LeConte, 1865, (**2**) *Enoplium fimbriolatum* Chevrolat, 1843, (**3**) *Enoplium vitticeps* Blanchard, 1844, (**4**) *Enoplium bicolor* Laporte, 1836, (**5**) *Enoplium contaminatum* Klug, 1842, (**6**) *Enoplium duodecimpunctatum* Klug, 1842, (**7**) *Galeruclerus lunulatus* Pic, 1940, (**8**) *Pelonium bilineicolle* Chevrolat, 1874, (**9**) *Pelonium lineolatum* Gorham, 1883, (**10**) *Pelonium quadrinotatum* Chevrolat, 1874, (**11**) *Pelonium quadrisignatum* Spinola, 1844, (**12**) *Pelonium vittipenne* Schenkling, 1906, (**13**) *Pelonium circumcinctum* Chevrolat (nec Spinola, 1844), 1874, (**14**) *Pelonium guyanense* Chevrolat, 1876, (**15**) *Pelonium geminum* Schenkling, 1900, (**16**) *Pelonium nigropunctum* Chevrolat, 1876, (**17**) *Pelonium inscriptum* Gorham, 1883, (**18**) *Pelonium confluens* Gorham, 1877, et (**19**) *Pelonium kraatzi* Schenkling, 1900.

A la fois la morphologie et les informations fournies sur les étiquettes des échantillons étudiés, suggèrent que les espèces du genre *Cregya* sont lignicoles prédatrices impliquées dans des relations mimétiques de type Batesien avec les Galerucinae (Coleoptera, Chrysomelidae). La phylogénie reconstruite par ordinateur a montré que l'ascendance du genre a produit sept lignes d'évolution qui correspondent aux sept groupes d'espèces inclus ici. Ce travail comprend un résumé en Anglais, Français, Espagol et Allemand, une brève discussion sur l'histoire naturelle du genre, une analyse morphologique, une clé du genre *Cregya*, un traité sur l'évolution intragénérique, 240 dessins au trait, 10 micrographies électroniques, 16 cartes de répartition, 94 photographies d'édéages et 119 photographies d'habitus.

# Resumen

El género *Cregya* LeConte se redefine para incluir 117 especie. Se describen en el presente trabajo las 89 nuevas especies siguientes:

(**1**) *C. abacula* **n. sp.**, (**2**) *C. agnosta* **n. sp.**, (**3**) *C. alicula* **n. sp.**, (**4**) *C. america* **n. sp.**, (**5**) *C. ametra* **n. sp.**, (**6**) *C. andersoni* **n. sp.**, (**7**) *C. andros* **n. sp.**, (**8**) *C. apanthesa* **n. sp.**, (**9**) *C. apicula* **n. sp.**, (**10**) *C. aragua* **n. sp.**, (**11**) *C. ardis* **n. sp.**, (**12**) *C. asarota* **n. sp.**, (**13**) *C. assumenta* **n. sp.**, (**14**) *C. atracapitis* **n. sp.**, (**15**) *C. bipunctipennis* **n. sp.**, (**16**) *C. campana* **n. sp.**, (**17**) *C. caraca* **n. sp.**, (**18**) *C. cariari* **n. sp.**, (**19**) *C. caruaru* **n. sp.**, (**20**) *C. castanea* **n. sp.**, (**21**) *C. casusa* **n. sp.**, (**22**) *C. catoma* **n. sp.**, (**23**) *C. cerina* **n. sp.**, (**24**) *C. corumba* **n. sp.**, (**25**) *C. cruzvera* **n. sp.**, (**26**) *C. decima* **n. sp.**, (**27**) *C. decusoris* **n. sp.**, (**28**) *C. diffusa* **n. sp.**, (**29**) *C. dybasi* **n. sp.**, (**30**) *C. egeri* **n. sp.**, (**31**) *C. ekteina* **n. sp.**, (**32**) *C. elegantula* **n. sp.**, (**33**) *C. ferratilis* **n. sp.**, (**34**) *C. furfurosi* **n. sp.**, (**35**) *C. glena* **n. sp.**, (**36**) *C. goias* **n. sp.**, (**37**) *C. gutta* **n. sp.**, (**38**) *C. guttula* **n. sp.**, (**39**) *C. hamatilis* **n. sp.**, (**40**) *C. hedra* **n. sp.**, (**41**) *C. helva* **n. sp.**, (**42**) *C. hexalineata* **n. sp.**, (**43**) *C. infula* **n. sp.**, (**44**) *C. inornata* **n. sp.**, (**45**) *C. jatai* **n. sp.**, (**46**) *C. juxta* **n. sp.**, (**47**) *C. karafucosa* **n. sp.**, (**48**) *C. kreagris* **n. sp.**, (**49**) *C. lenticula* **n. sp.**, (**50**) *C. linea* **n. sp.**, (**51**) *C. linomolina* **n. sp.**, (**52**) *C. lita* **n. sp.**, (**53**) *C. marysearsi* **n. sp.**, (**54**) *C. mekosa* **n. sp.**, (**55**) *C. mexcala* **n. sp.**, (**56**) *C. mocagua* **n. sp.**, (**57**) *C. morrisi* **n. sp.**, (**58**) *C. nebula* **n. sp.**, (**59**) *C. nubilosa* **n. sp.**, (**60**) *C. odonta* **n. sp.**, (**61**) *C. palaga* **n. sp.**, (**62**) *C. pallida* **n. sp.**, (**63**) *C. panna* **n. sp.**, (**64**) *C. pannusa* **n. sp.**, (**65**) *C. paragramma* **n. sp.**, (**66**) *C. pereira* **n. sp.**, (**67**) *C. pictila* **n. sp.**, (**68**) *C. preclara* **n. sp.**, (**69**) *C. rifkindi* **n. sp.**, (**70**) *C. rileyi* **n. sp.**, (**71**) *C. robusta* **n. sp.**, (**72**) *C. sina* **n. sp.**, (**73**) *C. stilastichosa* **n. sp.**, (**74**) *C. stricta* **n. sp.**, (**75**) *C. tambopata* **n. sp.**, (**76**) *C. terapoto* **n. sp.**, (**77**) *C. teretis* **n. sp.**, (**78**) *C. tessara* **n. sp.**, (**79**) *C. tetralineata* **n. sp.**, (**80**) *C. trilineata* **n. sp.**, (**81**) *C. turrialba* **n. sp.**, (**82**) *C. ungula* **n. sp.**, (**83**) *C. urica* **n. sp.**, (**84**) *C. variegata* **n. sp.**, (**85**) *C. versicula* **n. sp.**, (**86**) *C. verticula* **n. sp.**, (**87**) *C. villavera* **n. sp.**, (**88**) *C. yojoa* **n. sp.**, y (**89**) *C. zacapa* **n. sp.**

Las 28 descritas anteriormente son las siguientes:

(**1**) *C. abdita* Wolcott, 1927, (**2**) *C. bicolor* (Laporte, 1836), (**3**) *C. bilineicolle* (Chevrolat, 1874) **nov. stat.**, (**4**) *C. casselorum* (Opitz, 2014), (**5**) *C. catarina* (Opitz, 2014), (**6**) *C. chevrolati* Corporaal, 1950, (**7**) *C. confluens* (Gorham, 1877), (**8**) *C. contaminata* (Klug, 1842), (**9**) *C. duodecimpunctata* (Klug, 1842), (**10**) *C. fimbriolata* (Chevrolat, 1843), (**11**) *C. gemina* (Schenkling, 1900), (**12**) *C. guyanensis* (Chevrolat, 1876), (**13**) *C. inscripta* (Gorham, 1883), (**14**) *C. insignata* Pic, 1952, (**15**) *C. insularis* (Gorham, 1898), (**16**) *C. kraatzi* (Schenkling, 1900), (**17**) *C. lineolata* (Gorham, 1883), (**18**) *C. lunulata* (Pic, 1940), (**19**) *C. mixta* LeConte, 1865, (**20**) *C. nigropunctata* (Chevrolat, 1876), (**21**) *C. oculata* (Say, 1835), (**22**) *C. quadrinotata* (Chevrolat, 1874) **nov. stat.**, (**23**) *C. quadrisignata* (Spinola, 1844), (**24**) *C. seabrai* Peracchi, 1962, (**25**) *C. sexnotata* (Klug, 1842), (**26**) *C. vitticeps* (Blanchard, 1844), (**27**) *C. vittipennis* (Schenkling, 1906), y (**28**) *C. withlacoochee* Rifkind, 2012.

Se establecen las sinonimias nuevas:

*Enopliun crinitum* Klug, 1842 **nov. syn.** con *Cregya bicolor* (Laporte, 1836), *Pelonium conforme* Chevrolat, 1876 **nov. syn.** con *Cregya chevrolati* Corporaal, 1950, *Pelonium subapicale* Schenkling, 1900 **nov. syn.** con *Cregya chevrolati* Corporaal, 1950, y *Pelonium divisum* Gorham, 1903 **nov. syn.** con *Cregya guyanensis* (Chevrolat, 1876).

Se designan Lectotipos para las especies:

(**1**) *Cregya mixta* LeConte, 1865, (**2**) *Enoplium fimbriolatum* Chevrolat, 1843, (**3**) *Enoplium vitticeps* Blanchard, 1844, (**4**) *Enoplium bicolor* Laporte, 1836, (**5**) *Enoplium contaminatum* Klug, 1842, (**6**) *Enoplium duodecimpunctatum* Klug, 1842, (**7**) *Galeruclerus lunulatus* Pic, 1940, (**8**) *Pelonium bilineicolle* Chevrolat, 1874, (**9**) *Pelonium lineolatum* Gorham, 1883, (**10**) *Pelonium quadrinotatum* Chevrolat, 1874, (**11**) *Pelonium quadrisignatum* Spinola, 1844, (**12**) *Pelonium vittipenne* Schenkling, 1906, (**13**) *Pelonium circumcinctum* Chevrolat (nec Spinola, 1844), 1874, (**14**) *Pelonium guyanense* Chevrolat, 1876, (**15**) *Pelonium geminum* Schenkling, 1900, (**16**) *Pelonium nigropunctum* Chevrolat, 1876, (**17**) *Pelonium inscriptum* Gorham, 1883, (**18**) *Pelonium confluens* Gorham, 1877, y (**19**) *Pelonium kraatzi* Schenkling, 1900.

Basado en la morfología y la información de las etiquetas de los especímenes se sugiere que las especies de *Cregya* son depredadores lignícolas. Además son miméticos de tipo batesianos de Chrysomelidae Galerucinae. Se generó con computadora una filogenia que postula que los ancestros del género produjeron siete líneas evolutivas que corresponden a los siete grupos de especies delimitados en este trabajo. Esta publicación incluye resúmenes en francés, español y alemán, una breve discusión sobre la historia natural del género, una clave de las especies de *Cregya*, un estudio de la evolución intragenerica, 240 dibujos, 10 microfotografías electrónicas, 16 mapas de distribución, 94 fotografías de aedeagos, y 119 fotografía de especímenes enteros.

# Zusammenfassung

Die Gattung Cregya LeConte wird neu definiert und beinhaltet 117 Arten. Folgende 89 neue Arten werden hier beschrieben:

(**1**) *C. abacula* **n. sp.**, (**2**) *C. agnosta* **n. sp.**, (**3**) *C. alicula* **n. sp.**, (**4**) *C. america* **n. sp.**, (**5**) *C. ametra* **n. sp.**, (**6**) *C. andersoni* **n. sp.**, (**7**) *C. andros* **n. sp.**, (**8**) *C. apanthesa* **n. sp.**, (**9**) *C. apicula* **n. sp.**, (**10**) *C. aragua* **n. sp.**, (**11**) *C. ardis* **n. sp.**, (**12**) *C. asarota* **n. sp.**, (**13**) *C. assumenta* **n. sp.**, (**14**) *C. atracapitis* **n. sp.**, (**15**) *C. bipunctipennis* **n. sp.**, (**16**) *C. campana* **n. sp.**, (**17**) *C. caraca* **n. sp.**, (**18**) *C. cariari* **n. sp.**, (**19**) *C. caruaru* **n. sp.**, (**20**) *C. castanea* **n. sp.**, (**21**) *C. casusa* **n. sp.**, (**22**) *C. catoma* **n. sp.**, (**23**) *C. cerina* **n. sp.**, (**24**) *C. corumba* **n. sp.**, (**25**) *C. cruzvera* **n. sp.**, (**26**) *C. decima* **n. sp.**, (**27**) *C. decusoris* **n. sp.**, (**28**) *C. diffusa* **n. sp.**, (**29**) *C. dybasi* **n. sp.**, (**30**) *C. egeri* **n. sp.**, (**31**) *C. ekteina* **n. sp.**, (**32**) *C. elegantula* **n. sp.**, (**33**) *C. ferratilis* **n. sp.**, (**34**) *C. furfurosi* **n. sp.**, (**35**) *C. glena* **n. sp.**, (**36**) *C. goias* **n. sp.**, (**37**) *C. gutta* **n. sp.**, (**38**) *C. guttula* **n. sp.**, (**39**) *C. hamatilis* **n. sp.**, (**40**) *C. hedra* **n. sp.**, (**41**) *C. helva* **n. sp.**, (**42**) *C. hexalineata* **n. sp.**, (**43**) *C. infula* **n. sp.**, (**44**) *C. inornata* **n. sp.**, (**45**) *C. jatai* **n. sp.**, (**46**) *C. juxta* **n. sp.**, (**47**) *C. karafucosa* **n. sp.**, (**48**) *C. kreagris* **n. sp.**, (**49**) *C. lenticula* **n. sp.**, (**50**) *C. linea* **n. sp.**, (**51**) *C. linomolina* **n. sp.**, (**52**) *C. lita* **n. sp.**, (**53**) *C. marysearsi* **n. sp.**, (**54**) *C. mekosa* **n. sp.**, (**55**) *C. mexcala* **n. sp.**, (**56**) *C. mocagua* **n. sp.**, (**57**) *C. morrisi* **n. sp.**, (**58**) *C. nebula* **n. sp.**, (**59**) *C. nubilosa* **n. sp.**, (**60**) *C. odonta* **n. sp.**, (**61**) *C. palaga* **n. sp.**, (**62**) *C. pallida* **n. sp.**, (**63**) *C. panna* **n. sp.**, (**64**) *C. pannusa* **n. sp.**, (**65**) *C. paragramma* **n. sp.**, (**66**) *C. pereira* **n. sp.**, (**67**) *C. pictila* **n. sp.**, (**68**) *C. preclara* **n. sp.**, (**69**) *C. rifkindi* **n. sp.**, (**70**) *C. rileyi* **n. sp.**, (**71**) *C. robusta* **n. sp.**, (**72**) *C. sina* **n. sp.**, (**73**) *C. stilastichosa* **n. sp.**, (**74**) *C. stricta* **n. sp.**, (**75**) *C. tambopata* **n. sp.**, (**76**) *C. terapoto* **n. sp.**, (**77**) *C. teretis* **n. sp.**, (**78**) *C. tessara* **n. sp.**, (**79**) *C. tetralineata* **n. sp.**, (**80**) *C. trilineata* **n. sp.**, (**81**) *C. turrialba* **n. sp.**, (**82**) *C. ungula* **n. sp.**, (**83**) *C. urica* **n. sp.**, (**84**) *C. variegata* **n. sp.**, (**85**) *C. versicula* **n. sp.**, (**86**) *C. verticula* **n. sp.**, (**87**) *C. villavera* **n. sp.**, (**88**) *C. yojoa* **n. sp.**, und (**89**) *C. zacapa* **n. sp.**

Zu den bisher beschriebenen 28 Arten gehören:

(**1**) *C. abdita* Wolcott, 1927, (**2**) *C. bicolor* (Laporte, 1836), (**3**) *C. bilineicolle* (Chevrolat, 1874) **nov. stat.**, (**4**) *C. casselorum* (Opitz, 2014), (**5**) *C. catarina* (Opitz, 2014), (**6**) *C. chevrolati* Corporaal, 1950, (**7**) *C. confluens* (Gorham, 1877), (**8**) *C. contaminata* (Klug, 1842), (**9**) *C. duodecimpunctata* (Klug, 1842), (**10**) *C. fimbriolata* (Chevrolat, 1843), (**11**) *C. gemina* (Schenkling, 1900), (**12**) *C. guyanensis* (Chevrolat, 1876), (**13**) *C. inscripta* (Gorham, 1883), (**14**) *C. insignata* Pic, 1952, (**15**) *C. insularis* (Gorham, 1898), (**16**) *C. kraatzi* (Schenkling, 1900), (**17**) *C. lineolata* (Gorham, 1883), (**18**) *C. lunulata* (Pic, 1940), (**19**) *C. mixta* LeConte, 1865, (**20**) *C. nigropunctata* (Chevrolat, 1876), (**21**) *C. oculata* (Say, 1835), (**22**) *C. quadrinotata* (Chevrolat, 1874) **nov. stat.**, (**23**) *C. quadrisignata* (Spinola, 1844), (**24**) *C. seabrai* Peracchi, 1962, (**25**) *C. sexnotata* (Klug, 1842), (**26**) *C. vitticeps* (Blanchard, 1844), (**27**) *C. vittipennis* (Schenkling, 1906), und (**28**) *C. withlacoochee* Rifkind, 2012.

Neue Synonymien beinhalten:

*Enopliun crinitum* Klug, 1842 **nov. syn.** mit *Cregya bicolor* (Laporte, 1836), *Pelonium conforme* Chevrolat, 1876 **nov. syn.** mit *Cregya chevrolati* Corporaal, 1950, *Pelonium subapicale* Schenkling, 1900 **nov. syn.** mit *Cregya chevrolati* Corporaal, 1950, und *Pelonium divisum* Gorham, 1903 **nov. syn.** mit *Cregya guyanensis* (Chevrolat, 1876).

Lectotypen werden designiert für:

(**1**) *Cregya mixta* LeConte, 1865, (**2**) *Enoplium fimbriolatum* Chevrolat, 1843, (**3**) *Enoplium vitticeps* Blanchard, 1844, (**4**) *Enoplium bicolor* Laporte, 1836, (**5**) *Enoplium contaminatum* Klug, 1842, (**6**) *Enoplium duodecimpunctatum* Klug, 1842, (**7**) *Galeruclerus lunulatus* Pic, 1940, (**8**) *Pelonium bilineicolle* Chevrolat, 1874, (**9**) *Pelonium lineolatum* Gorham, 1883, (**10**) *Pelonium quadrinotatum* Chevrolat, 1874, (**11**) *Pelonium quadrisignatum* Spinola, 1844, (**12**) *Pelonium vittipenne* Schenkling, 1906, (**13**) *Pelonium circumcinctum* Chevrolat (nec Spinola, 1844), 1874, (**14**) *Pelonium guyanense* Chevrolat, 1876, (**15**) *Peloniu geminum* Schenkling, 1900, (**16**) *Pelonium nigropunctum* Chevrolat, 1876, (**17**) *Pelonium inscriptum* Gorham, 1883, (**18**) *Pelonium confluens* Gorham, 1877, und (**19**) *Pelonium kraatzi* Schenkling, 1900.

Aufgrund von Morphologie und Informationen der Fundortetiketten wird angenommen, dass Vertreter der Gattung *Cregya* räuberische, holzbewohnende Käfer sind, die in einer Bates'schen Mimikry-Beziehung mit Galerucinae (Chrysomelidae) stehen. Basierend auf einer computer-generierten Phylogenie wird postuliert, dass sich aus der Herkunft der Gattung sieben evolutive Linien entwickelten, die hier mit den sieben Artengruppen korrespondieren. Diese Arbeit beinhaltet ein spanisches, ein französisches und ein deutsches Abstract, eine kurze Diskussion zur Biologie der Gattung, einen Bestimmungsschlüssel der Arten der Gattung Cregya, eine Abhandlung über intragenerische Evolution, 240 Strichzeichnungen, 10 REM-Aufnahmen, 16 Verbreitungskarten, 94 Aedeagus Fotografien und 119 Habitusaufnahmen.

# Contents

*america* species group

# Classification, natural history, and evolution of the subfamily Peloniinae Opitz (Coleoptera: Cleroidea: Cleridae). Part XV. Taxonomic revision of the new world genus *Cregya* Leconte

- ZooBank : http://zoobank.org/12032042-C7B6-4DF0-A8F2-6B1D5F149353

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natural history,
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phylogeny.

## Introduction

Perhaps the most daunting task in the preparation of this work was coming to a reasonable conclusion when new species status was suspected. There is a general morphologic homogeneity among the available specimens. In some cases, I found slight differences in color patterns corroborate conclusions of species status based on aedeagal differences. Moreover, I posit that the general overall similarity among the species represents a manifestation of recent evolution, with mimicry as the evolutionary inertia towards a Chrysomelidae color and body form. An example of the mimetic tendencies in the genus is the resemblance between *Cregya asarota* Opitz **n. sp.**, and the chrysomelid *Walterianella* sp. (Figs. 496, 507); both of which were collected from the same locality.
*Cregya* was established by LeConte in 1861, but the genus did not become speciose until Corporaal (1950a: 279) correctly added to *Cregya* many species that were misclassified under *Pelonium* Spinola. *Cregya* has never been revised collectively. The purpose of this treatise is to make better known this speciose checkered beetle genus, and to advance our knowledge of the species abundance in the subfamily Peloniinae Opitz.

## Materials and Methods

This study is based on the morphology of 2,598 adult specimens; many males were dissected to investigate the aedeagus, amongst which the phallus shows considerable differences. Although morphological criteria are used to determine specific-level discontinuities, I adhere to the biological species concepts as presented by Standfuss (1896), Dobzhansky (1937), and Mayr (1963). The operational criteria for the delimitation of species involve morphologic structure and any other available criteria that suggest reproductive isolation among members of metapopulation lineages (de Queiroz, 2007). Experience with differences in morphological structure is generally a reasonable criterion with which to hypothesize reproductive isolation. In this study, consideration for species status involves: Comparisons involving width of the eye and width of the frons, shape of the maxillary and labial terminal palpomeres, development of the pronotal tubercle, macrosculpture of the pronotal and elytral discs, shape of the distal margin of the pygidium, body coloration, and development of the phallus.

The principles of Hennig (1966) were followed for estimations of supraspecific relationships, although I agree with Tuomikoski (1967) who advocates the use of “apotypic” and “plesiotypic” instead of “apomorphic” and “plesiomorphic” because phylogenetic work may not be restricted to morphological criteria.

Methods involving dissections, measurements, and morphological terminology follow those described in Opitz (2010: 35). Brown (1956) was used to coin scientific names.

Abbreviations used in this treatise are defined as follows:
– **EW/FW** = eye width/frons width (measured at 500 x from the front of the head);
– **PW/PL** = pronotal width (from the apex of one tubercle to the apex of the other) /pronotal length (from midline anterior margin to midline posterior margin);
– **EL/EW** = elytral length (from humeral angle to apex)/elytral width (greatest dorsal width of one elytron).

Line drawings were made with an M5 Wild stereoscopic microscope with camera lucida attachment (Leica, Wetzlar, Germany). Habitus photographs were taken with a Leica Z 16 APO microscope equipped with JVC KY-F75U-CCD camera and controlled by Syncroscopy Auto Montage software (Cambridge, United Kingdom). The SEM micrographs were produced with a Scanning Electron Microscope-S-3500N (Hitachi Science Systems, Ltd., Tokyo, Japan). Image stacks, involving the aedeagus, were taken with a Leica® DM2500 compound scope with a 10X objective lens and a Leica® DFC425 camera (Meyer Instruments, Houston, Texas, United States of America), and combined using Zerene Stacker®. To facilitate the identity of primary type specimens, I transcribed their locality information in the exact manner as found on labels.

In the "Diagnosis" section of descriptions, I rely heavily on the copious variety of interspecific color characteristics. My purpose for doing so is to facilitate the identification process when dealing with *Cregya* species. Color differences among the species treated herein are fairly useful at interspecific level. That being said, I would encourage the users of this work to double check their identifications with examination of the male genitalia. Within *Cregya*, as in most Cleridae genera, the aedeagus characteristics are very reliable identification tools to identify species. In many cases such aedeagal usefulness extends to the genus level as well.

## Natural History

There is limited information about the natural history of these beetles. However, the almost identical color makings between *Cregya asarota* Opitz **n. sp.** (Fig. 496), and the chrysomelid *Walterianella* sp. (Fig. 507), which were collected from the same niche, clearly points to potential mimetic relationships between these two beetle species. Many other *Cregya* specimens, representing an array of different species, especially in the *fimbriolata* and *kraatzi* species groups, show a very colorful punctiform and line markings typically found on the elytra of many Chrysomelidae.

My observations of mouthpart and leg structure, and results from examination of the alimentary canal, and ventricular contents, suggests that, like most checkered beetles, cregyans are predatory. As several individuals have been reared from branches of hardwood trees, it is reasonable to suggest that they are feeders of lignicolous insects. There are no records to indicate that *Cregya* individuals visit flowers, although this would not be an unexpected circumstance since a variety of groups in the Cleridae do their predatory activities in an anthophilic niche (Opitz, 2002b: 243). They have been reared from woody branches of *Celtis laevigata* Willdenow (Cannabaceae), *Celtis limheimeri* Englm. EX K. Koch (Cannabaceae), *Leucaena pulverolenta* (Schlecht) Benth (Fabaceae), *Solanum malacoxylon* Sendtn. (Solanaceae). One specimen was reared from the liana of a species of soapberry Juss. (Sampindaceae).

Specimens have also been associated with foliage and branches of *Virola koschnyi* Warb (Myristicaceae), *Acacia farnesiana* (Linnaeus) Wight et Arn. (Fabaceae), *Citrus sinensis* (Linnaeus) Osbek (Rutaceae), the water-plantain [*Sagittaria montevidensis* Cham & Schitdl. (Alismataceae)], the boatspine acacia [*Acacia cochliacantha* Willd. (Fabaceae)], *Acacia cochliacantha* Willd. (Fabaceae), the common hackberry [*Celtis occidentalis* Linnaeus (Cannabaceae)], on bur oak [*Quercus macrocarpa* Michx. (Fagaceae)], and on the whitemanjack [*Cordia dentata* Poir. (Boraginaceae)]. Another specimen was captured on the foliage of a yellow blossomed *Acacia* Martius. (Fabaceae), a species of ash [*Fraxinus* Linnaeus (Oleaceae)], a species of elm [*Ulmus* Linnaeus (Ulmaceae)], and one on a species of *Zanthoxylum* Linnaeus (Rutaceae). R. Reeve indicates that these checkered beetles are predatory on the southern pine beetle [*Dendroctonus frontalis* Zimmerman (Curculionidae)]. Josef N. Knull reports (Knull 1951: 309) that specimens of *Cregya oculata* (Say) are, " recorded from dead pitch pine infested with Scolytidae and *Pogonocherus* Dejean (Cerambycidae); sumac infested with *Leiopus* Audinet-Serville (Cerambycidae) and scolytids; Virginia creeper infested with *Leiopus* Audinet-Serville (Cerambycidae) and chestnut infested with *Euderces picipes* (Fabricius) (Cerambycidae) and *Ecyrus dasycerus* (Say) (Cerambycidae) ".

Various collecting techniques were used to capture these beetles. Some were taken in a Malaise trap including one set in a coffee plantation beneath a grove of a species of *Inga* Mill (Fabaceae). Another successful capture technique involves sweeping foliage of *Leuanena lanceolate* S. Watson (Fabaceae). Many specimens were captured by beating dead branches and foliage; several by beating foliage of *Inga* Mill. (Fabaceae), the false willow [*Baccharis neglecta* Britt. (Asteraceae)], the boat-thorned acacia [*Acacia cochliacantha* Willd. (Fabaceae)], and a species of fig [*Ficus* Linnaeus (Moraceae)]. Other collecting techniques involve fogging tree canopies and use of a mercury vapor light. Altitudinally, many of the available specimens were captured around 900 m, others were taken in an altitudinal range from 1 to 3,000 m.

# Characters

Twelve character states were organized into a matrix (Table 1), which was then analyzed with NONA (Goloboff 2003) in combination with WINCLADA version 100.80 (Nixon 2002); to find the most parsimonious phylogenetic tree.

Through the same program, I subjected the matrix to 100 branched and bootstrap replicates under the parsimonious criterion. The WINCLADA program produced 1 tree (Fig. 278) via heuristic analysis [Maximum trees (hold) = 100, number of replications 1 (mult) = 100, and multiple TBR = TBR (mult max) were used] (with indices as follows: L-13, Ci-100, Ri-100).

The program also produced a bootstrap consensus tree (Fig. 279) with indices noted on the diagram. Character states given the value of "0" are assessed plesiotypic whereas those judged a value of "1" are assessed apotypic. The genus *Pelonium* Spinola was used as the outgroup to assist in character state assessments and to predict the evolutionary states of characteristics.

My general knowledge of other Peloniinae genera was also used in the process character state analysis; and for this task, I also relied on the methods employed by Ekis (now Opitz) (1977), Watrous and Wheeler (1981), and Nixon and Carpenter (1993).

## Assessments of Evolutionary States of Characters

| | | | |
|---|---|---|---|
| Character **0** | **Pronotal arch** | (0) not scabrous | (1) scabrous |
| Character **1** | **Phallobasic rod** | (0) present | (1) absent |
| Character **2** | **Phallic plate** | (0) not divided (**Fig. 283**) | (1) divided (**Fig. 14**) |
| Character **3** | **Phallic post-apical flap** | (0) not present (**Fig. 283**) | (1) present (**Fig. 14, 299**) |
| Character **4** | **Phallic apex** | (0) not digitiform | (1) digitiform |
| Character **5** | **Elytral disc** | (0) not roughly sculptured | (1) roughly sculptured |
| Character **6** | **Elytral asetiferous punctures** | (0) not oval | (1) oval |
| Character **7** | **Elytral disc** | (0) not punctulate | (1) punctulate |
| Character **8** | **Pronotum** | (0) not punctulate | (1) punctulate |
| Character **9** | **Width of phallobasic apodeme** | (0) not wide | (1) wide |
| Character **10** | **Length of phallobasic apodeme** | (0) not long | (1) long |
| Character **11** | **Elytral asetiferous punctures** | (0) not concentrated in humeral region | (1) concentrated in humeral region |
| Character **12** | **Shape of phallobasic apodeme** | (0) not keel-shaped | (1) keel-shaped |

| **TAXA** | **CHARACTERS** | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| ***Pelonium*** | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ***C. america* group** | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ***C. inscripta* group** | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ***C. castanea* group** | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| ***C. kraatzi* group** | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| ***C. gemina* group** | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| ***C. fimbriolata*** | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| ***C. chevrolati* group** | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| ***C. abacula* group** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 1.** Matrix of 13 adult morphological characters of *Pelonium* (outgroup) and species groups of *Cregya*.

# Morphology

## External Morphology

***Color***. – There is great variation in integumental color among species of *Cregya*. The dorsum of members of the *america* species group show a dark coloration especially on the elytral disc, which is usually dark brown to black with testaceous epipleural and sutural margins. The elytral and the pronotal discs are more colorful in other species, which often show a predominantly yellow elytrum with black streaks and spots.

***Vestiture***. – The integument is copiously vested with short pale setae; microsensilla are prominent on the angular portion of the 8th and 9th antennomeres of the capitulum.

***Cranium***. – The adult head is hypognathous, and the cranium is usually subquadrate and well sclerotized. The major structures and sclerites on the front of the head are illustrated in Fig. 28. Anteriorly, the cranium is defined by the frons, which is bordered dorsally by the epicranium and ventrally by the clypeus. The epistomal suture traverses the frontoclypeal region, dividing the frontal region of the cranium into the clypeus and frons. The frons is flanked by compound eyes and leads into the more dorsal epicranium. The clypeus is a narrow transverse plate that is bordered laterally by antennal carinae. The compound eyes are boldly convex and comprised of large ommatidia, which are interrupted by the ocular notch. The region behind the eye defines the gena, which is ventrally bordered by the post occipital suture. Ventrally, the cranium has a trapezoidal gula that shows a well-developed post-gular plate and a pair of setose post-gular processes.

***Antenna***. – The antenna (Fig. 2) consists of 10 antennomeres, which are organized into the scape, pedicel, and flagellum. The latter is further divided into a funicle and capitulum. The funicle, pedicel, and scape combine to form the fundus. The scape is oblong/capitate and is connected to a rectangular pedicel. The funicular antennomeres are subfiliform and become progressively shorter as they approach the capitulum. Capitular antennomeres 8 and 9 are triangular, antennomere 10 is ovoid.

***Mouthparts***. – The labrum (Fig. 8) is strongly emarginate at its anterior margin. From the hind angles the labrum projects tormal processes, which are divided into a medial and lateral process. The medial processes coalesce at their medial extremities. Anteroventrally, the labrum exhibits a small plate, the epipharynx. The mandible (Fig. 16) is triagonal, well sclerotized, prominently visible in repose, and exhibits well-developed anterior, medial, and posterior dens; a setose penicillus is present. The maxillary components involve a triangular base, the cardo, stipes, galea, and the lacinia. The lacinia is divided into the mediolacinia and laterolacinia. The terminal maxillary palpomere is subsecuriform (Fig. 11). The labium connects to the submental region of the cranium. Its mentum is predominantly membranous and feebly sclerotized basally and laterally. The ligula has a fringe of minute setae. The last labial palpomere is subsecuriform (Fig. 10).

***Prothorax***. – The prothorax is usually a slightly transverse cylinder connected to the cranium by the cervical membrane. The pronotum (Fig. 7) may be slightly oblong, quadrate, or slightly transverse, and is traversed by slightly-developed subapical and posterior depressions that delimit the pronotal arch, the pronotal proper, and the pronotal collar. Dorsally, the pronotum is moderately convex. Its side margins show a variously developed tubercle. Further, the upper sides show a dorsolateral carina that extends anteriorly well beyond the apex of the lateral tubercle. Posteriorly, the carina coalesces with the pronotal hem at the pronotal posterior angle. The anteromedial portion of the prosternum is a narrow transverse plate that extends posteriorly, between the procoxae, to form the prointercoxal process, and posterolaterally to form the pronotal projections. The latter may approach, but do not conjoin with, the prointercoxal process, which is slightly expanded distally. The floor of the procoxal cavities, the cryptosternum, is incomplete.

***Pterothorax***. – The mesothorax is approximately one-half the length of the metathorax. Its notal plate is divided into an anterior scutum and quadrate scutellum. The mesopleuron is divided into a large triangular mesepisternum and smaller tapering mesepimeron. The mesosternum is subcampanulate in outline and is prolonged posteromedially into a mesothoracic intercoxal process. The elytron is oblong and varies in width and surface sculpturing, and is outlined by the anterior, sutural, and epipleural margins. The epipleuron narrows to the elytral apex. The elytral disc always shows setiferous and asetiferous punctures. The latter may be concentrated near the humerus, may diminish slightly beyond the elytral middle, or end near the elytral apex. Primary degree (1°) and second degree (2°) setae (Opitz, 2011: 193) are present. The 1° are found on the upper periphery of asetiferous punctations, whereas 2° setae emerge from minute punctations found mostly on the periphery of the elytral disc and in areas between the asetiferous punctations, areas defined herein as interstitial spaces.
The metathorax is minimally sclerotized dorsally, well sclerotized and convex ventrally. The metapleuron consists of a slender metepisternum and mostly membranous metepimeron. The metasternum is trapezoidal and is divided into two halves by the discriminal line. A hylecoetoid metendosternite is well-developed (Crowson, 1944: 274). The metendosternite consists of furcal arms, furcal anterior plate, furcal laminae, and the furcal stalk. The membranous metathoracic wing (Fig. 18) is supported by well-defined veins. I follow the vein nomenclature for the Cleridae as proposed by Gerstmeier & Eberle (2010: 10).

***Legs***. – The leg morphology of *Cregya* species is similar to other beetles whose lifestyle involves cursorial predatory activities. The leg is comprised of the coxa, trochanter, femur, tibia, and tarsus. Set in the membranes between the tibia and tarsus are tibial spurs. The tarsus is comprised of 5 tarsomeres, with the 4$^{th}$ minute and embedded into the anterior depression of the 3$^{rd}$. The 5$^{th}$ tarsomere, the ungues, have a denticle at their base (Fig. 32). The venter of the first three tarsomeres is set with well-developed tasal soles that are not incised distally.

***Abdomen***. – The abdomen is soft, flexible, and feebly sclerotized dorsally. Ventrally, it consists of 6 moderately sclerotized visible sternites. The distal margin of male sternite VI is usually emarginate; it is evenly arcuate in females. Visible tergite VI, the pygidium, is usually scutiform, but may be oblong, and emarginate distally.
The checkered beetle aedeagus (Figs. 14, 15) is comprised of two main structures, the tegmen and the phallus. The tegmen surrounds the phallus when the latter is in repose. For practical reasons the tegmen is divided into phallobasic components, which involve the phallobase, phallobasic lobes, a pair of phallobasic struts, and the phallobasic apodeme. The phallobasic apodeme may be long and narrow or short and broad. The phallus is comprised of the phallic apex and the phallic plates. Each phallic plate may be divided into an anterior and phallic portion (Fig. 14). The most extensive variation in aedeagal structure, among *Cregya* species, involves the length of the aedeagus, shape of the phallic apex, and length of the phallobasic apodeme. The ovipositor is mostly a membranous tube supported by three pairs of slender sclerites, the oblique bacculi, the ventral bacculi, and a pair of proctigeral bacculi. The coxites are lobes that are slightly sclerotized and setose. Between the dorsal and ventral bases of the coxites are the laminae. The dorsal lamina is trilobed whereas the ventral lamina is unilobed. The coxital stylus, which is setose at its extremity, is attached to the posterior limits of the coxite.

## Internal Morphology

This analysis of internal morphology is based on dissection results involving 6 species of *Cregya*. (Ekis & Gupta, 1971: 62, in part).

***Alimentary canal***. – The adult alimentary canal (Fig. 19) consists of the stomodaeum, ventriculus, cryptonephridial Malpighian tubules, and the proctodaeum. The stomodaeum is comprised of the pharynx, esophagus, and a muscular proventriculus. Internally, the proventriculus shows infoldings that lead to lobes of the stomodeal valve. Based on the species studied, the *Cregya* stomodeal valve consists of 4 primary and 2 secondary lobes; the dorsal primary lobe is very broad. The ventriculus, does not show ventricular papillae. Between the ventriculus and the proctodaeum emerge 4 cryptonephridial Malpighian tubules. These are followed by the components of the proctodaeum, which are, a muscular pylorus, the ileum, a bulbous colon, and the rectum; the latter is considerably longer in females than in males.

***Mesodermal reproductive organs***. – The mesodermal male reproductive organs (Fig. 39) involve the testes, vas deferens, accessory glands, and ejaculatory duct. The testes are multifollicular. There are 2 pairs of accessory glands. The major female organs (Fig. 38) involve the ovaries, lateral and medial oviducts, bursa copulatrix, spermathecal capsule, spermathecal gland, and the vagina. The ovaries consist of multifollicular acrotrophic follicles that stem from the calyx. This structure connects to short lateral oviducts that communicate with a longer median oviduct. The bursa copulatrix is a tubular structure continuous with the vagina. The spermathecal capsule is tubular and variously sclerotized. The capsule communicates with the vagina via the spermathecal duct. The place of connection of the spermathecal gland to the spermathecal capsule varies, most often it is attached to the middle of the capsule but it may be attached to the base of the capsule. The vagina is a tubular, highly muscular tapered organ.

# Taxonomy

***Cregya*** LeConte, 1861: 197

ZooBank : http://zoobank.org/19EC852C-FBD5-44A9-8125-249886C2C0C5

– Winkler 1961: 64.
– Ekis (now Opitz) & Gupta 1971: 62.
– Ekis (now Opitz) 1975: 53.
– Opitz 2002a: 279; 2010: 100; 2017: 44.
– Solervicens 2008: 593.

See Corporaal (1950a: 279) for historical citations.

***Type species***. – *Clerus oculatus* Say, 1835: 163. Subsequent designation by Corporaal (1950a: 279).

***Junior synonym***. – *Galeruclerus* Gahan, 1910: 75.

***Diagnosis***. – Among the Neotropical genera of Peloniinae, characterized by having 10 antennomeres, the subfiliform condition of the funicular antennomeres separates the members of Cregya from superficially similar specimens of Pujoliclerus, in which the funicular antennomeres are expanded. Also, the terminal maxillary and labial palpomeres are subsecuriform in specimens of Cregya, but digitiform in those of Pujoliclerus.

***Synapotypic characteristics***. – Phallobasic rod absent.

***Redescription***

***Size***. – Length 3.3-12.0 mm; width 1.2-4.0 mm.

***Form*** (Fig. 1). – Oblong rectangular, hind body may be suboval, body deep, about 3 times longer than broad.

***Vestiture***. – Dorsum profusely vested with pale setae, antenna moderately setose, elytra with 1º and 2º setae.

***Head*** (Figs. 3-5, 28). – *Cranium* subquadrate, frons wider, narrower or equal in width of eye, indented with coarse setiferous punctations. – *Gula* (Figs. 4, 30) large, triangular, sutures converge, gula with two well-developed setose gular processes (Fig. 30). – *Labrum* (Fig. 8) shallow, incised distally, tormal processes confluent, epipharyngeal plate small. – *Mandible* (Fig. 16), body stout, anterior dens acuminate, medial and posterior dens well developed, penicillus well developed. – *Maxilla* (Figs. 11, 29), laterolacinia present as inflection, terminal palpomere subsecuriform. – *Labium* (Fig. 10), ligula deeply incised, ligular lobes narrowed, terminal palpomere subsecuriform. – *Eyes* large, coarsely facetted, bulgy, ocular notch moderately sized. – *Antenna* comprised of 10 antennomeres, capitate (Fig. 2).

***Thorax***. – *Pronotum* (Figs. 7, 34) quadrate, slightly transverse, or slightly oblong, anterior limit of dorsolateral carina extends slightly beyond lateral tubercle, posteriorly carina extends to pronotal posterior angles where confluent with pronotal hem, disc variously punctate, slightly convex, side margins with variously developed lateral tubercle, *prointercoxal process* narrow (Figs. 6, 33), slightly expanded distally. – *Pronotal projections* short (Fig. 33), acuminate, they are not contiguous with prointercoxal process. – *Elytron* sculptured with asetiferous punctuations (Fig. 35), punctures may be arranged into punctiferous striae (Figs. 36, 37), or may be minute and profusely distributed throughout elytral disc, or punctures may be concentrated in humeral region, epipleural fold wide and tapered to elytral apex, elytral anterior margin not carinate. – *Metathoracic wing* (Fig. 18) with wedge cell not discernible. – *Metendosternite* (Fig. 9) with furcal lamina, furcal anterior plate large triangular. – *Legs*, *profemora* not swollen, anterior margin without spines, tibial spur (Fig. 31) formula 1-2-2, tarsal pulvillar formula 3-3-3, *unguis* with basal denticle (Fig. 32).

***Abdomen***. – *Pygidium* incised distally (Fig. 20) or not incised (Fig. 21). – *Aedeagus* (Figs. 14, 15) shorter than length of abdomen, distal region of phallobase slightly lobed, *tegmen* (Fig. 23) very reduced, submembranous, phallobasic struts confluent with phallobasic apodeme, latter narrow (Figs. 15, 23) or broad (Fig. 27) phallobasic rod absent, phallobasic lobes very small, not fimbriate, phallic apex digitiform (Fig. 25) or triangular (Fig. 26), phallic plates wide and may (Figs. 22, 24) or may not (Figs. 26, 27) be bipartite. – *Spicular plates* (Fig. 17) flared, spicular apodemes fused at basal 1/3rd, intraspicular plate oblong-linear. – *Ovipositor* shorter than abdomen, laminae acuminate, laminal rod present.

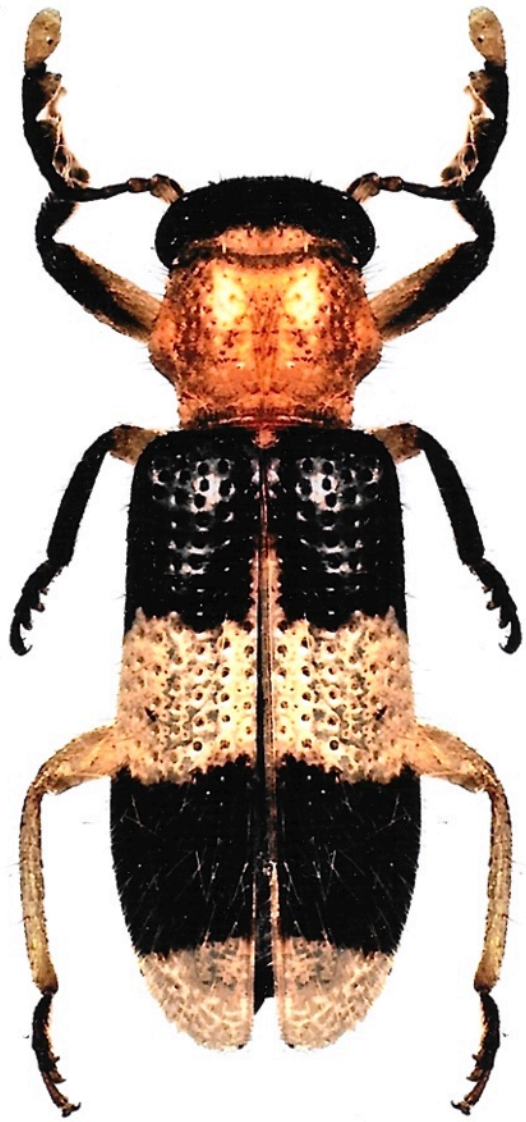


**Fig**. **1**. - Habitus of *Cregya marysearsi* Opitz **n**. **sp**.

***Alimentary Canal*** (Fig. 19). – Described and illustrated in Ekis (now Opitz) & Gupta (1971: 62).

***Male Mesodermal Reproductive Organs*** (Figs. 39, 42-44). – Two pairs of accessory glands, medial pair longer than lateral pair, medial pair broad at base and narrowed distally, often convoluted in narrow portion, testis comprised of 12 follicles.

***Female Mesodermal Reproductive Organs*** (Figs. 38, 40). – Spermathecal capsule well sclerotized; spermathecal gland attached to sides of spermathecal capsule; bursa copulatrix not saccular.

***Distribution***. – *Cregya* is known from the USA to Uruguay.

# Key to Species of *Cregya* Leconte

This key is based on characteristics found on the primary types. If a specimen keys out to a species, but the specimen at hand does not fit exactly the key definition, then the reader is advised to check the "Variation" category in the description of the couplet species. For example, a specimen may key to *Cregya sexnotata* (Klug, 1842), but instead of having one black spot behind the middle of the elytral disc, which is what the key couplet states, the specimen at hand may show a solid black line or 2 black spots behind the elytral middle; which is described in the "Variation" section of *C. sexnotata*. If the specimen to be identified is a male, then genitalia must be examined for a more credible conclusion of the identification. To facilitate the descriptive process of characteristics involving the antenna, I have combined the scape, pedicel, and funicle under one term, the "fundus" (Fig. 2).

Because of external morphologic homogenicity among *Cregya* species, the initial key couplets in the separation of the species rely on geographical distribution, i. e., whether they are found in North America, Middle America, or South America (*sensu*, Opitz, 2005: 105). If a species is found in more than one of these geographical regions, then that species keys out in more than one couplet. Species from the Bahama Islands are considered part of the Middle American fauna, whereas those from the Windward Islands of the West Indies are considered part of the South American fauna.

| | | |
|---|---|---|
| 1 | Specimens from North America | **2** |
| 1’ | Specimens not from North America | **6** |
| 2 (1) | Specimens uniformly flavotestaceous (USA) (Fig. 457) | (68) ***C. withlacoochee*** Rifkind |
| 2’ | Specimens not uniformly flavotestaceous | **3** |
| 3 (2’) | Elytral disc uniformly brown, elytral margins testaceous; pronotal disc with two brown spots (USA) (Fig. 437) | (48) ***C. oculata*** (Say) |
| 3’ | Elytral disc not uniformly brown | **4** |
| 4 (3’) | Pronotal sides dark brown, pronotal disc with 2 spots near base; elytral humeral dark marking extends to elytral middle (USA) (Fig. 435) | (46) ***C. mixta*** LeConte |
| 4’ | Pronotal and elytral color not as above | **5** |
| 5 (4’) | Elytral disc with two, sometimes faint, brown maculae between humeral and preapical brown marking (USA) (Fig. 410) | (20) ***C. america*** Opitz, **n. sp.** |
| 5’ | Elytral disc without two brown maculae between humeral and preapical brown marking (USA) (Fig. 444) | (55) ***C. quadrinotata*** (Chevrolat) |
| 6 (1’) | Specimens from Middle America | **7** |
| 6’ | Specimens from South America | **34** |
| 7 (6) | Pronotum concolorous; elytral disc not mottled with dark markings | **8** |
| 7’ | Pronotum not concolorous | **16** |
| 8 (7) | Elytra mostly or entirely testaceous | **9** |
| 8’ | Elytra mostly or entirely dark color | **13** |
| 9 (8) | Elytra with dark brown maculations | **10** |
| 9’ | Elytra entirely testaceous | **11** |
| 10 (9) | Elytral disc with short, dark brown, transverse macula at middle of disc, each elytron with two brown markings near anterior margin; legs bicolorous (Costa Rica, Panamá) (Fig. 46) | (79) ***C. cariari*** Opitz, **n. sp.** |
| 10’ | Elytral maculations restricted to humeral angle and in front of elytral apex; legs unicolorous (México) (Fig. 411) | (21) ***C. andersoni*** Opitz, **n. sp.** |
| 11 (9’) | Cranium black (Costa Rica) (Fig. 415) | (25) ***C. atracapitis*** Opitz, **n. sp.** |
| 11’ | Cranium testaceous | **12** |
| 12 (11’) | Antennal capitulum brown (México) (Fig. 427) | (37) ***C. inornata*** Opitz, **n. sp.** |
| 12’ | Antennal capitulum testaceous (Andros Island) (Fig. 391) | (2) ***C. andros*** Opitz, **n. sp.** |
| 13 (8’) | Elytra unicolorous | **14** |
| 13’ | Elytra bicolorous | **15** |
| 14 (13) | Elytra black; forebody reddish; legs testaceous (México) (Fig. 434) | (45) ***C. mexcala*** Opitz, **n. sp.** |
| 14’ | Elytra blue-black; forebody testaceous; legs black (Panamá) (Fig. 443) | (54) ***C. preclara*** Opitz, **n. sp.** |
| 15 (13’) | Pronotum red; elytral disc black, elytral periphery yellow (Costa Rica) (Fig. 429) | (39) ***C. karafucosa*** Opitz, **n. sp.** |
| 15’ | Pronotum yellow; elytral disc partially infuscated (México) (Fig. 446) | (57) ***C. rifkindi*** Opitz, **n. sp.** |
| 16 (7’) | Pronotum with 4 quadrantally positioned brown spots (México) (Fig. 430) | (40) ***C. lenticula*** Opitz, **n. sp.** |
| 16’ | Pronotum marking not as above | **17** |
| 17 (16’) | Each elytron with macula on humeral angle and with macula just anterior to elytral apex | **18** |
| 17’ | Elytral coloration not as described above | **19** |
| 18 (17) | Elytral disc with two, sometimes faint, brown maculae between humeral and preapical brown marking (México, Honduras) (Fig. 466) | (20) ***C. america*** Opitz, **n. sp.** |
| 18’ | Elytral disc without two brown maculae between humeral and preapical brown marking (México, Guatemala, Honduras, Costa Rica) (Fig. 444) | (55) ***C. quadrinotata*** (Chevrolat) |
| 19 (17’) | Dorsum largely testaceous; pronotal and elytral disc mottled with small black spots | **20** |
| 19’ | Dorsum, pronotum, and elytral disc not as described above | **21** |

| | | |
|---|---|---|
| 20 (19) | Elytral disc with large preapical black macula that shows narrow angular line towards sutural margin | **22** |
| 20’ | Elytral disc coloration not as above | **25** |
| 21 (19’) | Elytral disc subcarinose (Costa Rica, Panamá) (Fig. 495) | (106) ***C. inscripta*** (Gorham) |
| 21’ | Elytral disc not carinose | **23** |
| 22 (20) | Pronotum entirely black (Costa Rica, Panamá) (Fig. 452) | (63) ***C. turrialba*** Opitz, **n. sp.** |
| 22’ | Pronotum not entirely black | **24** |
| 23 (21’) | Elytral disc near elytral anterior margin with 4 small spots (México, Guatemala) (Fig. 417) | (27) ***C. bilineicolle*** (Chevrolat) |
| 23’ | Elytral disc near elytral anterior margin with 3 small spots (Costa Rica) (Fig. 408) | (18) ***C. abdita*** Wolcott |
| 24 (22’) | Elytral disc with brown speckles | **26** |
| 24’ | Elytral disc not speckled | **31** |
| 25 (20’) | Elytral speckles oblong | **27** |
| 25’ | Elytral speckles not oblong | **28** |
| 26 (24) | Sides of elytra broadly dark brown in elytral basal 2/3rd (Costa Rica) (Fig. 395) | (6) ***C. decusoris*** Opitz, **n. sp.** |
| 26’ | Sides of elytra only slightly infuscated; each elytron with an oblong speckle extending backwards from elytron anterior margin (Costa Rica) (Fig. 447) | (58) ***C. rileyi*** Opitz, **n. sp.** |
| 27 (25) | Posterior 2/3rd of elytral disc with large black marking | **29** |
| 27’ | Posterior 2/3rd of elytral disc without large black marking | **30** |
| 28 (25’) | Posterior elytral black marking in form of subcircular spot (México, Guatemala) (Fig. 423) | (33) ***C. cruzvera*** Opitz, **n. sp.** |
| 28’ | Posterior elytral black marking in form of transverse fascia | **29’** |
| 28’’ | Posterior elytral fascia slightly narrow to sutural margin (Belize, Honduras) (Fig. 458) | (69) ***C. yojoa*** Opitz, **n. sp.** |
| 29 (27) | Elytral transverse fascia narrows near sutural margin (Belize, Honduras) (Fig. 458) | (69) ***C. yojoa*** Opitz, **n. sp.** |
| 29’ | Elytral transverse fascia not narrowed near sutural margin (México) (Fig. 454) | (65) ***C. versicula*** Opitz, **n. sp.** |
| 30 (27’) | Subapical region of elytral disc with brown angular marking (Guatemala) (Fig. 459) | (70) ***C. zacapa*** Opitz, **n. sp.** |
| 30’ | Subapical region of elytral disc without brown angular marking (Panamá, Colombia, Venezuela, Bolivia, Brazil, Argentina) (Fig. 421) | (31) ***C. contaminata*** (Klug) |
| 31 (24’) | Elytral disc light brown (México) (Fig. 462) | (73) ***C. apanthesa*** Opitz, **n. sp.** |
| 31’ | Elytral disc dark brown | **32** |
| 32 (31’) | Elytral disc brown at sides, adjacent to epipleural margin (Guatemala, Honduras, Costa Rica) (Fig. 409) | (19) ***C. alicula*** Opitz, **n. sp.** |
| 32’ | Elytra brown throughout disc; elytral margins testaceous | **33** |
| 33 (32’) | Apex of antenna yellow (Panamá) (Fig. 393) | (4) ***C. campana*** Opitz, **n. sp.** |
| 33’ | Apex of antenna black (México, Honduras, Costa Rica) (Fig. 432) | (42) ***C. lineolata*** (Gorham) |
| 34 (6’) | Elytral asetiferous punctures large, as wide as interstitial spaces, punctures arranged in striae that end just before elytral apex (Fig. 36) | **35** |
| 34’ | Elytral asetiferous punctures small, much narrower than interstitial spaces, punctures not arranged in striae that are straight, punctures end near elytral middle or near anterior margin | **84** |
| 35 (34) | Elytral disc mostly dark brown or black | **36** |
| 35’ | Elytral disc not mostly dark brown or black | **46** |
| 36 (35) | Each elytron with 2 large black quadrate markings | **37** |
| 36’ | Elytral marking not as noted above | **39** |
| 37 (36) | Cranium testaceous (Bolivia, Peru) (Fig. 496) | (107) ***C. asarota*** Opitz, **n. sp.** |
| 37’ | Cranium black | **38** |
| 38 (37’) | Last antennomere yellow (Colombia, Ecuador) (Fig. 1) | (44) ***C. marysearsi*** Opitz, **n. sp.** |
| 38’ | Last antennomere black (Brazil) (Fig. 390) | (1) ***C. abacula*** Opitz, **n. sp.** |
| 39 (36’) | Pronotum concolorous | **40** |
| 39’ | Pronotum bicolorous | **44** |

| | | |
|---|---|---|
| 40 (39) | Pronotum black | **41** |
| 40’ | Pronotum not black, yellow or testaceous | **42** |
| 41 (40) | Body form rectangulate; elytral apex black (Brazil) (Fig. 448) | (59) ***C. robusta*** Opitz, **n. sp.** |
| 41’ | Body form ovoid; elytral apex testaceous (Brazil) (Fig. 414) | (24) ***C. ardis*** Opitz, **n. sp.** |
| 42 (40’) | Epipleural margin black (Colombia, Venezuela) (Fig. 416) | (26) ***C. bicolor*** (Laporte) |
| 42’ | Epipleural margin testaceous | **43** |
| 43 (42’) | Cranium yellow (Brazil) (Fig. 406) | (16) ***C. seabrai*** Peracchi |
| 43’ | Cranium black (Grenada, St. Vincent, Bolivia) (Fig. 428) | (38) ***C. insularis*** (Gorham) |
| 44 (39’) | Midelytron with oblique testaceous fascia (Bolivia) (Fig. 451) | (62) ***C. tessara*** Opitz, **n. sp.** |
| 44’ | Midelytron without oblique testaceous fascia | **45** |
| 45 (44’) | Darkness of elytral disc extends to elytral apex (Bolivia) (Fig. 418) | (28) ***C. casselorum*** (Opitz) |
| 45’ | Darkness of elytral disc does not extend to elytral apex (Ecuador) (Fig. 399) | (10) ***C. guttula*** Opitz, **n. sp.** |
| 46 (35’) | Elytral disc with basal and apical/preapical brown maculae and without markings in between | **47** |
| 46’ | Elytral disc coloration not as described above | **56** |
| 47 (46) | Pronotum bicolored | **48** |
| 47’ | Pronotum unicolored | **49** |
| 48 (47) | Elytral posterior brown macula is preapical (Colombia) (Fig. 441) | (52) ***C. pereira*** Opitz, **n. sp.** |
| 48’ | Elytral posterior brown macula is apical (Brazil) (Fig. 455) | (66) ***C. vitticeps*** (Blanchard) |
| 49 (47’) | Elytral posterior brown macula is apical (Suriname, Trinidad, French Guiana, Bolivia, Ecuador, Brazil) (Fig. 440) | (51) ***C. pannusa*** Opitz, **n. sp.** |
| 49’ | Elytral posterior brown macula is preapical | **50** |
| 50 (49’) | Tarsus testaceous | **51** |
| 50’ | Tarsus brown | **53** |
| 51 (50) | Elytral posterior brown macula does not extend to epipleural margin (Bolivia, Brazil) (Fig. 439) | (50) ***C. pallida*** Opitz, **n. sp.** |
| 51’ | Elytral posterior brown macula extends to epipleural margin | **52** |
| 52 (51’) | Phallic plates divided (Colombia, Bolivia, Brazil, Argentina) (Fig. 436) | (47) ***C. mocagua*** Opitz, **n. sp.** |
| 52’ | Phallic plates not divided (Brazil) (Fig. 464) | (75) ***C. chevrolati*** Corporaal |
| 53 (50’) | Elytral anterior brown macula extends across sutural margin (Brazil) (Fig. 463) | (74) ***C. caraca*** Opitz, **n. sp.** |
| 53’ | Elytral anterior brown macula does not extend across sutural margin | **54** |
| 54 (53’) | Elytral anterior brown macula well defined (Colombia) (Fig. 445) | (56) ***C. quadrisignata*** (Spinola) |
| 54’ | Elytral anterior brown macula not well defined | **55** |
| 55 (54’) | Elytral posterior brown marking punctiform, not reaching sutural margin (Venezuela) (Fig. 413) | (23) ***C. aragua*** Opitz, **n. sp.** |
| 55’ | Elytral posterior brown marking not punctiform, reaching sutural margin (Peru) (Fig. 450) | (61) ***C. tambopata*** Opitz, **n. sp.** |
| 56 (46’) | Cranium black or castaneous | **57** |
| 56’ | Cranium not black or dark castaneous | **60** |
| 57 (56) | Pronotum unicolorous, castaneous (Ecuador) (Fig. 460) | (71) ***C. castanea*** Opitz, **n. sp.** |
| 57’ | Pronotum bicolorous, not castaneous | **58** |
| 58 (57’) | Each elytron with 4 brown spots (Brazil) (Fig. 480) | (91) ***C. decima*** Opitz, **n. sp.** |
| 58’ | Elytra without spots | **59** |
| 59 (58’) | Pronotal collar transversally black (Peru) (Fig. 431) | (41) ***C. linea*** Opitz, **n. sp.** |
| 59’ | Pronotal collar not transversally black (Bolivia, Brazil Paraguay, Uruguay, Argentina) (Fig. 456) | (67) ***C. vittipennis*** (Schenkling) |

60 (56') Dark line extends posteriorly from elytral anterior margin ..... **61**
60' Elytral anterior margin not lined ..... **68**

61 (60) Elytral line extends from anterior margin near humeral angle ..... **62**
61' Elytral line extends from anterior margin near sutural margin ..... **63**

62 (61) Long narrow black line extends from humeral angle; pronotal sides testaceous (Brazil) (Fig. 40) ..... (15) ***C. paragramma*** Opitz, **n. sp.**
62' Short broad line extends from humeral angle; pronotal sides broadly black (Bolivia) (Fig. 400) ..... (11) ***C. hedra*** Opitz, **n. sp.**

63 (61') Cranium unicolorous ..... **64**
63' Cranium bicolorous ..... **66**

64 (63) Elytral line near sutural margin broad, extending well beyond elytral middle (Brazil) (Fig. 426) ..... (36) ***C. infula*** Opitz, **n. sp.**
64' Elytral line near sutural margin narrow & short ..... **65**

65 (64') Pronotal disc with two disconnected brown lines (Brazil) (Fig. 422) ..... (32) ***C. corumba*** Opitz, **n. sp.**
65' Pronotal disc brown lines joined at base (Brazil) (Fig. 453) ..... (64) ***C. urica*** Opitz, **n. sp.**

66 (63') Pronotum unicolorous, testaceous; elytral lines near humeral margin slightly oblique (Brazil) (Fig. 449) ..... (60) ***C. sina*** Opitz, **n. sp.**
66' Pronotum bicolorous; elytral lines near humeral margin linearly aligned ..... **67**

67 (66') Pronotum with broad dark brown marking at middle of disc (Bolivia) (Fig. 424) ..... (34) ***C. ekteina*** Opitz, **n. sp.**
67' Pronotum discal marking V-shaped (Colombia) (Fig. 407) ..... (17) ***C. stricta*** Opitz, **n. sp.**

68 (60') Elytra entirely testaceous ..... **69**
68' Elytra not entirely testaceous ..... **70**

69 (68) Antennal capitulum bicolorous (Peru) (Fig. 401) ..... (12) ***C. insignata*** Pic
69' Antennal capitulum unicolorous (Peru) (Fig. 438) ..... (49) ***C. palaga*** Opitz, **n. sp.**

70 (68') Pronotum proper unicolorous ..... **71**
70' Pronotum proper bicolorous ..... **78**

71 (70) Elytral periphery black; pronotal arch with two oblong-transverse spots (Peru) (Fig. 397) ..... (8) ***C. elegantula*** Opitz, **n. sp.**
71' Elytral periphery and pronotal arch not as noted above ..... **72**

72 (71') Elytra mostly dark brown ..... **73**
72' Elytra not mostly dark brown ..... **74**

73 (72) Pronotal collar with 2 black spots (Bolivia) (Fig. 433) ..... (43) ***C. linomolina*** Opitz, **n. sp.**
73' Pronotal collar uniformly dark brown; pronotal arch testaceous at anterior angles (Brazil) (Fig. 420) ..... (30) ***C. catarina*** (Opitz)

74 (72') Elytral entirely testaceous (Brazil) (Fig. 425) ..... (35) ***C. helva*** Opitz, **n. sp.**
74' Elytral not entirely testaceous ..... **75**

75 (74') Elytral disc with brown circular spot (Bolivia, Brazil) (Fig. 403) ..... (14) ***C. lunulata*** (Pic)
75' Elytral disc without brown circle ..... **76**

76 (75') Elytral distal 1/3$^{rd}$ entirely dark brown (Bolivia) (Fig. 442) ..... (14) ***C. pictila*** Opitz, **n. sp.**
76' Elytral distal 1/3$^{rd}$ entirely testaceous ..... **77**

77 (76') Elytral basal macula brown, disc with punctiform mark behind middle (Bolivia) (Fig. 392) ..... (3) ***C. bipunctipennis*** Opitz, **n. sp.**
77' Elytral basal macula red-yellow, remainder of disc testaceous (Peru) (Fig. 394) ..... (5) ***C. cerina*** Opitz, **n. sp.**

78 (70') Pronotal sides with spot (Brazil) (Fig. 396) ..... (7) ***C. duodecimpunctata*** (Klug)
78' Pronotal sides without black spots ..... **79**

79 (78') Pronotal sides with narrow black lines ..... **80**
79' Pronotal sides without narrow black lines ..... **82**

80 (79) Each elytron with 2 large brown macula (Colombia) (Fig. 467) ..... (78) ***C. assumenta*** Opitz, **n. sp.**
80' Elytra without large maculae ..... **81**

81 (80') Elytral distal 2/3rd with oblique irregular narrow black fascia (Venezuela) (Fig. 398) ..... (9) ***C. ferratilis*** Opitz, **n. sp.**
81' Elytral distal 2/3rd faintly spotted (Venezuela) (Fig. 461) ..... (72) ***C. agnosta*** Opitz, **n. sp.**

82 (79') Elytral apex brown (Brazil, Argentina) (Fig. 412) ..... (22) ***C. apicula*** Opitz, **n. sp.**
82' Elytral apex testaceous ..... **83**

83 (82') Antennal apex yellow (Ecuador) (Fig. 402) ..... (13) ***C. lita*** Opitz, **n. sp.**
83' Antennal apex brown (Brazil) (Fig. 465) ..... (76) ***C. variegata*** Opitz, **n. sp.**

84 (34') Eyes wider than width of frons ..... **85**
84' Eyes not wider than width of frons ..... **108**

85 (84) Cranium completely testaceous ..... **86**
85' Cranium not completely testaceous, mostly black or dark brown ..... **98**

86 (85) Each elytral disc with red-brown maculae ..... **87**
86' Elytral disc not marked with red-brown maculae ..... **89**

87 (86) Pronotum oblong (Brazil) (Fig. 472) ..... (83) ***C. gutta*** Opitz, **n. sp.**
87' Pronotum quadrate ..... **88**

88 (87') Elytral posterior macula obliquely positioned (Peru, Ecuador, Bolivia) (Fig. 484) ..... (95) ***C. gemina*** (Schenkling)
88' Elytral posterior macula not obliquely positioned (Brazil) (Fig. 483) ..... (94) ***C. furfurosi*** Opitz, **n. sp.**

89 (86') Pronotum bicolorous ..... **90**
89' Pronotum unicolorous ..... **91**

90 (89) Anterior brown marking on elytral disc proximal to sutural margin J-shaped (Bolivia, Peru) (Fig. 474) ... (85) ***C. hamatilis*** Opitz, **n. sp.**
90' Anterior brown marking on elytral disc proximal to sutural margin linear (Ecuador, Peru) (Fig. 499) ..... (110) ***C. egeri*** Opitz, **n. sp.**

91 (89') Anterior brown marking on elytral disc in form of a macula ..... **92**
91' Anterior brown marking on elytral disc in form of a straight line ..... **96**

92 (91) Anterior marking on elytral disc circular (Ecuador) (Fig. 506) ..... (117) ***C. verticula*** Opitz, **n. sp.**
92' Anterior marking on elytral disc not circular ..... **93**

93 (92') Posterior marking on elytral disc in form of spot ..... **94**
93' Posterior marking on elytral disc not in form of spot ..... **95**

94 (93) Anterior brown marking on elytral disc comprised of large macula (Bolivia) (Fig. 50) ..... (112) ***C. morrisi*** Opitz, **n. sp.**
94' Anterior brown marking on elytral disc comprised of 2 spots (Bolivia) (Fig. 485) ..... (96) ***C. glena*** Opitz, **n. sp.**

95 (93') Posterior 1/2 of elytral disc with short oblique line (Brazil) (Fig. 494) ..... (98) ***C. jatai*** Opitz, **n. sp.**
95' Posterior 1/2 of elytral disc without marking (Suriname) (Fig. 476) ..... (87) ***C. panna*** Opitz, **n. sp.**

96 (91') Long narrow black line extends from humeral angle (French Guiana) (Fig. 488) ..... (100) ***C. mekosa*** Opitz, **n. sp.**
96' Marking from humeral angle not long and narrow ..... **97**

97 (96') Last antennomere black (French Guiana, Brazil) (Fig. 479) ..... (90) ***C. villavera*** Opitz, **n. sp.**
97' Last antennomere yellow (Ecuador, Brazil) (Fig. 475) ..... (86) ***C. kreagris*** Opitz, **n. sp.**

98 (85') Black cranium with yellow spot on frons ..... **99**
98' Cranial color not as above ..... **102**

99 (98) Two markings on elytral anterior region conjoined ..... **100**
99' Elytral marking in anterior region not conjoined ..... **101**

100 (99) Pronotum pale yellow (Colombia, French Guiana, Peru) (Fig. 503) ..... (114) ***C. odonta*** Opitz, **n. sp.**
100' Pronotum testaceous (Peru, Brazil) (Fig. 498) ..... (109) ***C. confluens*** (Gorham)

101 (99') Basal 1/4th of sutural margin black (Ecuador, Peru) (Fig. 492) ..... (104) ***C. terapoto*** Opitz, **n. sp.**
101' Basal 1/4th of sutural margin testaceous (Brazil) (Fig. 493) ..... (105) ***C. tetralineata*** Opitz, **n. sp.**

102 (98') Black streaks extend backwards from elytral anterior margin ..... **103**
102' Black marking near elytral anterior margin does not project streaks ..... **107**

103 (102) Cranium bicolorous ..... **104**
103' Cranium unicolorous ..... **105**

104 (103) Cranium mostly testaceous, infuscated behind eye (Bolivia) (Fig. 505) ..... (116) ***C. trilineata*** Opitz, **n. sp.**
104' Cranium broadly testaceous at middle, black at sides (Brazil) (Fig. 502) ..... (113) ***C. nubilosa*** Opitz, **n. sp.**

105 (103') Large black macula near each elytral anterior margin extends backward into single streak (Bolivia) (Fig. 497) ..... (108) ***C. catoma*** Opitz, **n. sp.**
105' Elytral color not as noted above ..... **106**

106 (105') Black macula near each elytral anterior margin expands posteriorly into 2 streaks (Brazil) (Fig. 487) ..... (99) ***C. juxta*** Opitz, **n. sp.**
106' Black macula near each elytral anterior margin expands posteriorly into more than 2 streaks (Bolivia) (Fig. 486) ..... (97) ***C. hexalineata*** Opitz, **n. sp.**

107 (102') Capitular antennomeres 8 & 9 long triangular (Fig. 12) (Brazil, Argentina, Paraguay) (Fig. 500) ..... (111) ***C. kraatzi*** (Schenkling)
107' Capitular antennomeres 8 & 9 short triangular (Fig. 13) (Colombia, Venezuela) (Fig. 478) ..... (89) ***C. ungula*** Opitz, **n. sp.**

108 (84') Each elytron with 3 dark markings, 2 lines from anterior margin, one dark marking in eltral posterior 1/3 ..... **109**
108' Elytron not marked as indicated above ..... **112**

109 (108) Elytral posterior marking punctiform (Bolivia) (Fig. 466) ..... (77) ***C. ametra*** Opitz, **n. sp.**
109' Elytral posterior marking oblong ..... **110**

110 (109') Elytral posterior making not obliquely positioned (French Guiana, Bolivia, Brazil) (Fig. 504) ..... (115) ***C. sexnotata*** (Klug)
110' Elytral posterior making obliquely positioned ..... **111**

111 (110') Elytral posthumeral black line narrow, extends to elytral 1/2 (Bolivia) (Fig. 491) ..... (103) ***C. stilastichosa*** Opitz, **n. sp.**
111' Elytral posthumeral black line not extended to elytral 1/2 (Brazil) (Fig. 471) ..... (82) ***C. goias*** Opitz, **n. sp.**

112 (108') Each elytron with 2 reddish maculae outlined in brown (Brazil) (Fig. 470) *Cregya fimbriolata* (Chevrolat)
112' Elytral color not as indicated above ..... **113**

113 (112') Elytra 1/2 or more black ..... **114**
113' Elytra not 1/2 or more black ..... **115**

114 (113) Elytral disc completely black; epipleural margin yellow (Colombia, French Guiana, Ecuador, Bolivia, Brazil) (Fig. 477) ..... (88) ***C. teretis*** Opitz, **n. sp.**
114' Elytral disc 1/2 black,1/2 flavotestaceous (French Guiana, Peru, Ecuador, Bolivia, Brazil) (Fig. 473) ... (84) ***C. guyanensis*** (Chevrolat)

115 (113') Each elytral disc with 4 black markings ..... **116**
115' Each elytron with less or more than 4 black markings ..... **117**

116 (115) Antenna dark brown (Peru, Bolivia) (Fig. 489) ..... (101) ***C. nebula*** Opitz, **n. sp.**
116' Antenna flavotestaceous (Brazil) (Fig. 469) ..... (80) ***C. caruaru*** Opitz, **n. sp.**

117 (115') Black marking in anterior region of each elytron extends posteriorly into streaks (Bolivia) (Fig. 481) ..... (92) ***C. diffusa*** Opitz, **n. sp.**
117' Elytra not marked as indicated above ..... **118**

118 (117') Cranium black; elytral disc mostly light brown (Brazil) (Fig. 419) ..... (29) ***C. casusa*** Opitz, **n. sp.**
118' Cranium flavotestaceous; elytral disc mostly flavotestaceous ..... **119**

119 (118') Each elytron with 2 black markings (Colombia) (Fig. 482) ..... (93) ***C. dybasi*** Opitz, **n. sp.**
119' Each elytron with 5 black markings (Brazil) (Fig. 490) ..... (102) ***C. nigropunctata*** (Chevrolat)

# Description of *Cregya* Species

## The *abacula* species group

This is a convenience group, whose species do not show, in aggregate, a defining morphologic characteristic. There are 17 species in this group whose combined geographical range extends from Andros Island (Bahama) to Brazil.

1. ***Cregya abacula*** Opitz **n**. **sp**.

(Fig. 57, 167, 280, 378, 390)

ZooBank: http://zoobank.org/3B2FD624-2D73-47A7-9B77-357D43B34A38

**Holotype**. ♂. BRAZIL, Santa Catarina, Nova Teutonia, 300-500 m, I-1974, F. Plaumann (FSCA).

**Paratypes**. 4 specimens.

**Brazil**

– **Estado do Santa Catarina**, 27°11'S-52°23'W, collection date not given, Fritz Plaumann (WFBM, 1);

– *idem*, 9-XII-1940, Fritz Plaumann (AMNH, 1);

– **Estado do São Paulo**, Val du Rio Pardo, ?-XII-1898, E. Gounelle (MNHN, 1; WOPC, 1).

***Diagnosis***. – *C. abacula* **n**. **sp**. specimens resemble superficially those of *C. marysearsi* **n**. **sp**., but specimens of the latter species have the last antennomere yellow. The same antennomere is brown in specimens of *C. abacula* **n**. **sp**.

### *Description*

***Size***. – Length 4.0 mm. – Width 1.8 mm.

***Form***. – As in Fig. 390.

***Color***. – Testaceous, except *cranium* black, *antenna* brown, and each *elytron* with 2 large black maculae, one near humeral region, the other in elytral posterior 1/2.

***Head***. – Funicular antennomeres subfiliform, progressively shorter towards capitulum (Fig. 57), capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular, antennomere 10 long obovate. – *Eye* as wide as width of frons (EW/FW 23/23).

***Thorax***. – *Pronotum* (Fig. 167) quadrate (PW/PL 65/65), side margin with well-developed tubercle, disc sides coarsely punctate, middle of disc smooth. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5$^{th}$ (EL/EW 185/60).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex long triangular, phallobasic apodeme short and narrow (Fig. 280).

***Variations***. – The available specimens are quite homogeneous.

***Natural History***. – Specimens were captured during December and January, two at an altitude between 300-500 m.

***Distribution*** (Fig. 378). – Known from Brazil.

***Etymology***. – The trivial name, *abacula*, is a Latin noun derived from *abaculus* (= colored tile). I refer to the tile-like color pattern on the elytral disc.

### 2. ***Cregya andros*** Opitz **n. sp.**

(Fig. 160, 168, 281, 377, 391)

ZooBank: http://zoobank.org/33D3600E-F7F5-4BBC-8C28-17A188F3C89B

**Holotype**. ♂. BAHAMAS, Andros Is. Forfar Field Station, bl trap, 6 June 2004, R. Turnbow (FSCA).

**Paratypes**. 1 specimen. – **Bahamas**, 4-VI-1964 (WOPC, 1).

***Diagnosis***. – There are 5 species of *Cregya* whose body color is entirely testaceous: *C. andros* **n. sp.**, *C. inornata* **n. sp.**, *C. insignata* Pic, 1952, *C. withlocoochee*, and *C. palaga* **n. sp.** Male specimens of these species are readily distinguished by differences in the aedeagus. *C. andros* **n. sp.** is the only known *Cregya* species from the Andros Island (Bahamas).

#### *Description*

***Size***. – Length 5.0 mm. – Width 1.8 mm.

***Form***. – As in Fig. 391.

***Color***. – Testaceous.

***Head***. – Funicular antennomeres subfiliform, progressively shorter towards capitulum, capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular (Fig. 160), antennomere 10 obovate. – *Eye* slightly narrower than width of frons (EW/FW 25/28).

***Thorax***. – *Pronotum* (Fig. 168) quadrate (PW/PL 81/81), side margin with well-developed tubercle, disc coarsely punctate; elytra with 10 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 210/60).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex triangular. – Phallobasic apodeme narrow (Fig. 281).

***Natural History***. – The holotype was captured in June, in a black light trap.

***Distribution*** (Fig. 377). – Known from Andros Island, a Bahamas Island.

***Etymology***. – The trivial name, *andros*, constitutes a noun in apposition and refers to the type locality.

### 3. ***Cregya bipunctipennis*** Opitz **n. sp.**

(Fig. 161, 169, 378, 392)

ZooBank: http://zoobank.org/F7956D79-E70B-4CD0-AA00-756CC8D62B76

**Holotype**. ♂. BOLIVIA, Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 405 m, 5-15-XI-2001, 17°29.949'S 63°33.152'W, M. C. Thomas & B. K. Dozier, tropical transition forest (MNKM).

***Diagnosis***. – Specimens of this species superficially resemble those of *C. cerina* **n. sp.**, but in *C. bipunctipennis* **n. sp.** specimens there are two discal spots behind the elytral middle. The posterior half of the elytral disc is uniformly testaceous in specimens of *C. cerina* **n. sp.** Also, the elytral basal marking is dark brown in specimens of *C. bipunctipennis* **n. sp.** These markings are red-brown in specimens of *C. cerina* **n. sp.**

#### *Description*

***Size***. – Length 5.5 mm. – Width 2.2 mm.

***Form***. – As in Fig. 392.

***Color***. – Testaceous, except each elytron with 2 brown maculae, one large macula near elytral base, the other small punctiform macula near elytral middle.

***Head***. – Funicular antennomeres subfiliform, progressively shorter towards capitulum (Fig. 161), capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular, antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 38/15).

***Thorax***. – *Pronotum* (Fig. 169) slightly oblong (PW/PL 85/90), side margin with well-developed tubercle, disc sides coarsely punctate, middle of disc smooth – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4th (EL/EW 255/70).

***Abdomen***. – Pygidium scutiform.

***Natural History***. – The holotype was collected during November, at 405 m.

***Distribution*** (Fig. 378). – Known from Bolivia.

***Etymology***. – The trivial name, *bipunctipennis*, is a Latin compound name that stems from the prefix *by-* (= 2), the noun *punctum* (= dot), and the noun *penna* (= wing); regarding the elytral markings.

### 4. ***Cregya campana*** Opitz **n. sp.**

(Fig. 70, 171, 282, 388, 393)

ZooBank: http://zoobank.org/8CA14963-C6F0-4E0B-A1D3-F8FFF6E7E6B1

**Holotype**. ♂. Panamá, Panamá, Cerro Campana, 18-VI-1976, W. E. Clark (FSCA).

**Paratypes**. One specimen. – **Panamá**, **Provincia de Panamá**, El Llano, Carti Road, kilometer 9-10-V-1996, mercury vapor and black light, R. Turnbow (RHTC).

***Diagnosis***. – *C. campana* **n. sp.** specimens resemble superficially those of *C. lineolata* (Gorham, 1883), but specimens of the latter species have the antennal apex black, whereas in those of *C. abacula* **n. sp.** the antennal apex is yellow.

#### *Description*

***Size***. – Length 4.5 mm. – Width 1.3 mm.

***Form***. – As in Fig. 393.

***Color***. – *Cranium* bicolored, mostly yellow, upper frons and epicranium black. – *Antenna* black, except distal 1/2 of antennomere 11 yellow. – *Pronotum* yellow along sides and yellow in midline, disc with two broad brown lines. – *Pterothorax* and *abdomen* brown. – *Legs* bicolored, *femora* yellow, except *prothoracic femur* infuscated distally, *tibiae* bicolored, *prothoracic tibia* infuscate, *mesothoracic* and *metathoracic tibiae* mostly yellow, slightly infuscated distally, *tarsi* brown. – *Elytra* bicolorous, outline yellow, disc dark brown.

***Head***. – *Funicular antennomeres* subquadrate, capitulum longer than combined length of funicular antennomeres, 7th antennomere conspicuously widened. – *Capitular antennomeres* 8 and 9 short triangular (Fig. 70), antennomere 10 obovate. – *Eye* wider than frons (EW/FW 29/18).

***Thorax***. – *Pronotum* (Fig. 171) quadrate (PW/PL 70/70), side margin with well-developed tubercle, disc punctures widely separated, midline of disc broadly glabrous. – *Elytra* with 10 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 205/45).

***Abdomen***. – *Pygidium* scutiform, posterior margin slightly emarginate. – Phallic post-apical flap absent, each phallobasic lobe with medial odontoid process, phallic apex triangular. – Phallobasic apodeme narrow (Fig. 282).

***Natural History***. – The holotype was collected during July, at 305 m; the paratype during May.

***Distribution*** (Fig. 388). – Known from Panamá.

***Etymology***. – The trivial name, *campana*, constitutes a noun in apposition and refers to the type locality.

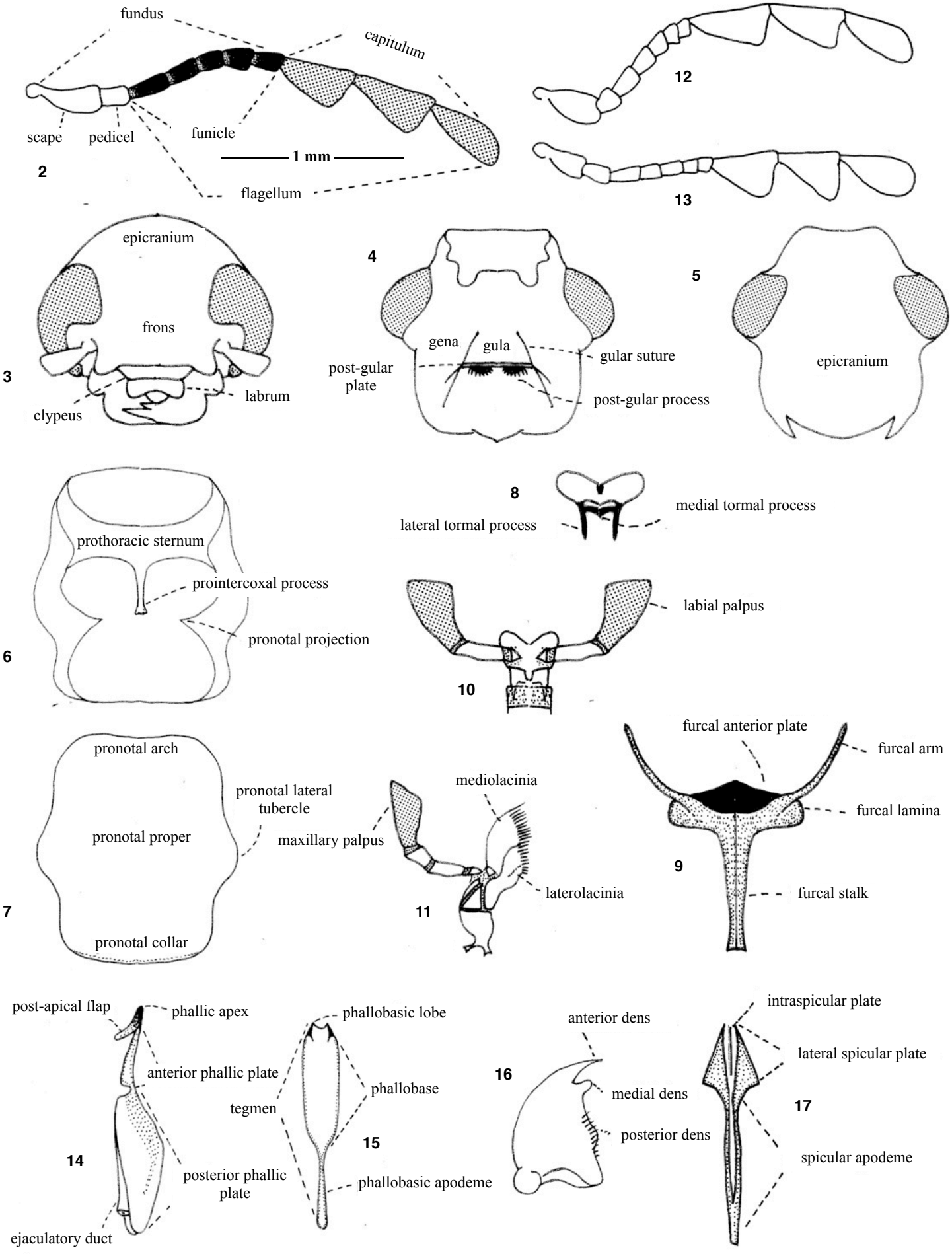



**Fig**. **2-13**. - Various structures. **(2)** Antenna of *Cregya kraatzi* (Schenkling, 1900). **3-11** *C. oculata* (Say, 1835). **(3)** Head, frontal view. **(4)** Head, ventral view. **(5)** Head, dorsal view. **(6)** Prothorax, ventral view. **(7)** Pronotum, dorsal view. **(8)** Labrum. **(9)** Metendosternite. **(10)** Labium. **(11)** Maxilla. **12-13** Antennae. **(12)** *C. hamatilis* **n**. **sp**. **(13)** *C. decusoris* **n**. **sp**.

**Fig**. **14-17**. - Various structures of *Cregya oculata* (Say, 1835). **(14)** Phallus. **(15)** Tegmen. **(16)** Mandible. **(17)** Spicular fork.

### 5. ***Cregya cerina*** Opitz **n. sp.**

(Fig. 150, 172, 283, 378, 394)

ZooBank: http://zoobank.org/C60AAACC-6E74-452A-8315-140961A8CF16

**Holotype**. ♂. PERU, Madre de Dios, Rio Tambopata Res. 30 km (air) sw Maldonado, 290 m, 12°50'S-069°20'W. A second label reads: Smithsonian Institution Canopy Fogging Project, T. L. Erwin et al. colls., 10 May 84 04/065 (USNM). A third label reads: Fogging, 0053226.

**Paratypes**. 2 specimens.

**Peru**:

– **Provincia de Puno**, Madre de Dios, Rio Tambopata, 30 km SW Puerto Maldonado, 12°50'S-069°20'W, 9-III-1984, 290 m, T. L. Erwin (USNM);

– *idem*, 10-XI-1982, T. L. Erwin (WOPC).

***Diagnosis***. – Specimens of this species superficially resemble those of *C. bipunctipennis* **n. sp.**, but in *C. bipunctipennis* **n. sp.** specimens there are two discal spots behind the elytral middle. The posterior half of the elytral disc is uniformly testaceous in specimens of *C. cerina* **n. sp.** Also, the elytral basal marking is red-brown in specimens of *C. cerina* **n. sp.**, whereas in *C. bipunctipennis* **n. sp.** beetles this marking is dark brown.

#### *Description*

***Size***. – Length 5.5 mm. – Width 2.1 mm.

***Form***. – As in Fig. 394.

***Color***. – Testaceous, except pronotal disc and each elytral base marked by reddish-brown macula.

***Head***. – Funicular antennomeres subfiliform, progressively shorter towards capitulum (Fig. 150), capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular, antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 33/15).

***Thorax***. – *Pronotum* (Fig. 172) quadrate (PW/PL 75/75), side margin with well-developed tubercle, disc sides coarsely punctate, middle of disc smooth. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4th (EL/EW 230/70).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex triangular (Fig. 283).

***Natural History***. – The available specimens were collected during March, May, and November, at 290 m; by fogging tree canopy.

***Distribution*** (Fig. 378). – Known from Peru.

***Etymology***. – The trivial name, *cerina*, is a Latin name that stems from *cerinus* (= yellowish); I refer to the yellowish color of these beetles.

### 6. ***Cregya decusoris*** Opitz **n. sp.**

(Fig. 13, 159, 173, 284, 388, 395)

ZooBank: http://zoobank.org/5A9097DC-D736-44C6-8E19-734B33027AB6

**Holotype**. ♂. Costa Rica, Guanacaste, Volcán Cacao, 1988, 1000-1400 m. (FMNH).

**Paratypes**. One specimen. – **Panamá**: **Provincia de Panamá**, Cerro Campana, 11-15-V-1980, E. G. Riley & D. LeDoux (TAMU, 1).

***Diagnosis***. – Specimens of this species superficially resemble those of *C. rileyi* **n. sp.**, but in *C. decusoris* **n. sp.** specimens the pronotal sides are broadly dark brown, whereas in *C. rileyi* **n. sp.** specimens the pronotal sides are only slightly infuscated.

#### *Description*

***Size***. – Length 4.5 mm. – Width 1.2 mm.

***Form***. – As in Fig. 395.

***Color***. – Testaceous, except lower frons and epicranium with faint brown streak, *pronotum* broadly dark brown at sides and with faint narrow line at middle, *elytra* dark brown in basal 2/3rd and with brown narrow streaks at middle and apical 1/3rd.

***Head***. – Funicular antennomeres subfiliform, progressively shorter towards capitulum (Fig. 159), capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular, antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 23/20).

***Thorax***. – *Pronotum* (Fig. 173) quadrate (PW/PL 68/68), side margin with well-developed tubercle, disc sides coarsely punctate, middle of disc smooth. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4th (EL/EW 190/50).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex digitiform (Fig. 284).

***Natural History***. – The holotype was collected at an altitude between 1,000 and 1,400 m. The paratype was captured during May.

***Distribution*** (Fig. 388). – Known from Costa Rica and Panamá.

***Etymology***. – The trivial name, *decusoris*, is a Latin name that stems from *decorus* (= beautiful); with reference to the color of the dorsum of this beetle.

### 7. ***Cregya duodecimpunctata*** (Klug, 1842)

(Fig. 49, 158, 174, 285, 378, 396)

*Enoplium duodecimpunctatum* Klug, 1842: 368. Brasilien (Brazil).

**Lectotype**. Gender not known. Here designated (ZMHB). Corporaal 1950a: 280.

It is not known how many specimens were available when Klug made the description of this species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

***Diagnosis***. – Only in specimens of this species do we find 12 brown spots on the dorsum.

#### *Redescription*

***Size***. – Length 8.2 mm. – Width 3.2 mm.

***Form***. – As in Fig. 396.

***Color***. – Testaceous, except epicranium with narrow black infuscation, *pronotum* with 2 paralaterally located black spots, each *elytron* with 5 punctiform black spots, one near elytral anterior margin, 2 in front of elytral middle, 2 behind elytral middle, humeral region broadly black, *disc apex* broadly black.

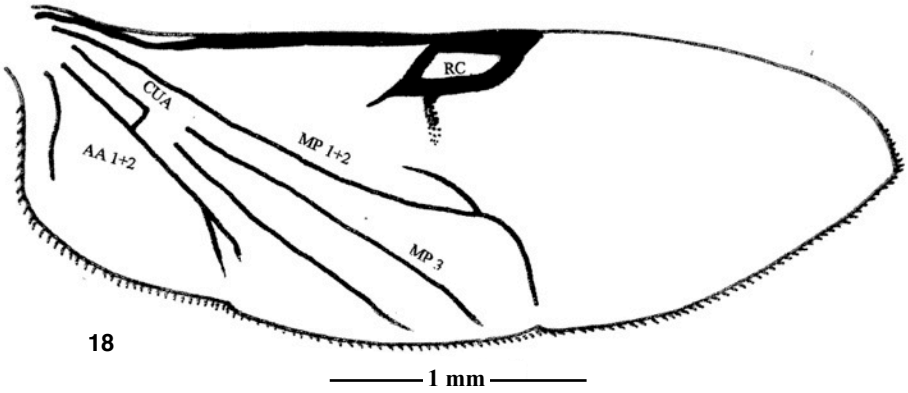
***Head***. – *Funicle* shorter than capitulum (Fig. 49, 158), capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eyes* slightly wider than width of frons (EW/FW 43/40).

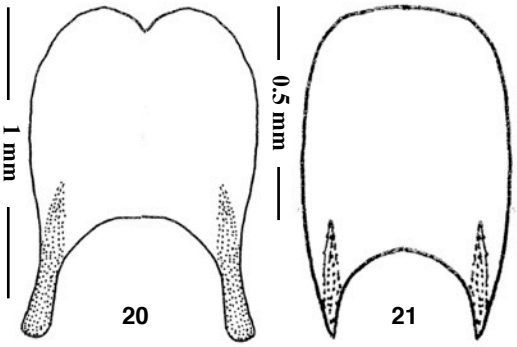
***Thorax***. – *Pronotum* (Fig. 174) quadrate (PW/PL 130/130), side margin with well-developed tubercle, disc coarsely punctate at sides, punctulate at middle. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4th (EL/EW 360/110).

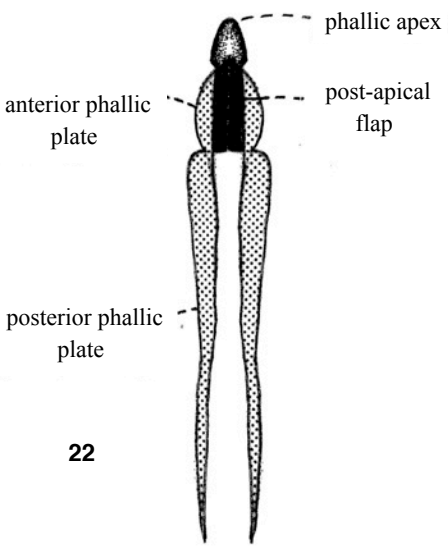
***Abdomen***. – *Pygidium* scutiform, distal margin concave. – Phallic post-apical flap absent, phallic apex acuminate. – Phallobasic apodeme narrow (Fig. 285).

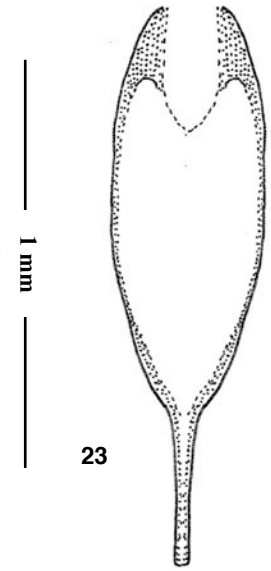
***Variations***. – Size: Length 6.0-8.2 mm; width 2.0-3.2 mm. – The epicranial infuscation may be missing and the two black spots behind the middle of the elytral disc may be consolidated.

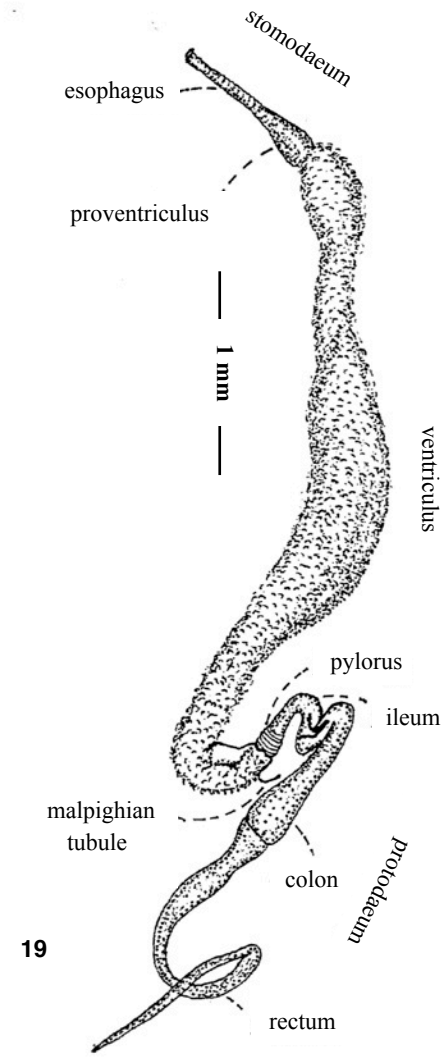
***Natural History***. – Specimens were collected during April, September, and December.



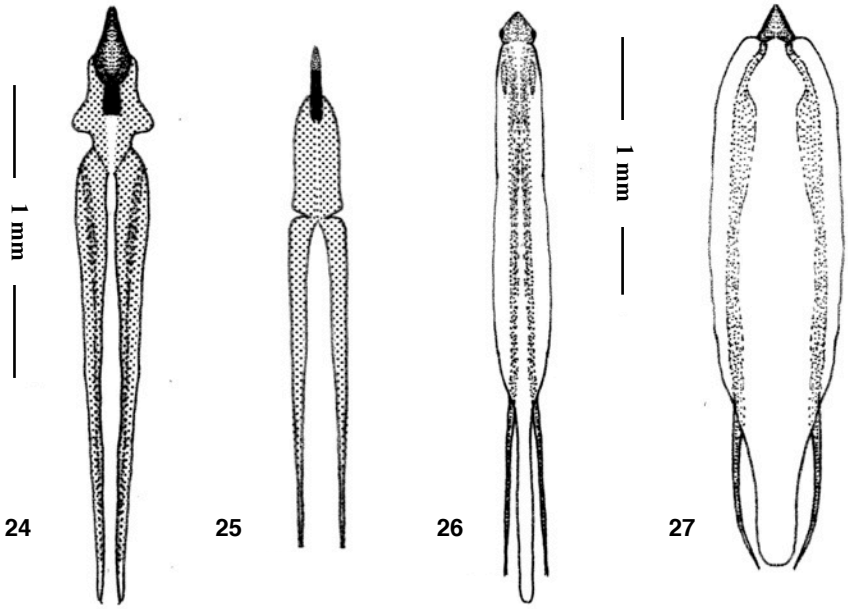




**Fig**. **18**. - Metathoracic wing of *Cregya oculata* (Say, 1835).

**Fig**. **19-21**. - Alimentary canal and pygidiae. **(19)** Alimentary canal of *Cregya quadrisignata* (Spinola, 1844). **20-21** Pygidiae. (**20)** *C. kraatzi* (Schenkling, 1900). **(21)** *C. fimbriolata* (Chevrolat, 1843).

**Fig**. **22-27**. - Aedeagal structures. **(22)** Phallus of *Cregya mixta* LeConte, 1865. **(23)** Tegmen of *Cregya mixta* LeConte, 1865. **(24)** Phallus of *C. america* **n**. **sp**. **(25)** Phallus of *C. oculata* (Say, 1835). **(26)** Phallus of *C. mekosa* **n**. **sp**. **(27)** Aedeagus of *C. kraatzi* (Schenkling, 1900).

***Distribution*** (Fig. 378). – In addition to the lectotype, I examined 76 specimens from:

**Peru**

– **Region Ancash**, Huambo, ?-?-1889, M. de Mathan.

**Brazil**

– **Estado do Santa Catarina**, Nova Teutonia, 27°11'S-52°23'W, 29-IX-1940, Fritz Plaumann;
– *idem*, 10-I-1942, Fritz Plaumann;
– *idem*, 24-XII-1941, Fritz Plaumann;
– Rio Vermelho, ?-I-1945, Fritz Plaumann;
– Corupa, Hansa Humbolt, ?-XI-1948, A. Maller;
– **Estado do Rio de Janeiro**, Nova Friburgo, 3-4-II-1943, E. Gounelle;
– Petropolis, ?-V-1885, P. Germain;
– Tijuca, ?-I-1857, H. Clark;
– **Estado do Minas Gerais**, ?-?-1907, collector not noted;
– Serrado Caraça, ?-I-1970, F. M. Oliveira; Matusinhos, 4-III-1885, E. Gounelle;
– Viçosa, 12-IV-1933, E. J. Hambleton;
– Mar de Espanha, 30-XI-1910, J. F. Zicán;
– Vila Monte Verde, 26-XII-1970;
– Rio Piracicaba, ?-II-1885, P. Germain;
– **Estado do São Paulo**, Val du Rio Pardo, ?-XII-1998, E. Gounelle;
– Barueri, ?-XII-1965, K. Lenko;
– Sitio Bananal, Guarulkos, 13-XII-1958, J. Halik;
– Cantareira, 1-I-1940, J. Halik;
– Constancia, ?-I-1857, J. Gray;
– **Estado do Mato Grosso**, Villa Vera, ?-X-1973, Moacir Alvarenga;
– **Estado do Paraná**, Lapa, ?-I-1957, 1,200 m, E. Amante;
– **Estado do Paraiba**, ?-V-1884, P. Germain.

Specimens are deposited in AMNH, FMNH, MNHN, MZSP, WFBM, and WOPC.

### 8. ***Cregya elegantula*** Opitz **n. sp.**

(Fig. 146, 177, 378, 397)

ZooBank: http://zoobank.org/DB960138-D982-49F2-A58C-B14092A184D9

**Holotype**. ♂. PERU, Madre de Dios, Rio Tambopata Res. 30 km (air) sw Maldonado, 290 m, 12°50'S-069°20'W. A second label reads: Smithsonian Institution Canopy Fogging Project, T. L. Erwin et al. colls, 28 Feb 84 01/01/025 (USNM). A third label reads: Fogging, 00003509.

***Diagnosis***. – Within *Cregya*, only in specimens of this species do we find the elytral disc yellow, but outlined in black (see Fig. 397). The epipleural margin is yellow.

#### *Description*

***Size***. – Length 5.5 mm. – Width 2.0 mm.

***Form***. – As in Fig. 397.

***Color***. – Yellow, except *cranium* black, *antenna* mostly brown, last *antennomere* yellow, anterior margin of *pronotal arch* infuscated, *tibiae* and *tarsi* brown, each *elytron* with yellow disc narrowly outlined in black, *epipleural margin* yellow, *pterothorax* black, *abdomen* brown.

***Head***. – Funicular antennomeres subfiliform, progressively shorter towards capitulum (Fig. 146), capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular, antennomere 10 obovate. – *Eye* as wide as width of frons (EW/FW 30/30).

***Thorax***. – *Pronotum* (Fig. 177) transverse (PW/PL 103/85), side margin with well-developed tubercle, disc sides shallowly punctate, middle of disc smooth. – *Elytra* with 10 punctiferous striae, striae end at elytral distal 4/5$^{th}$ (EL/EW 245/80).

***Abdomen***. – *Pygidium* scutiform.

***Natural History***. – The holotype was collected during February, at 290 m; by fogging tree canopy.

***Distribution*** (Fig. 378). – Known from Peru.

***Etymology***. – The trivial name, *elegantula*, is a Latin name that stems from *elegantulus* (= very fine); with reference to the elegant elytral color of these beetles.

### 9. ***Cregya ferratilis*** Opitz **n. sp.**

(Fig. 58, 178, 378, 398)

ZooBank: http://zoobank.org/31C348C6-C5F5-4B52-992C-F5EE414CB7AF

**Holotype**. ♀. VENEZUELA, Tach. 3000 m, 50 km NE San Cristobal, 17-18-V.1974, H. & A. Howden (CMNC).

**Paratypes**. One specimen. – **Venezuela**: Estado de Merida, La Culata, 25-IV-2-V-1988, S. A. Marshal (CNCI).

***Diagnosis***. – *C. ferratilis* **n. sp.** specimens differ from superficially similar specimens of *C. agnosta* **n. sp.** by showing an angular black oblique line at the posterior 2/3$^{rd}$ of the elytral disc. *C. agnosta* **n. sp.** specimens show brown spots on the elytra disc.

#### *Description*

***Size***. – Length 5.0 mm. – Width 2.0 mm.

***Form***. – As in Fig. 398.

***Color***. – Ferruginous, except slight infuscations behind *eye* and along sides of *pronotum*, each *elytron* with angular fascia at elytral posterior 2/3 $^{rd}$.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular (Fig. 58), antennomere 10 long obovate; eye much narrower than width of frons (EW/FW 20/35).

***Thorax***. – *Pronotum* (Fig. 178) quadrate (PW/PL 75/75), side margin with well-developed broad tubercle, disc sides coarsely punctate, middle of disc shallowly punctate, disc with slightly elevated tumescences. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5$^{th}$ (EL/EW 220//65).

***Abdomen***. – *Pygidium* scutiform.

***Natural History***. – The holotype was captured in May, at 3,000 m. The paratype has a black marking at elytral basal 1/3.

***Distribution*** (Fig. 378). – Known from Venezuela.

***Etymology***. – The trivial name, *ferratilis*, is a Latin name that stems from *ferrum* (= of iron); with reference of the body color of this beetle.

### 10. ***Cregya guttula*** Opitz **n. sp.**

(Fig. 59, 179, 286, 378, 399)

ZooBank: http://zoobank.org/9FBA4C2D-E8B3-437C-98D2-B0522F24BE5F

**Holotype**. ♀. ECUADOR, Pich. 47 km SE Sto. Domingo, Rio Palenque Sta., II-22-28-1976, 300 m, J. M. Campell (CNCI).

**Paratypes**. 6 specimens.

**Ecuador**

– **Provincia de Pichincha**, Los Rios, 2-II-1955, 40 m, E. L. Schlinger & E. S. Ross (WOPC, 1);
– 15 km E. Santo Domingo, Tinalandia, 23-26-II-1981, 700 m, H. F. Howden (CMNC, 3; WOPC 1);
– *idem*, 26-II-1981, 700 m, H. F. Howden (EMEC, 1).

***Diagnosis***. – *C. guttula* **n. sp.** specimens resemble superficially those of *C. ardis* **n. sp.**, but specimens of the latter species have the last antennomere completely black, whereas those of *C. guttula* **n. sp.** have the last antennomere partially yellow.

## *Description*

***Size***. – Length 4.5 mm. – Width 1.8 mm.

***Form***. – As in Fig. 399.

***Color***. – *Cranium*, *prothoracic sternum*, and *legs* testaceous. – *Antenna* brown, except *capitular antennomere* 3 with yellow apex. – *Pronotum* dark brown paralaterally, slightly testaceous at middle near anterior margin. – *Pterothorax* and *abdomen* brown. – *Elytra* mostly brown, testaceous epipleural margin and testaceous posterior 1/3 of disc.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 59), antennomere 10 obovate. – *Eye* as wide as width as frons (EW/FW 20/20).

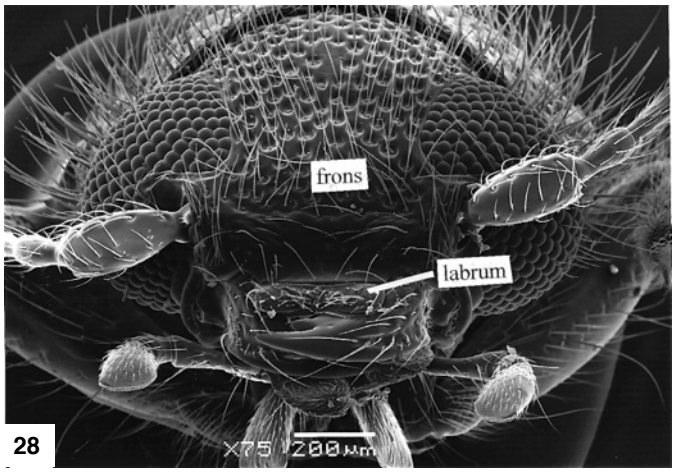
***Thorax***. – *Pronotum* (Fig. 179) slightly oblong (PW/PL 60/63), side margin with well-developed tubercle, disc coarsely punctate at sides, glabrous at middle. – Elytra with 9 punctiferous striae, striae end at elytral distal 2/3rd (EL/EW 170/60).

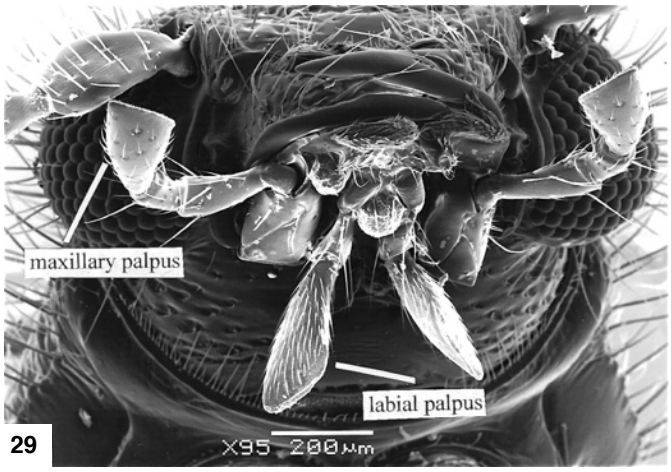
***Abdomen***. – *Pygidium* scutiform, distal margin concave. – Phallic post-apical flap absent, phallic apex triangular. – Phallobasic apodeme narrow (Fig. 286).

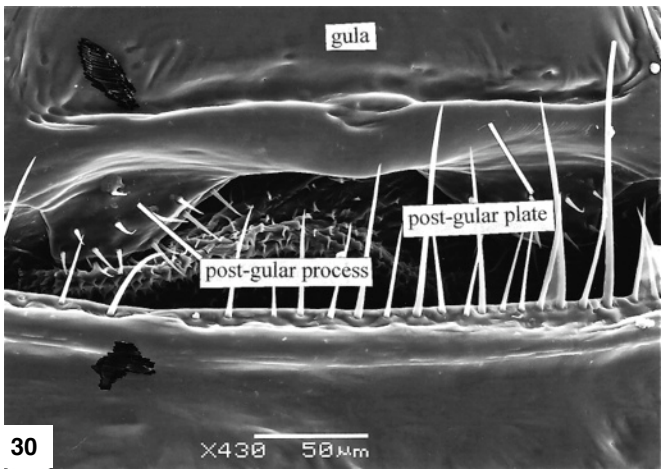
***Variations***. – Size: Length 3.5-4.5 mm; width 1.2-1.8 mm. – Except for body size, the available specimens are quite homogeneous.

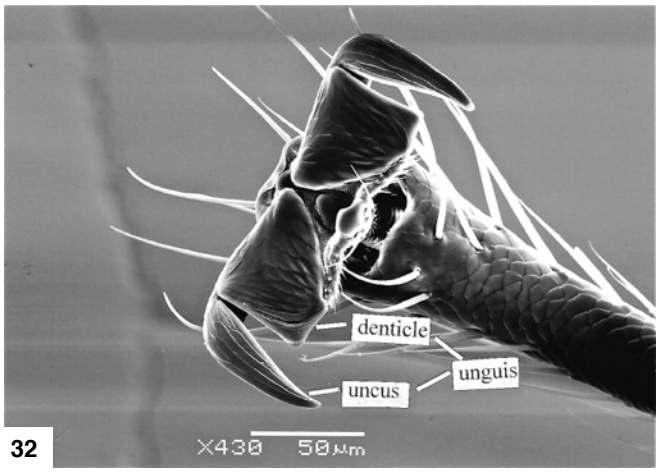
***Natural History***. – The types were collected during February, one at 40 m, on at 300 m, and 5 at 700 m; five specimens were collected by beating tree branches of *Inga* Mill. (Fabaceae).

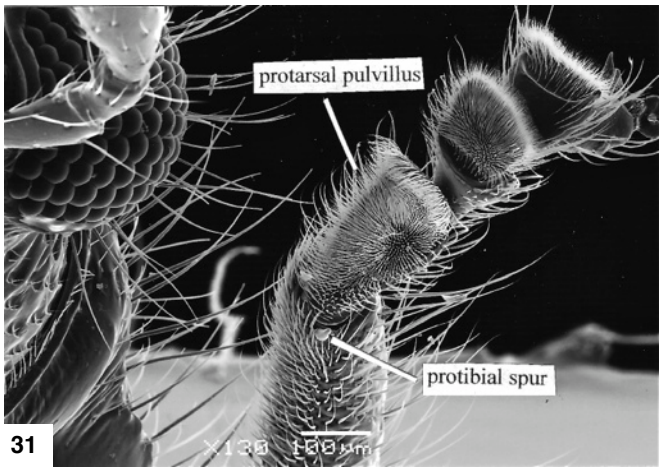
***Distribution*** (Fig. 378). – Known from Ecuador.



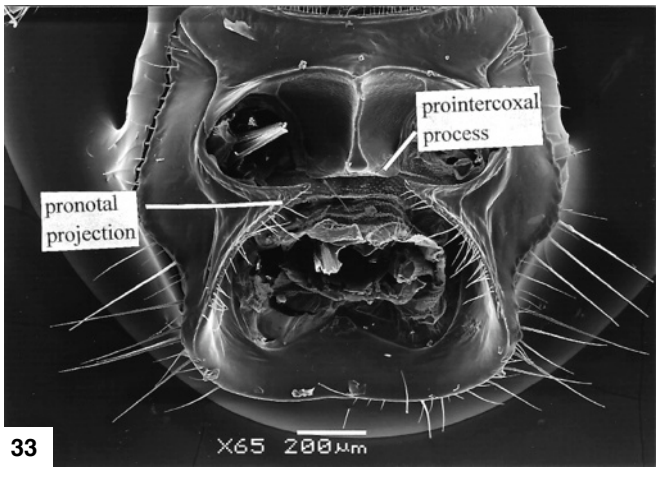




**Fig**. **28-33**. - Structures of *Cregya oculata* (Say, 1835). **(28)** Head, frontal view. **(29)** Mouthparts. **(30)** Forebody, ventral view. **(31)** Protarsus, ventral view. **(32)** Metatarsal ungues. **(33)** Prothorax, ventral view.

***Etymology***. – The trivial name, *guttula*, is a Latin noun with a meaning of "drop". I refer to the tear-drop shape of the hind body of these beetles.

### 11. *Cregya hedra* Opitz **n**. **sp**.

(Fig. 50, 180, 378, 400)

ZooBank: http://zoobank.org/A24FE795-F1F0-4FCC-B443-F8254834E117

**Holotype**. ♀. BOLIVIA, Santa Cruz, Amboro Rd above Achira Campo, 5-5,800', 9-11-X-2004, Wappes & Morris (MNKM).

***Diagnosis***. – Within *Cregya* only in specimens of *C. hedra* **n**. **sp**. is there a broad black line that extends from behind the eye, across the pronotum, and ends on the elytral humeral angle.

#### *Description*

***Size***. – Length 4.8 mm. – Width 1.8 mm.

***Form***. – As in Fig. 400.

***Color***. – Testaceous, except *antenna* black, a black streak extends from behind *eye*, across pronotal side and ends just beyond elytral humeral angle, *prothoracic femur* infuscated distally, *prothoracic tibia* brown.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular (Fig. 50), antennomere 10 long obovate. – *Eye* much narrower than width of frons (EW/FW 20/40).

***Thorax***. – *Pronotum* (Fig. 180) slightly transverse (PW/PL 82/77), side margin with well-developed broad tubercle, disc sides coarsely punctate, middle of disc shallowly punctate. – *Elytra* with 10 punctiferous striae, striae end at elytral distal 4/5$^{th}$ (EL/EW 185/60).

***Abdomen***. – *Pygidium* scutiform.

***Natural History***. – The holotype was captured in October, at an altitude between 1,524 and 1,768 m.

***Distribution*** (Fig. 378). – Known from Bolivia.

***Etymology***. – The trivial name, *hedra*, is a Latin noun that means "side"; with reference to the lateral black line on the body of this beetle.

### 12. *Cregya insignata* Pic, 1952

(Fig. 51, 182, 378, 401)

*Cregya insignata* Pic, 1952: 4.

**Holotype**. ♀. Amazones, Terapoto, (Peru) M. de Mathan, 4$^{e}$ Trimestre 1885 (MNHN).

**Paratypes**. 2 specimens. – **Peru**, **Provincia de San Martin**, Terapoto, Fall of 1885, m. de Mathan (MNHN).

***Diagnosis***. – There are 5 species of *Cregya* whose body color is entirely testaceous: *C. andros* **n**. **sp**., *C. inornata* **n**. **sp**., *C. insignata* Pic, 1952, *C. withlocoochee*, and *C. palaga* **n**. **sp**. Male specimens of these species are readily distinguished by differences in the aedeagus. Among this group of species, only specimens of *C. insignata* Pic, 1952 are known from South America.

#### *Redescription*

***Size***. – Length 5.0 mm. – Width 2.0 mm.

***Form***. – As in Fig. 401.

***Color***. – Testaceous, except *antennal fundus* black, *capitular antennomeres* brown and partially testaceous, *pronotum* ferruginous, *pterothorax* brown, *prothoracic tibia* brown, *mesothoracic* and *metathoracic tibia* brown at base and testaceous in remainder, *tarsi* brown.

***Head***. – *Funicle* shorter than *capitulum*, capitular antennomeres 8 and 9 long triangular (Fig. 51), antennomere 10 obovate. – *Eyes* wider than width of frons (EW/FW 38/21).

***Thorax***. – *Pronotum* (Fig. 182) slightly transverse (PW/PL 79/75), side margin with well-developed broad tubercle, disc shallowly punctate at sides, subglabrous at middle. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4$^{th}$ (EL/EW 220/60).

***Abdomen***. – *Pygidium* scutiform.

***Distribution*** (Fig. 378). – Known from Peru.

### 13. *Cregya lita* Opitz **n**. **sp**.

(Fig. 152, 183, 288, 378, 402)

ZooBank: http://zoobank.org/CB037E23-70A1-4484-A023-A320156CB369

**Holotype**. ♀. Ecuador, Guayas, 1 km SE Sabanillo, ii-13-2004, F. T. Hovore Coll. A ♀ symbol attached to the label (CSCA).

**Paratypes**. 11 specimens.

**Ecuador**:

– **Provincia de Pichincha**, 36 km SE Santo Domingo, Tinalandia, 15-30-V-1945, S. J. Peck (CMNC);

– *idem*, 2-XI-1983, L. Huggert (WOPC);

– *idem*, 15 km E Santo Domingo, Tinalandia, 26-II-1981, 700 m, H. Howden (CMNC, 1);

– *idem*, 23-26-II-1981, 700m, beating, H. F. Howden (CMNC, 4; WFBM, 1: WOPC, 3).

***Diagnosis***. – In the key to species, *C. lita* **n**. **sp**. specimens are grouped with those of *C. variegata* **n**. **sp**., but specimens of *C. lita* **n**. **sp**. have the last antennomere partially yellow, whereas those of *C. variegata* **n**. **sp**. have the last antennomere completely brown.

#### *Description*

***Size***. – Length 6.0 mm. – Width 2.4 mm.

***Form***. – As in Fig. 402.

***Color***. – Mostly testaceous; *frons*, *cranium*, *pronotum*, and *elytron* mottled with dark brown markings. – *Antennal fundus* testaceous, *antennal capitulum* brown, except tip of last *antennomere* pale.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 152), antennomere 10 obovate. – *Eye* as wide as width as frons (EW/FW 30/30).

***Thorax***. – *Pronotum* (Fig. 183) quadrate (PW/PL 90/90), side margin with well-developed tubercle, disc coarsely punctate at sides, glabrous at middle. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 2/3$^{rd}$ (EL/EW 240/75).

***Abdomen***. – *Pygidium* scutiform, distal margin concave. – Phallic post-apical flap absent, phallic apex triangular. – Phallobasic apodeme slightly widened (Fig. 288).

***Variations***. – The prominence of the black mottling on the elytral disc varies.

***Natural History***. – The types were collected during February, May, and November.

***Distribution*** (Fig. 378). – Known from Ecuador.

***Etymology***. – The trivial name, *lita*, is a Latin name that stems from *lino* (= pread over); with reference to the black mottling marks on the notum of these beetles.

14. ***Cregya lunulata*** (Pic, 1940)
(Fig. 64, 184, 287, 379, 403)

*Galeruclerus lunulatus* Pic, 1940: 10. Bresil (Brazil).

**Lectotype**. Gender not known. Here designated (MNHN). Corporaal 1950a: 282.

It is not known how many specimens were available when Pic made the description of this species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

***Diagnosis***. – Among known *Cregya* species, only in specimens of *C. lunulata* (Pic, 1940) is the predominately brown elytral disc interrupted by a centrally located circular testaceous macula (see Fig. 403).

## *Description*

***Size***. – Length 6.0 mm. – Width 2.8 mm.

***Form***. – As in Fig. 403.

***Color***. – *Antenna*, *pterothorax*, *legs*, and *abdomen* testaceous. – *Cranium*, *prothorax* black. – *Elytra* with a black circle that surrounds a large testaceous oval marking, elytral apical region testaceous.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular (Fig. 64), antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 37/27).

***Thorax***. – *Pronotum* (Fig. 184) quadrate (PW/PL 90/90), side margin with slightly-developed tubercle, disc coarsely punctate. – *Elytra* with 10 punctiferous striae, striae end at elytral distal 4/5$^{th}$ (EL/EW 255/100).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex narrow digitiform. – Phallobasic apodeme narrow (Fig. 287).

***Variations***. – Length 4.0-6.0 mm; width 1.8-2.8 mm. – Except for body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected during October and November, some at 430 m.

***Distribution*** (Fig. 379). – In addition to the lectotype, I examined 18 specimens from:

**Bolivia**:

– **Departamento de Santa Cruz**, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 17°29. 949'S-63°33.152'W, 5-15-XI-2001, 430 m, tropical transition forest, black light trap, M. C. Thomas;

– *idem*, 27-31-X-2002, Morris & Wappes; 4.6 km SSE Buena Vista, Hotel Flora & Fauna, 1-8-XI-2002, J. E. Wappes;

– *idem*, 14-28-X-2000, 420, B. K. Dozier; Reserva Privada, Potrerillos de Guenda, 17°40.26'S-63°27.44'W, 10-29-XI-2006, B. K. Dozier.

**Brazil**:

– **Estado do Mato Grosso**, Corumba, collection date & collector not noted.

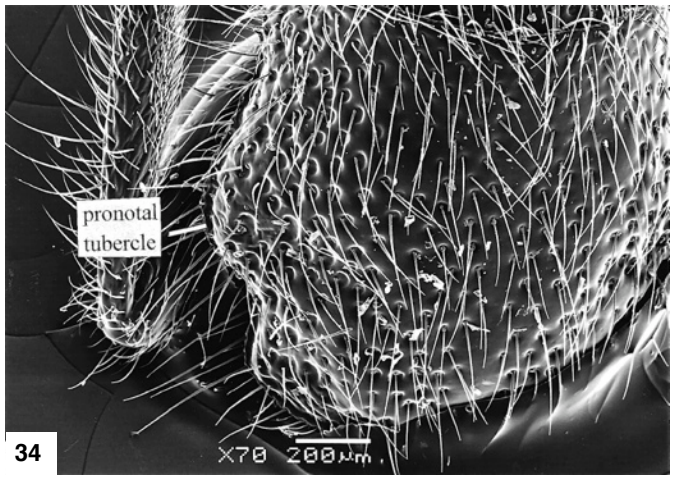
Specimens are deposited in ACMT, FSCA, MNHN, and WOPC.

15. ***Cregya paragramma*** Opitz **n**. **sp**.
(Fig. 60, 185, 379, 405)
ZooBank: http://zoobank.org/E23E752E-B8D5-4C2C-A2E1-DBE3DA388789

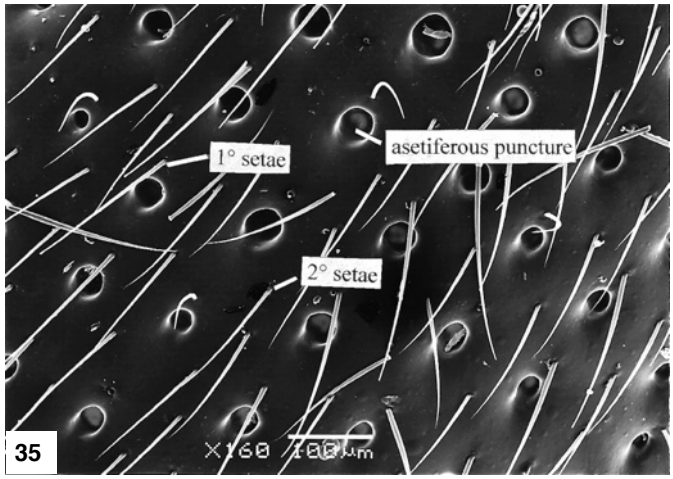
**Holotype**. ♀. BRAZIL, Minas Gerais, Pedra Azul, 800 m, XI-1974 (collector not noted) (FSCA).

**Paratypes**. One specimen. – **Brazil**, **Estado do Bahia**, Encruzilhada, ?-XI-1974, 980 m, Moacir Alvarenga (WOPC, 1).

***Diagnosis***. – There are several South American *Cregya* that have black lines extended posteriorly from the anterior margin of the elytra, but only in specimens of *C. paragramma* **n**. **sp**. do the elytra show a single long line that extends posteriorly from the humeral angle.

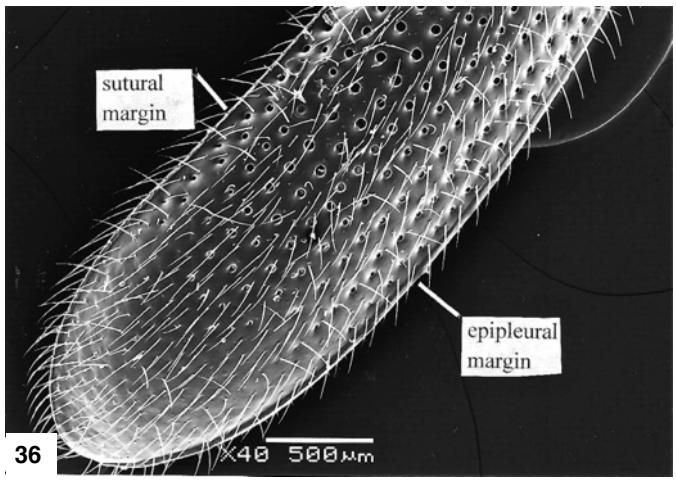


34

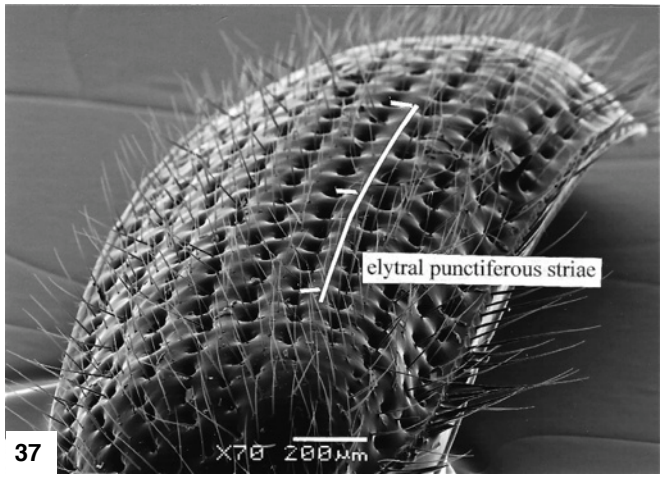


35

**Fig**. **34-35**. Structures of *Cregya oculata* (Say, 1835). **(34)** Pronotum, dorsal view. **(35)** Elytral surface.



36



37

**Fig**. **36-37**. Elytral surface of *Cregya oculata* (Say, 1835).

### *Description*

***Size***. – Length 5.5 mm. – Width 2.0 mm.

***Form***. – As in Fig. 405.

***Color***. – Testaceous, except *antennal fundus* black, *capitular antennomeres* mostly testaceous, their posterior margin brown, *pterothorax*, *tibiae*, *tarsi*, and *abdomen* black, each *elytron* with a black line that extends from the humeral angle to the posterior 2/3rd limit of the *elytral disc*.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular (Fig. 60), antennomere 10 long obovate. – *Eye* wider than width of frons (EW/FW 30/20).

***Thorax***. – *Pronotum* (Fig. 185) slightly transverse (PW/PL 78/70), side margin with well-developed broad tubercle, disc sides coarsely punctate, middle of disc subglabrous. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4th (EL/EW 230/65).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex broad triangular. – Phallic plates particularly broad, phallobasic apodeme short, narrow.

***Variations***. – Size: Length 4.5-5.5 mm; width 1.8-2.0 mm. – Except for body size, the available specimens are quite homogeneous.

***Natural History***. – The types were captured in November.

***Distribution*** (Fig. 379). – Known from Brazil.

***Etymology***. – The trivial name, *paragramma*, is a Greek compound name that stems from *para* (= along side) and *gramme* (= line); about the black line on the elytral disc.

### 16. ***Cregya seabrai*** Peracchi, 1962

(Fig. 155, 187, 289, 379, 406)

*Cregya seabrai* Peracchi, 1962: 179.

**Holotype**. ♀. **Brasil**, **Estado de São Paulo** (Peruibe), 10-X-1951 (CSCB).

***Diagnosis***. – Among South American *Cregya*, the pronotal disc is totally flavotestaceous and the elytral disc is partially/predominantly black in specimens of *C. seabrai* Peracchi, 1962, C. *guyanensis* (Chevrolat, 1876), and *C. teretis* **n**. **sp**. But, only in specimens of *C. seabrai* Peracchi, 1962 is the distal 1/3rd of the elytral disc flavotestaceous.

### *Description*

***Size***. – Length 8.0 mm. – Width 3.2 mm.

***Form***. – As in Fig. 406.

***Color***. – Testaceous, except *antenna* mostly black, *elytral dis*c black in basal 3/4th, *epipleural margin* yellow.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular (Fig. 155), antennomere 10 obovate. – *Eye* narrower than width of frons (EW/FW 35/45).

***Thorax***. – *Pronotum* (Fig. 187) quadrate (PW/PL 125/125), side margin with well-developed tubercle, disc shallowly punctate at sides, glabrous at middle. – Elytral asetiferous punctures arranged into 9 punctiferous striae, punctured end at elytral distal 3/4th (EL/EW 320/115).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex narrow. – Phallobasic apodeme short (Fig. 289).

***Variations***. – Size: Length 5.0-8.0 mm; width 2.0-3.2 mm. – Except for body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected during a period from August through October.

***Distribution*** (Fig. 379). – I examined 2 specimens from:

**Brazil**:

– **Estado do Mato Grosso**, Mato Grosso, collection date and collector not noted;

– **Estado do Rio de Janeiro**, Laguna de Sacuaresma, ?-VIII-IX-1884, P. Germain.

Specimens are deposited in CSCB, MNHN, and WOPC.

***Notes***. – I did not see the holotype of this species, but the habitus illustration provided by Peracchi leaves no doubt that the two available specimens are *Cregya seabrai* Peracchi, 1962.

### 17. ***Cregya stricta*** Opitz **n**. **sp**.

(Fig. 52, 188, 379, 407)

ZooBank: http://zoobank.org/6DF2B646-5BDF-4710-B8CD-B62FE71A3BFC

**Holotype**. ♀. Colombia, Vichada, Tuparro, Cerro Thomás, 5°21'N-67°51'W, 17-26-2000, 140 m, Malaise, W. Villalba (FSCA).

***Diagnosis***. – Members of *C. stricta* **n**. **sp**. resemble superficially those of *C. ekteina* **n**. **sp**., but *C. stricta* **n**. **sp**. specimens have the pronotal discal marking V-shaped, whereas in the beetle of *C. ekteina* **n**. **sp**. the pronotal discal marking is in the form of a broad black line.

### *Description*

***Size***. – Length 5.5 mm. – Width 1.8 mm.

***Form***. – As in Fig. 407.

***Color***. – Testaceous, except *epicranium* infuscated, *pronotal disc* with V-shaped mark, *tarsi* black, each *elytron* with 5 brown markings, one linear extends backwards from *elytral anterior margin*, one linear extends backwards from *humeral angl*e near epipleural margin, one short line near *sutural margin*, 2 punctiform marks at posterior 3/4 limit of *elytral disc*.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular (Fig. 52), antennomere 10 obovate. – *Eye* narrower than width of frons (EW/FW 27/31).

***Thorax***. – *Pronotum* (Fig. 188) slightly transverse (PW/PL 85/80), side margin with well-developed tubercle, disc coarsely punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 230/65).

***Abdomen***. – *Pygidium* scutiform.

***Natural History***. – The holotype was collected at 140 m.

***Distribution*** (Fig. 379). – Known from Colombia.

***Etymology***. – The trivial name, *stricta*, is a Latin name that stems from *strictus* (= straight); with reference to the black lines on the elytral disc.

## The *america* species group

The members of this species group are characterized by having the phallus divided into an anterior and posterior plate (Fig. 14), the phallic apex is digitiform and is expanded posteriorly into a post-apical flap. In general, these beetles represent the less "colorful" members of the genus with more "rectangular" elytra. There are 53 species in this group whose geographic distribution extends from the USA to Uruguay.

### 18. ***Cregya abdita*** Wolcott, 1927

(Fig. 65, 189, 290, 388, 408)

*Cregya abdita* Wolcott, 1927: 99.

**Holotype**. ♀. Turrialba, Costa Rica, 900 m, VI. A second label reads: Coll. 1920, A. Heyne. A third label reads: 1745. (FMNH). Corporaal 1950a: 283.

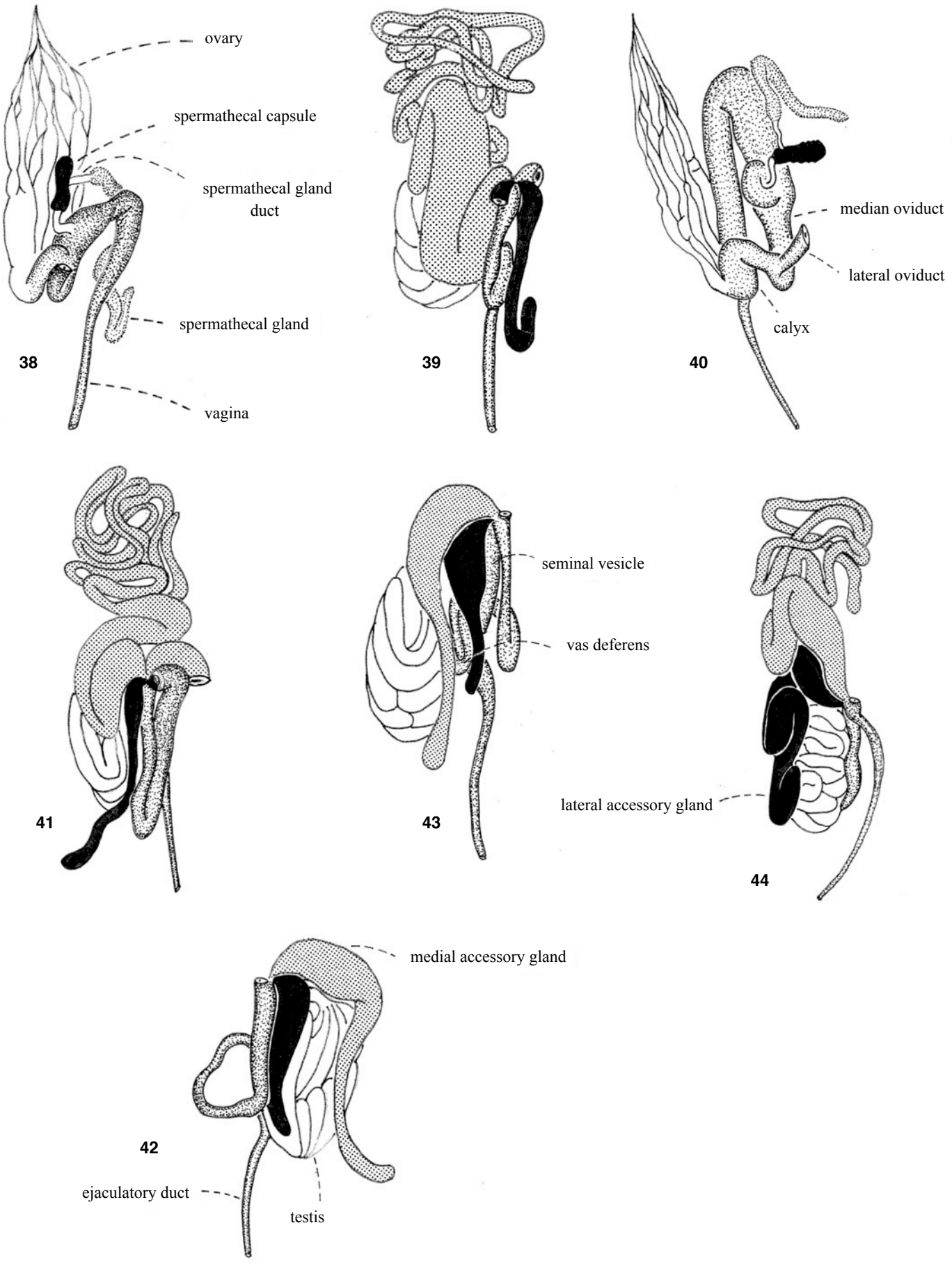



**Fig**. **38-44**. - Mesodermal reproductive organs. **38-39** *Cregya fimbriolata* (Chevrolat, 1843). **(38)** Female. **(39)** Male. **40-41** *C. kraatzi* (Schenkling, 1900). **(40)** Female. **(41)** Male. **(42)** *Cregya* species A, male, Mexico. **(43)** *Cregya* species B, male, Costa Rica. **(44)** *Cregya* species C, male, Brazil.

***Diagnosis***. – The elytral disc shows a large preapical black macula that extends medially into a narrow angula line to the sutural margin (see Fig. 417). This elytral characteristic is found in specimens of *C. abdita* Wolcott, 1927, *C. bilineicolle* (Chevrolat, 1874) **nov**. **stat**., *C. inscripta* (Gorham, 1883), and *C. turrialba* **n**. **sp**. Among this assemblage, *C. abdita* Wolcott, 1927 is most closely related to *C. bilineicolle* (Chevrolat, 1874) **nov**. **stat**., from which it differs by showing 3 spots in the anterior third of the elytral disc. *C. bilineicolle* (Chevrolat, 1874) **nov**. **stat**. specimens show 4 spots in this elytral region.

## *Redescription*

***Size***. – Length 4.2 mm. – Width 1.5 mm.

***Form***. – As in Fig. 408.

***Color***. – Mostly testaceous. – *Frons* and *epicranium* infuscated. – *Pterothorax* black. – *Elytra* with slight infuscation near *mesoscutellum* and anterior to middle of *disc*, and with angular fascia near *apex*.

***Head***. – *Funicle* about as long as length of *capitulum*, capitular antennomeres 8 and 9 triangular (Fig. 65), antennomere 10 obovate. – *Eyes* narrower than width of frons (EW/FW 15/32).

***Thorax***. – *Pronotum* (Fig. 189) quadrate (PW/PL 70/70), side margin with well-developed tubercle, disc with shallow punctures. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4$^{th}$ (EL/EW 200/60).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate long, posterior phallic plate very broad, infuscate in distal region (Fig. 290).

***Variations***. – Size: Length 3.7-4.2 mm; width 1.5-1.7 mm. – The pronotum may be partially or completely black.

***Natural History***. – Specimens were collected during January, June, and December, the holotype at 900 m.

***Distribution*** (Fig. 388). – In addition to the holotype, I examined 4 specimens:

**Costa Rica**:

– **Provincia de Cartago**, La Suiza, ?-?-1923, Pablo Schild;

– **Provincia de Puntarenas**, Monteverde, 21-22-XII-1989, F. Hovore;

– San Luis, 28-I-1998, F. Hovore;

– *idem*, 3-8-I-1989, F. Hovore.

Specimens are deposited in FMNH, WFBM, and WOPC.

### 19. ***Cregya alicula*** Opitz **n**. **sp**.

(Fig. 76, 190, 291, 382, 409)

ZooBank : http://zoobank.org/67EEA6BD-420A-4D9D-A98E-15C80F72B458

**Holotype**. ♂. Est. Sirena, P. N. Corcovado, prov. Punta., COSTA RICA, 1-100 m, May 1993, G. Fonseca (FSCA).

**Paratypes**. 14 specimens.

**México**:

– **Estado de Oaxaca**, Puerto Escondido, 11-12-VII, 1987, Kovarik, Schaffer (TAMU, 1);

– **Estado de Chiapas**, Chorreadero, 8 km E Chiapa de Corzo, 6-VI-1989, H. Howden (CMNC, 1);

– 2 km S Chicoasen, Road to Mirador, 18-VI-1989, H. Howden (WOPC, 1);

– El Chorreadero, 26-VI-1990, mv – bl, R. Turnbow (RHTC, 1).

**Guatemala**:

– **Departamento de Zacapa**, Estación Biologica Heloderma near Aldea El Arenal, N14.86231°-W89.78526°, 22-II-2015, 546 m, light traps, R. S. Zack (SEMK, 1; WSUC, 1);

– 16 km San Lorenzo, 9-VI-1993, 210 m, H. &. A. Howden (WOPC, 1).

**Honduras**:

– **Departamento de Francisco Morazán**, Tamara Valley, 5-X-1993, R. Turnbow (RHTC, 3; WOPC, 2);

– *idem*, 5-X-1993, F. W. Skillman, Jr. (FWSC, 1);

– **Departamento de Copán**, Ruinas Copán, 1-I-1987, tropical highland forest, R. Jones (TAMU, 1).

***Diagnosis***. – Within *Cregya* only in specimens of *C. alicula* **n**. **sp**. is there a broad black line that extends from behind the eye, across the pronotum, and onto the elytra where it ends on the elytral apex.

## *Description*

***Size***. – Length 4.5 mm. – Width 1.5 mm.

***Form***. – As in Fig. 409.

***Color***. – *Cranium* bicolored, *vertex* red-brown, remainder black. – *Antenna* bicolored, *antennal fundus* testaceous, *capitulum* brown. – *Legs*, *prothoracic venter*, and *pterothorax* testaceous. – *Elytra* bicolored, sides broadly black, epipleural margin and disc near sutural margin red-brown. – *Abdomen* brown.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 76), antennomere 10 obovate. – *Eye* narrower than width of frons (EW/FW 20/30).

***Thorax***. – *Pronotum* (Fig. 190) quadrate (PW/PL 75/75), side margin with well-developed tubercle, disc punctures spread out, interstitial spaces wide. – *Elytra* with 10 punctiferous striae, striae end at elytral distal 4/5$^{th}$ (EL/EW 185/53).

***Abdomen***. – Phallic post-apical flap long, anterior phallic plate long, posterior phallic plate very broad (Fig. 291).

***Variations***. – Size: Length 3.5-5.0 mm; width 1.0-1.5 mm. – Except for body size, the available specimens are quite homogeneous.

***Natural History***. – The available specimens were collected during January, May, June, July, and October; at altitudes that range from 1 to 546 m. One specimen was collected with a mercury-vapor light and a black light, another in a tropical highland forest.

***Distribution*** (Fig. 382). – Known from México, Guatemala, and Honduras.

***Etymology***. – The trivial name, *alicula*, is a Latin noun that translates as "coat"; in reference to the cloak-like coloration of the elytra.

### 20. ***Cregya america*** Opitz **n**. **sp**.

(Fig. 24, 66, 186, 292, 374, 410)

ZooBank : http://zoobank.org/E18C1B6A-7C1E-4410-A34D-032CDF5D146B

**Holotype**. ♀. Here designated. FLORIDA, Lee Co. Lehigh Acres, 26-IV-2011, coll. R. Delcid, multilure trap, in *Citrus sinensis* (FSCA).

**Paratypes**. 386 specimens.

**United States of America**

**Florida**

– Collier County, Immokalee, SW Florida Rec., 19-26-III-2015, suction trap, S. Halbert (FSCA, 1; WOPC, 1);

– Polk County, Winter Haven, Lake Alfred Road, 12-19-III-2015, short suction trap, S. Halbert (FSCA, 1);

– Country Lake Delray Beach, 31-X-1996, black light, Vince Golia (FSCA, 1);

– Palm Beach County, Lake Worth, Geneva Lakes Court, 8-IX-2003, mercury vapor light, Vince Golia (WOPC, 1);

– Palm Beach County, Lake Worth Harbor, Greens Drive, 5-IX-2008, black light, Vince Golia (WOPC, 1);

– Dade County, Miami, Kendall, 11-V-2010, Lindgren funnel trap with manuka oil, L. Whilby & B. Saunders (FSCA, 1);

**Louisiana**

– Baton Rouge East, 11-VI-1976, C. B. Barr & E. G. Riley (EMEC, 1);

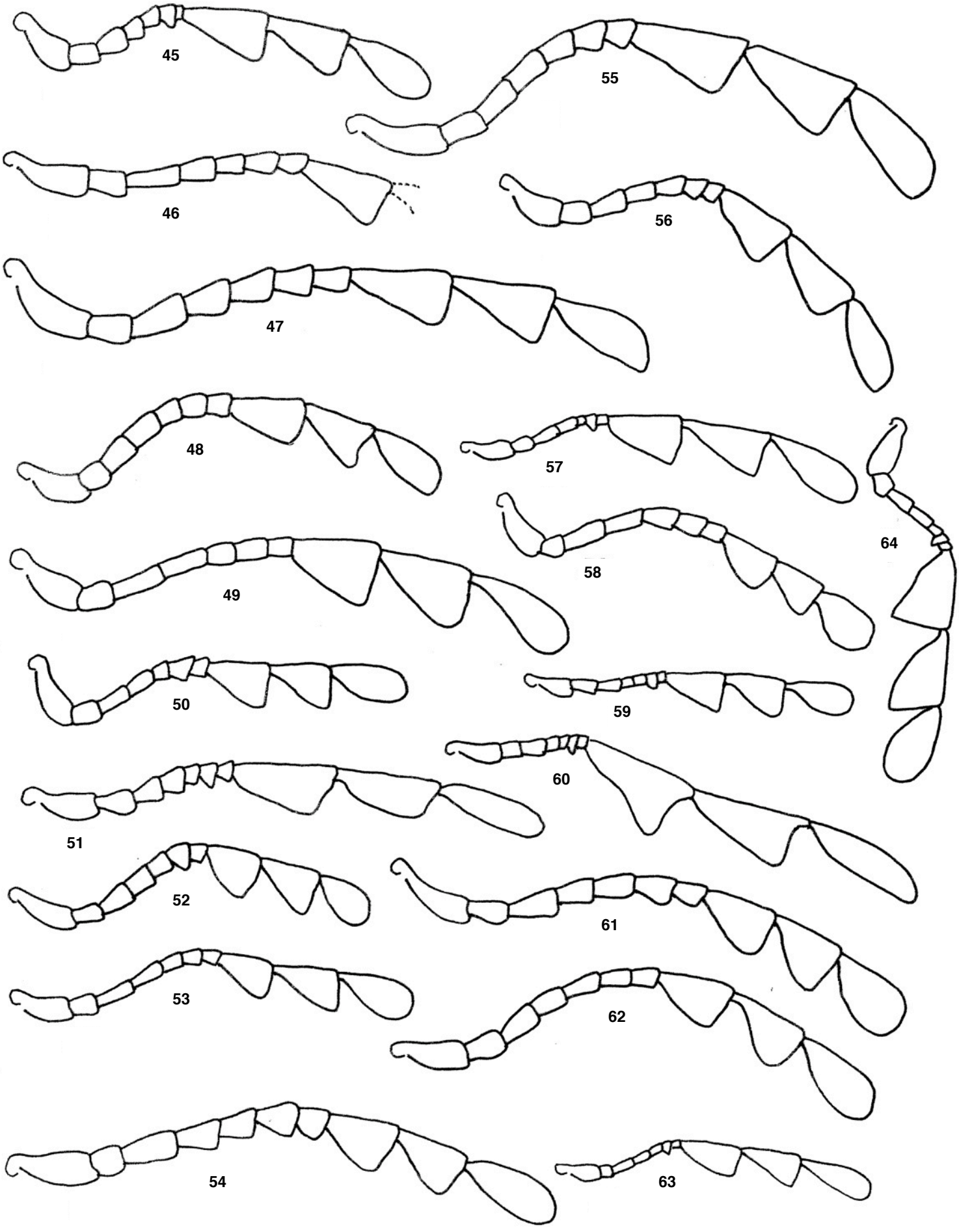



**Fig**. **45-64**. - Antennae. **(45)** *Cregya nebula* **n**. **sp**. **(46)** *C. nigropunctata* (Chevrolat, 1876). **(47)** *C. stilastichosa* **n**. **sp**. **(48)** *C. jatai* **n**. **sp**. **(49)** *C. duodecimpunctata* (Klug, 1842), ♀. **(50)** *C. hedra* **n**. **sp**. **(51)** *C. insignata* Pic, 1952. **(52)** *C. stricta* **n**. **sp**. **(53)** *C. inscripta* (Gorham, 1883). **(54)** *C. confluens* (Gorham, 1877). **(55)** *C. sexnotata* (Klug, 1842). **(56)** *C. tetralineata* **n**. **sp**. **(57)** *C. abacula* **n**. **sp**. **(58)** *C. ferratilis* **n**. **sp**. **(59)** *C. guttula* **n**. **sp**. **(60)** *paragramma* **n**. **sp**. **(61)** *C. asarota* **n**. **sp**. **(62)** *C. catoma* **n**. **sp**. **(63)** *C. egeri* **n**. **sp**. **(64)** *C. lunulata* (Pic, 1940).

**Texas**

– Karnes County, 1 mi NE Range, 28°. 8937 N-97°.6967 W, 11-V-2007, on *Zanthoxylum* sp, J. Keralis & E. Riley (TAMU, 1);

– Cameron County, Brownsville, 17-VI-1971, G. H. Nelson (FSCA, 1);

– *idem*, 29-VI-1938, L. W. Hepner (SEMC, 1);

– *idem*, 8-VI-1934, J. N. Knull (BYUC, 1);

– *idem*, 1-VI-1934, J. N. Knull (BYUC, 1);

– *idem*, ?-VI-?, F. H. Snow (SEMC, 1);

– *idem*, Brownsville, collection date and collector not noted (SEMC, 3);

– Cameron County, Sabal Palm Grove Sanctuary, 20-V-1997, on *Leucaena pulverulenta*, G. H. Nelson (FSCA, 1);

– Cameron County, 25.84799°N 97.41881°W, 26-III-2009, beating palm forest, King & Riley (TAMU, 1);

– Cameron County, Sabal Palm Grove Sanctuary, 25.85601°N-97.41726°W, 7-III-2009, beating open re-vegetated areas, E. Riley (TAMU, 3; WOPC, 2);

– Cameron County, Sabal Palm Grove Sanctuary, 25.84799°N-97.41881°W, 18-IX-2008, beating palm forest, King & Riley (TAMU, 1; WOPC, 1);

– Cameron County, Sabal Palm Grove Sanctuary, 25.85601°N-97.41726°W, 18-X-2008, beating open re-vegetated areas, E. Riley (TAMU, 3);

– Cameron County, Audubon Sabal Palm Sanctuary, 21-22-X-1997, beating, R. Androw, M. Brattain (JMLC, 1);

– Cameron County, Sabal Palm Grove Sanctuary, 25.85125°N-97.41864°W, 4-IV-2009, E. G. Riley (TAMU, 2);

– *idem*, Audubon Reserve, 9-10-X-1977, J. E. Wappes (ACMT, 1);

– *idem*, 1-2-IX-1978, J. E. Wappes (ACMT, 1);

– *idem*, 6-7-V-1978, J. E. Wappes (WOPC, 1);

– *idem*, 9-10-VI-1978, J. E. Wappes (ACMT, 1);

– Cameron County, Brownsville, 25.88873°N-97.43142°W, 7-VI-2009, D. Heffern & E. Riley (TAMU, 2);

– Cameron County, 25.85092°N-97.41604°W, 4-IV-2009, E. G. Riley (TAMU, 3);

– Cameron County, 25.85601°N-97.41726°W, 4-IV-2009, E. Riley (TAMU, 2);

– Cameron County, 4-IV-1950, D. J. & J. N. Knull (FMNH, 1);

– Cameron County, 8 miles W Boca Chica, 7-IV-1978, N. M. Downie (FMNH, 1);

– Cameron County, South Point Nursery, 8-V-1991, T. Carlow & E. Riley (WOPC, 1);

– Cameron County, Palmito Hill, highway 4, East of Brownsville, 6-V-1999, S. M. Clark (BYUC, 1);

– Sabal Palm Grove Wildlife Sanctuary, 7-V-1999, S. M. Clark (BYUC, 1);

– Paloma Blanca Road, vicinity of Sabal Palm Grove, 5-6-V-1989, E. G. Riley (WOPC, 1);

– Cameron County, Ebony Loma, 12.5 miles E Brownsville, 5-V-1985, E. G. Riley (WOPC, 1);

– Cameron County, 25.86601°N-97.41726°W, 6-VI-2009, beating open re-vegetated areas, M. Quinn & E. G. Riley (TAMU, 1; WOPC, 1);

– Cameron County, Sabal Palm Grove Sanctuary, 6-7-V-1978, J. E. Wappes (ACMT, 3);

– *idem*, 1-2-IX-1978, J. E. Wappes (ACMT, 1);

– *idem*, 21-X-1989, R. Morris;

– *idem*, Audubon Reserve, 9-10-X-1977, J. E. Wappes (ACMT, 1);

– *idem*, 1-2-IX-1978, J. E. Wappes (ACMT, 1);

– Cameron County, Sabal Palm Grove Sanctuary, 25.85092°N 97.41604°W, 4-VI-2009, beating open re-vegetated areas, E. Riley (TAMU, 7; WOPC, 1);

– Sabal Palm Grove, 17-IV-1993, D. J. Heffern (TAMU, 1);

– *idem*, 23-IV-1994, E. G. Riley (TAMU, 2);

– *idem*, 3-IX-1989, D. J. Heffern (TAMU, 1);

– *idem*, 6-V-1989, D. J. Heffern (TAMU, 1);

– *idem*, 12-13-X-1985, D. J. Heffern (WOPC, 1);

– *idem*, 6-7-V-1978, J. E Wappes (WOPC, 1);

– *idem*, 8-IV-1994, E. G. Riley (TAMU, 1);

– *idem*, 18-19-X-2002, E. G. Riley (TAMU, 1);

– *idem*, 5-V-1989, E. G. Riley (TAMU, 1);

– *idem*, 23-V-1994, E. G. Riley (TAMU, 4);

– *idem*, 13-14-X-1988, E. G. Riley (TAMU, 1);

– Sabal Palm Grove Sanctuary, 25.85125°N-97.41864°W, 6-VI-2009, beating palm forest margin, E. G. Riley (TAMU, 1);

– Sabal Palm Grove Sanctuary, 25.85092°N-97.41604°W, 21-IX-2008, beating open re-vegetated areas, E. G. Riley (TAMU, 1);

– Sabal Palm Grove Sanctuary, 25.84799°N-97.41881°W, 20-V-2009, beating palm forest, J. King & E. Riley (TAMU, 1);

– Sabal Palm Grove Sanctuary, 25.84799°N-97.41881°W, 23-IV-2009, beating palm forest, J. King & E. Riley (TAMU, 4);

– Sabal Palm Grove Sanctuary, 25.84799°N-97.41881°W, 14-V-2010, beating palm forest, J. King & E. Riley (TAMU, 1);

– Sabal Palm Grove Sanctuary, 25.84799°N-97.41881°W, 19-IX-2-X-2008, elevated palm forest, King & Riley (TAMU, 1);

– Sabal Palm Grove Sanctuary, 25.84799°N-97.41881°W, 16-V-5-VI-2010, elevated palm forest, King & Riley (TAMU, 1);

– Sabal Palm Grove Sanctuary, 25.85158°N-97.42028°W, 16-V-2009, palm forest margin, E. G. Riley (TAMU, 1);

– Laguna Atascosa NWR (site 1), 26.22375°N-97.35454°W, 2-X-2009, UV light, J. King & E. Riley (TAMU, 1);

– Sabal Palm Grove Sanctuary, 25.85601°N-97.41726°W, 7-III-2009, beating open re-vegetated areas, E. Riley (TAMU, 1);

– Cameron County, Sabal Palm Grove Sanctuary, 20-V-1997, beating, G. H. Nelson (FSCA, 1);

– Cameron County, Sabal Palm Grove Sanctuary, emerged from wood of *Leucaena pulverolenta* (Schlecht.) Benth, 27-VIII-3-IX-1978, R. Turnbow (WOPC, 1);

– *idem*, 20-22-X-1989, Anderson & Riley (WOPC, 1);

– *idem*, 6-7-V-1991, T. Carlow & E. Riley (WOPC, 1);

– *idem*, 2 miles E Sabal Palm Grove, emerged from wood of *Leucaena pulverulenta*, D. J. Heffern (WOPC, 1);

– *idem*, Sabal Palm Grove, 18-19-X-2002, E. G. Riley (WOPC, 1);

– *idem*, 20-X-1990, T. Carlow & E. Riley (WOPC, 2);

– *idem*, 2-V-1982, R. Turnbow (WOPC, 3);

– *idem*,10-X-1977, R. Turnbow (WOPC, 3);

– *idem*, 16-V-1981, R. Turnbow (WOPC, 2);

– *idem*, 18-V-1981, R. Turnbow (RHTC, 1);

– *idem*, 28-X-1984, R. Turnbow (RHTC, 1);

– *idem*, 28-IV-1979, R. Turnbow (RHTC, 1);

– *idem*, emerged from wood of *Laucaena pulverulenta* (Schlecht) Benth. on 27-31-IX-1978, R. Turnbow (RHTC, 1);

– *idem*, emerged from wood of *Laucaena pulverulenta* (Schlecht) Benth. on 17-23-IX-1978, R. Turnbow (RHTC, 1);

– *idem*, 28-IV-1979, R. Turnbow (RHTC, 1);

– *idem*, Sabal Palm Grove, near Southmost, 18-V-1977, R. L. Penrose (WOPC, 3);

– *idem* 6-7-V-1978, J. E, Wappes (ACMT, 2; EMEC, 2; WFBM, 3; WOPC, 1);

– *idem*, 9-10-VI-1978, J. E. Wappes (EMEC, 1);

– *idem*, 16-X-1993, U V light, Blackmon, Quinn, & Riley (WFBM, 1);

– *idem*, 18-X-2002, B. Raber & E. Riley (WFBM, 2);

– *idem*, 15-V-1987, J. E. Wappes (WOPC, 1);

– *idem*, 6-7-V-1991, T. Carlow & E. Riley (WOPC, 6);

– *idem*,11-X-1975, E. Giesbert (FSCA, 2; WOPC, 1);

– *idem*, 13-18-V-1977, E. Giesbert (FSCA, 2; WOPC, 2);

– *idem*, 14-V-1980, R. L. Penrose (WFBM, 1);

– *idem*, V-17-1978, R. L. Penrose (WOPC, 1);

– *idem*, near Southmost, 6-7-V-1878, J. E. Wappes (ACMT, 1);

– *idem*, 5-IV-1980, J. E. Wappes (FSCA, 1);

– *idem*, 26-27-IV-1979, J. E. Wappes (WOPC, 1);

– *idem*, 16-V-1981, R. Turnbow (FSCA, 1);

– *idem*, emerged from wood of *Leucanea pulverulenta* (Schlecht.) Benth, 1-7-I-1978, R. Turnbow (RHTC, 1);

– *idem*, 22-VIII-1981, R. Turnbow (FSCA, 2);

– *idem*, 9-V-1986, Wappes & Downie (FSCA, 1);

– *idem*, 5-IV-1980, N. M. Downie (WOPC, 1);

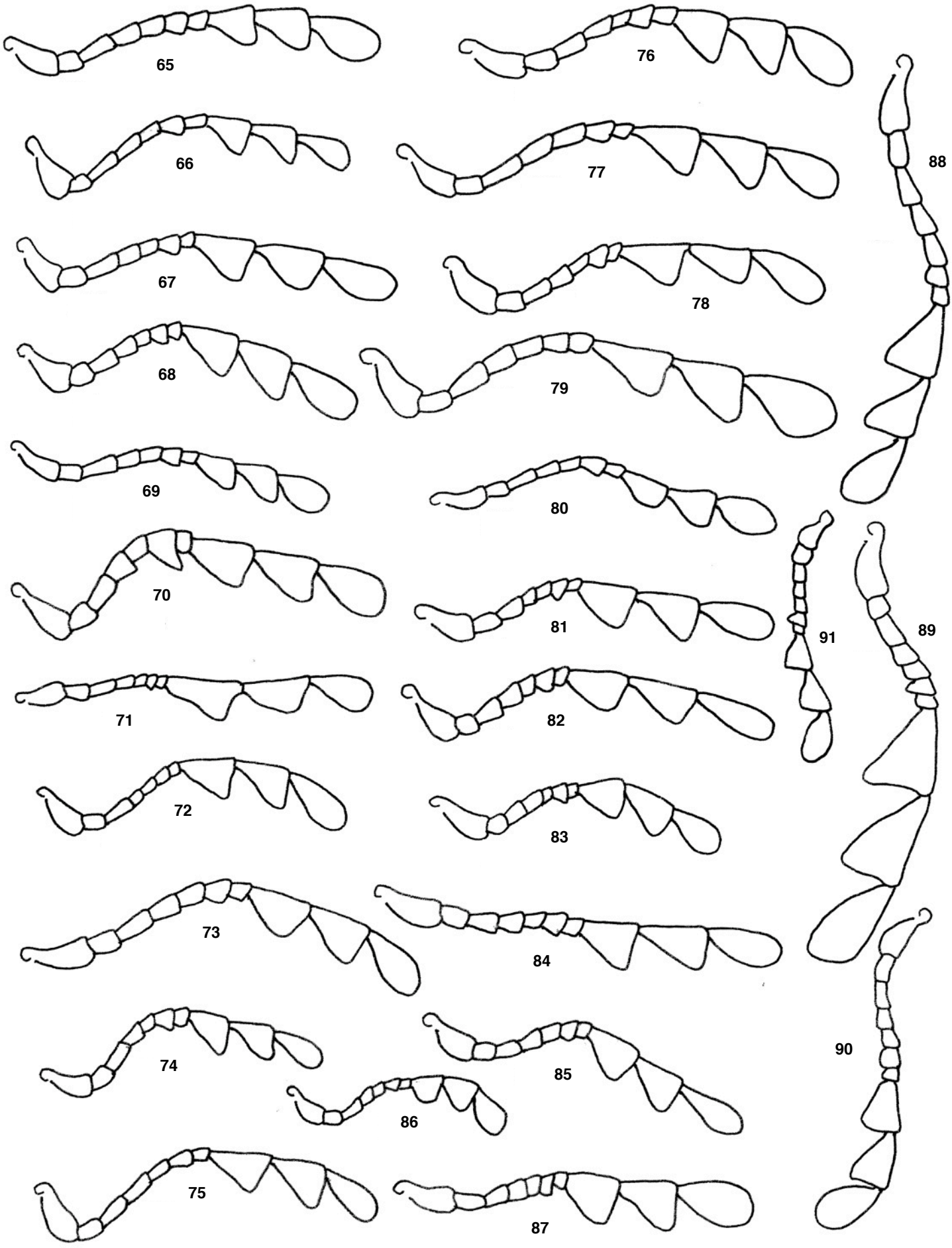



**Fig**. **65-91**. - Antennae. **(65)** *Cregya abdita* Wolcott, 1927. **(66)** *C. america* **n**. **sp**. **(67)** *C. apicula* **n**. **sp**. **(68)** *C. rifkindi* **n**. **sp**. **(69)** *C. bicolor* (Laporte, 1836). **(70)** *C. campana* **n**. **sp**. **(71)** *C. casusa* **n**. **sp**. **(72)** *C. contaminata* (Klug, 1842). **(73)** *C. cruzvera* **n**. **sp**. **(74)** *C. helva* **n**. **sp**. **(75)** *C. inornata* **n**. **sp**. **(76)** *C. alicula* **n**. **sp**. **(77)** *C. andersoni* **n**. **sp**. **(78)** *C. aragua* **n**. **sp**. **(79)** *C. atracapitis* **n**. **sp**. **(80)** *C. bilineicolle* (Chevrolat, 1874) **nov**. **stat**. **(81)** *C. casselorum* (Opitz, 2014). **(82)** *C. catarina* (Opitz, 2014). **(83)** *C. corumba* **n**. **sp**. **(84)** *C. ekteina* **n**. **sp**. **(85)** *C. karafucosa* **n**. **sp**. **(86)** *C. infula* **n**. **sp**. **(87)** *C. insularis* (Gorham, 1898). **(88)** *C. lenticula* **n**. **sp**. **(89)** *C. lineolata* (Gorham, 1883). **(90)** *C. linomolina* **n**. **sp**. **(91)** *C. linea* **n**. **sp**.

– *idem*, 9-V-1986 (WOPC, 2); Cameron County, Sabal Palm Grove, 18-V-1979, E. G. Riley (TAMU, 2);
– *idem*, 28-29-III-1986, E. G. Riley (TAMU, 1);
– *idem*, *idem*, 16-X-1993, Blackmon, Quinn & Riley (TAMU, 1);
– *idem*, 21-IX-2008, Riley, Raber & Heffern (TAMU, 1);
– *idem*, 26-X-1991, E. G. Riley (TAMU, 1);
– *idem*, 16-17-X-1993, E. J. Riley (TAMU, 1);
– *idem*, 16-X-1993, Backmon, Quinn & Riley (TAMU, 2);
– Cameron County, Audubon Preserve, Sabal Palm Grove, 2-X-1984, N. M. Downie (WOPC, 1);
– Cameron County, White Wing Dove Reserve, 9-VI-1970, V. V. Board (WOPC, 1);
– Cameron County, Rod & Reel RV Camp, 4 miles E Brownsville, 11-X-1999, W. F. Chaimberlain (WOPC, 1);
– Cameron County, 20 km E Brownsville (Ebony Loma), 21-X-1989, R. Anderson & E. Riley (WOPC, 1);
– Cameron County, Brownsville, 26-IV-1971, Clark, Murray, Hart, Schaeffer (WOPC, 1);
– Cameron County, 5 miles SE Brownsville, 14-VI-1969, Board & Hafernik (WOPC, 1);
– Cameron County, Brownsville, 12-VI-1968, V. V. Board (WOPC, 1);
– *idem*, 25-V-1934, J. N. Knull (WOPC, 11);
– *idem*, 2-VI-?, J. N. Knull (FMNH, 1; WOPC, 3);
– *idem*, 5-VI-?, J. N. Knull (FMNH, 1);
– *idem*, 1-VI-1934, J. N. Knull (FMNH, 5);
– *idem*, 3-VI-?, J. N. Knull (FMNH, 5);
– *idem*, 8-VIII-1937, D. J. & J. N. Knull (FMNH, 1);
– *idem*, 7-IV-1950, D. J. & J. N. Knull (FMNH, 1);
– *idem*, 4-VI-?, J. N. Knull (FMNH, 1);
– *idem*, 4-VI-1934, J. N. Knull (FMNH, 1);
– *idem*, 10-VI-1934, J. N. Knull (FMNH, 1);
– *idem*, 8-VIII-1937, D. J. & J. N. Knull (FMNH, 1);
– *idem*, 4-VIII-1967, H. R. Burke & J. Hafernik (TAMU, 1);
– *idem*, 21-VI-1969, H. R. Board & Hafernik (WOPC, 1);
– Cameron County, Brownsville, 28-III-1986, W. F. Barr (WFBM, 3; WOPC, 8);
– *idem*, 5-VI-1932, E. G. Linsley (CASC, 3; WOPC, 7);
– *idem*, 3-VI-1932, J. O. Martin (FMNH, 1);
– *idem*, 30-V-1932, E. G. Linsley (FMNH, 1);
– *idem*, 3-VI-1932, E. G. Linsley (FMNH, 3);
– *idem*, 3-VI-1933, E. G. Linsley (FMNH, 3);
– *idem*, collection date not noted, Wickham (FMNH, 1);
– *idem*, 8-VII-1941, B. E. White (FMNH, 1);
– *idem*, Esperanza Ranch, 27-VII-?, G. Beyer (FMNH, 1);
– *idem*, Old Fort Brown, 2-VII-1906, A. B. Wolcott (FMNH, 1);
– *idem*, 9-VI-1932, J. O. Martin (FMNH, 2);
– *idem*, 7-IX-1949, F. Werner & W. L. Nutting (WFBC, 1; WOPC, 3);
– Cameron County, Resaca de La Palma State Park, (site 2) Mesquite Trail, 25.99544°N-97.561159°W, 3-IV-2009, beating re-vegetative area, E. G. Riley (TAMU, 1);
– Cameron County, Resaca de La Palma State Park, (site 2) Mesquite Trail, 25.99638°N-97.56727°W, 3-IV-2009, beating re-vegetative area, E. G. Riley (TAMU, 1);
– Cameron County,7-IX-1949, F. Werner & W. L. Nutting (WFBM, 1; WOPC, 1);
– Brownsville, 25.888373°N-97.43142°W, 3-IV-2009, beating, E. G. Riley (TAMU, 2);
– *idem*, 11-VI-1969, Board & Hafernik (WOPC, 1);
– Cameron County, Audubon Preserve, Sabal Palm Grove, 26-IX-1984, N. H. Downie (FMNH, 2);
– *idem*, 9-10-X-1977, N. M. Downie (FMNH, 1);
– *idem*, 6-7-VI-1978, N. M. Downie (FMNH, 1);
– *idem*, 9-V-1986, N. M. Downie (FMNH, 1);
– *idem*, 9-VI-1986, N. M. Downie (FMNH, 1);
– *idem*, 26-28-V-1979, N. M. Downie (FMNH, 1);
– Hidalgo County, Casa Santa Ana, B &B, 1-IX-2016, J. E. Wappes (ACMT, 1);
– *idem*, near Santa Ana MWR, 26°04'N-98°07'W, 5-7-IV-2016, 94 feet, @ MV/UV lights, J. E. Wappes (ACMT, 1);
– Benson Rio Grande, Valley State Park, 17-18-V-1979, E. G. Riley (WOPC, 1);
– Hidalgo County, Delta Lake County Park, 27-28-III-1986, E. G. Riley (TAMU, 2; WOPC, 1);
– *idem*, 22-III-1980, E. G. Riley (TAMU, 1);
– Hidalgo County, S Ana National Refuge, 8-9-V-1978, J. E. Wappes (WOPC, 1);
– *idem*, 17-V-1985, C. Scholz, H. & A. Howden (CMNC, 1);
– Hidalgo County, Delta Lake Park, N of Elsa, 22-III-1980, E. G. Riley (UMRM, 1);
– Hidalgo County, Anzalduas County Park, 9-V-1987, D. J. Heffern (WOPC, 1);
– Hidalgo County, Anzalduas County Park, 9-V-1978, J. E. Wappes (WOPC, 1);
– Hidalgo County, 4-IV-1963, D. J. & J. N. Knull (WOPC, 1);
– Hidalgo County, 7-IV-1950, D. J. & J. N. Knull (FMNH, 1);
– Hidalgo County, Santa Ana NWR (site 16), Resaca Loop Trail, 26.06261°N-98.14860°W, 26-IV-31-V-2009, D. Heffern & B. Raber (TAMU, 1);
– Hidalgo County, 29-III-1963, D. J. & J. N. Knull (FMNH, 4);
– *idem*, 20-III-1952, D. J. & J. N. Knull (FMNH, 1);
– *idem*, 5-IV-1967, D. J. & J. N. Knull (FMNH, 1);
– *idem*, 26-III-1953, D. J. & J. N. Knull (FMNH, 1);
– *idem*, 7-VI-1950, D. J. & J. N. Knull (FMNH, 1);
– Hidalgo County, Anzalduas County Park, 9-IV-1978, N. M. Downie (FMNH, 1);
– La Coma (site 2), 26.05611°N-98.03635°W, 10-23-IV-2009, Lindgren flight trap, J. King & E. Riley (TAMU, 1);
– Hidalgo County, Bentsen, Rio Grande State Park, emerged 14-31-XII-1976 out of wood of *Celtis lindheimeri* Engelm, R. Turnbow (BYUC, 2);
– Bentsen, R. G. V. S. (site 1), 26.17830°N-98.38577°W, 7-12-IX-2009, cedar elm forest, E. G. Riley (TAMU, 1);
– Hidalgo County, La Coma (site 2), 26.05611°N-98.03635°W, 10-23-IV-2009, Lindgren flight trap, J. King & E. Riley (TAMU, 1);
– Hidalgo County, La Coma (site 2), 26.05611°N-98.03635°W, 27-III-2009, beating re-vegetated site, J, King & E. Riley (TAMU, 1);
– Hidalgo County, La Coma (site 2), 26.05611°N-98.03635°W, 28-III-10-IV-2009, Lindgren flight trap, J. King & E. Riley (TAMU, 1);
– Hidalgo County, La Coma (site 2), 26.05611°N-98.03635°W, 6-20-IX-2009, Lindgren flight trap, J. King & E. Riley (TAMU, 1);
– Hidalgo County, La Coma (site 2), 26.05611°N-98.03635°W, 16-X-2008, beating re-vegetated site, J. King & E. Riley (TAMU, 1);
– Hidalgo County, La Coma (site 2), 26.05611°N-98.03635°W, 21-IX-3-X-2009, Lindgren flight trap, J. King & E. Riley (TAMU, 1);
– Hidalgo County, La Coma (site 2), 26.05611°N-98.03635°W, 28-III-10-IV-2009, Lindgren flight trap, J. King & E. Riley (TAMU, 1);
– Hidalgo County, La Coma (site 2), 26.05611°N-98.03635°W, 13-26-III-2009, Lindgren flight trap, J. King & E. Riley (TAMU, 1);
– Hidalgo County, La Coma (site 2), 26.05611°N-98.03635°W, 5-IX-2009, UV light trap, J. King & E. Riley (TAMU, 1);
– Hidalgo County, La Coma (site 2), 26.05611°N-98.03635°W, 9-IV-2009, beating re-vegetated site, J. King & E. Riley (TAMU, 1);
– Hidalgo County (TAMU, 2); Hidalgo County, La Coma (site 2), 26.05302°N-98.04665°W, 3-X-2009, UV light trap, J. King & E. Riley (TAMU, 1);
– Hidalgo County, 4-IV-1963, D. J. & J. N. Knull (WOPC, 7);
– Hidalgo County, La Coma (site 2), 26.05611°N-98.03635°W, 19-IX-2008, beating re-vegetation site, J. King & E. Riley (TAMU, 2);
– Hidalgo County, Santa Ana, 26.07891°N-98.13792°W, 24-IV-2009, D. Patterson & E. Riley (TAMU, 1);
– Hidalgo County, La Coma (site 2), 26.05611°N-98.03635°W, 27-III-2009, Lindgren flight trap, J. King & E. Riley (TAMU, 7);
– Hidalgo County, Anzalduas County Park, 6-IX-1981, R. Turnbow (RHTC, 1);
– Santa Ana Wildlife Refuge, 9-IV-1971, W. E. Clark (WFBM, 1);
– Bentsen, Rio Grande State Park, emerged from wood of *Celtis limheimeri* Engelm., 24-31-XII-1976, R. Turnbow (RHTC, 1);
– Willacy County, 4 miles N Ray' Ville, 14-X-1977, N. M. Downie (FMNH, 1);

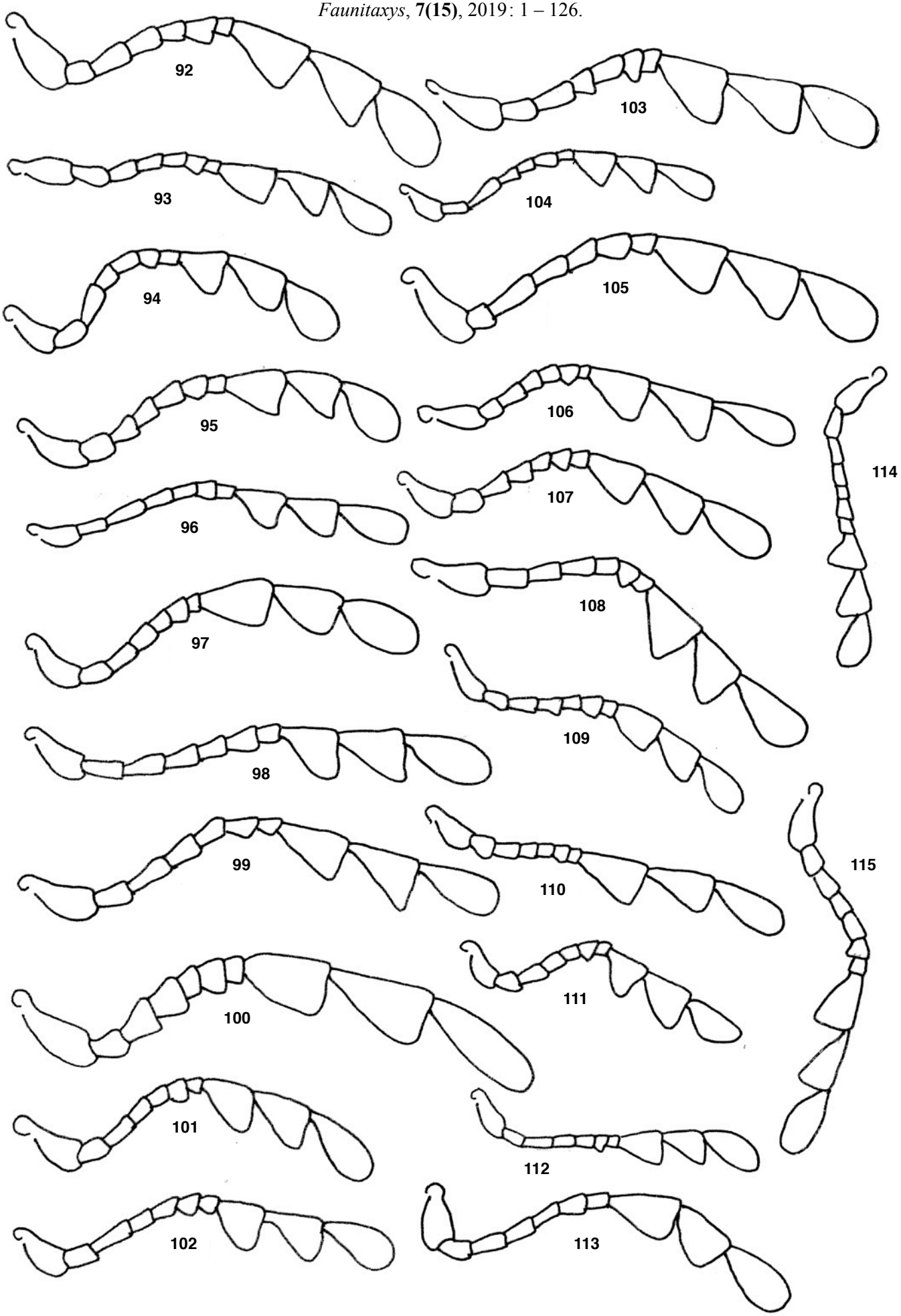



**Fig. 92-115**. - Antennae. **(92)** *Cregya marysearsi* **n. sp. (93)** *C. mexcala* **n. sp. (94)** *C. palaga* **n. sp. (95)** *C. pallida* **n. sp. (96)** *C. pereira* **n. sp. (97)** *C. preclara* **n. sp. (98)** *C. quadrinotata* (Chevrolat, 1874) **nov. stat. (99)** *C. quadrisignata* (Spinola, 1844). **(100)** *C. robusta* **n. sp. (101)** *C. vittipennis* (Schenkling, 1906). **(102)** *C. withlacoochee* Rifkind, 2012. **(103)** *C. mocagua* **n. sp. (104)** *C. mixta* LeConte, 1865. **(105)** *C. oculata* (Say, 1835). **(106)** *C. pannusa* **n. sp. (107)** *C. pictila* **n. sp. (108)** *C. sina* **n. sp. (109)** *C. tambopata* **n. sp. (110)** *C. tessara* **n. sp. (111)** *C. urica* **n. sp. (112)** *C. yojoa* **n. sp. (113)** *C. zacapa* **n. sp. (114)** *C. rileyi* **n. sp. (115)** *C. vitticeps* (Blanchard, 1844).

– San Patricio County, 28-29-IV-1979, J. E. Wappes (EMEC, 1);
– San Patricio County, Lake Corpus Christi State Park, emerged from a branch of a species of *Acacia*, on 11-17-XII-1976, R. Turnbow (WOPC, 1);
– San Patricio County, Lake Corpus Christi State Park, 8-IV-1972, on *Acacia farnesiana*, G. Nelson (FSCA, 4; JMLC, 2; WOPC, 1);
– *idem*, 7-VI-1972, on *Acacia farnesiana*, G. Nelson (FSCA, 1);
– San Patricio County, Welder Wildlife Refuge, 12-13-X-1988, E. G. Riley (WOPC, 1);
– *idem*, 8 miles NE Sinton, 13-15-V-1985, R Brown (MEMU, 2);
– *idem*, 13-V-1985, Paul K. Lago (MEMU, 4);
– *idem*, 17 km NE Sinton, 17-25-V-1985, on *Acacia*, H. & A. Howden, C. Scholtz (CMNC, 6; WOPC, 3);
– *idem*, 15-IV-1981, R. H. Wellso (CMNC, 1);
– San Patricio County, Lake Corpus Christi State Park, 8-IX-1977, R. Turnbow (FSCA, 1);
– *idem*, 12-V-1977, E. Giesbert (FSCA, 1); Welder Wildlife Refuge, near Sinton, 16-V-1980, R. L. Penrose (WFBM, 1);
– *idem,* 28-IV-1979, R. Turnbow (FSCA, 1);
– *idem*, 28-IV-1979, R. Turnbow (RHTC,1);
– *idem*, 23-V-1981 (RHTC, 1);
– *idem*, emerged from wood of a species of *Acacia* 19-16-XI-1976, R. Turnbow (FSCA, 1);
– *idem*, 28-29-IV-1979, J. E. Wappes (ACMT, 1);
– 359 at Nueces River, 25-IV-1986, J. E. Wappes (FSCA, 2);
– Hidalgo County, McAllen, 29-IV-1964, Donald R. Riley (WOPC, 1);
– Hidalgo County, highway 281, 1 mile 83 BR, 1-V-1979 (FSCA, 1);
– Hidalgo County, Santa Ana Wildlife Refuge, emerged from wood of *Celtis laevigata* Willd. (FSCA, 1);
– Delta Lake Park, of Elso, 22-III-1980, E. G. Riley (WOPC, 1);
– Nueces County, Corpus Christi, 15-V-1985, R. D. Parker (WOPC, 1);
– Kenedy County, 25 miles S Sarita, 13-X-1985, Roy Morris II; Kenedy Ranch, Jaboncillos Pasture, sand dune area, 26°59'22"N-97°40'11"W, 21-IV-2001, Raber, Riley, & Yoder (WFBM, 1; WOPC, 1);
– Gonzales County, Palmetto State Park, 30-V-1983, at black light, C. B. Barr (EMEC, 2);
– Kleberg County, Kingsville, 14-VIII-1979, William H. Cross (MEMU, 1);
– *idem*, 5-VII-1983, W. H. Cross (MEMU, 1).

**México**

– **Estado de Taumalipas**, 103 km E Ciudad Victoria, 16-VII-1973, Gauma & Clark (TAMU, 1);
– 29 miles S. Victoria, 19-V-1979, E. C. Riley (TAMU, 1);
– **Estado de Veracruz**, 1 mile N Rinconada, 25-IX-1976 (TAMU, 1);
– Puente Nacional, 6 miles SE Rinconada, 30-IX-1975, J. Powel & J. Chemsak (EMEC, 2);
– Estación Biologico Las Tuxtlas, 20-30-IV-1991, F. Hovore (WFBM, 1);
– Palmasola, 25-X-1979, E. Giesbert (FSCA, 1; WOPC, 1);
– **Estado de Tabasco**, Teapa, 23-VI-1963, J. Doyen (EMEC, 1);
– **Estado de San Luis Potosi**, Huichihuayán, 21-VI-1962, J. M. Campbell (WOPC, 1);
– El Salto Falls, 14-VI-1963, R. E. Woodruff (FSCA, 1).

**Honduras**

– **Departamento de Olancho**, Montaña del Malacate, 12-VI-2003, R. Turnbow (RHTC, 1);
– **Departamento de Francisco Morazán**, Zamorano, 23-V-2002, R. Turnbow (RHTC, 1);
– **Departamento de Yoro**, Parque Nacional Pico Pijol, 2-VI-2002, mercury vapor & black light, R. Turnbow (RHTC, 1);
– **Departamento de Sánta Barbara**, Santa Barbara, 30-V-1993, R. Turnbow (RHTC, 1).

***Diagnosis***. – Each *elytron* with humeral and preapical large macula. This characteristic is found in North American and Middle American specimens of *C. america* **n**. **sp**., *C. andersoni* **n**. **sp**., and *C. quadrinotata* (Chevrolat, 1874) **nov**. **stat**. Among this assemblage of species, *C. america* **n**. **sp**. specimens may be distinguished by showing 2 small pots between the elytral humeral and preapical maculae.

### *Description*

***Size***. – Length 5.0 mm. – Width 2.5 mm.

***Form***. – As in Fig. 410.

***Color***. – *Mouthparts* yellow, except *mandible* brown. – *Antennal fundus* yellow, *capitulum* light brown, *cranium* dark brown. – *Prothorax* testaceous, sides of *pronotum* with wide black streak. – *Pterothorax* and *legs* light testaceous. – Each *elytral disc* with 2 brown maculae, one small macula at humeral angle and elytral basal margin, other macula large and positioned behind elytral middle, disc between maculae with two faint punctiform spots.

***Head***. – *Funicle* shorter than length of capitulum, capitular antennomeres 8 and 9 triangular (Fig. 66), antennomere 10 obovate. – *Eyes* narrower than width of frons (EW/FW 17/27).

***Thorax***. – *Pronotum* (Fig. 186) slightly oblong (PW/PL 68/72), disc coarsely punctate; elytra with 9 punctiferous striae, striae end at elytral distal 4/5$^{th}$ (EL/EW 195/50).

***Abdomen***. – Phallic post-apical flap long, anterior phallic plate short, posterior phallic plate very broad, heavily infuscated distally (Fig. 292).

***Variations***. – Size: Length 3.0-5.0 mm; width 1.2-2.2 mm. – In some of the beetles examined, the pronotal side infuscation is reduced to two punctiform spots. The lateral pronotal black markings may coalesce along the pronotal anterior margin.

***Natural History***. – Specimens have been collected throughout the year, in North America most during the Spring and Summer months. They have been reared from the wood of *Celtis laevigata* Willdenow (Cannabaceae), *Celtis limheimeri* Englm. Ex K. Koch (Cannabaceae), and *Leucaena pulverolenta* (Schlecht) Benth. (Fabaceae). Specimens have also been associated with foliage and branches of *Acacia farnesiana* (Linnaeus) Wight et Arn. (Fabaceae), *Citrus sinensis* (Linnaeus) Osbek (Rutaceae), and of a species of *Zanthoxylum* Linnaeus (Rutaceae).

***Distribution*** (Fig. 374). – This species is known from the United States of America, México, and Honduras.

***Etymology***. – This species is dedicated to the United States of America, a country that provided the opportunity for this immigrant to become an Entomologist.

## 21. ***Cregya andersoni*** Opitz **n**. **sp**.

(Fig. 77, 191, 293, 382, 411)

ZooBank : http://zoobank.org/D8D04CC3-E708-4D1C-B8EB-F99D637FF91F

**Holotype**. ♂. MEXICO, Guerrero, 4.5 km S.W. Xochipala, 1400 m, 18.VII.1992, 92-021, R. S. Anderson, thorn scrub (CMNC).

**Paratype**. One specimen. – **México**, **Estado de Guerrero**, 4.5 km S.W. Xochipala, 1400 m, 18-VII-1992, thorn scrub, R. S. Anderson, thorn scrub (WOPC).

***Diagnosis***. – Each *elytron* with humeral and preapical large macula. This characteristic is found in North American and Middle American specimens of *C. andersoni* **n**. **sp**., *C. america* **n**. **sp**., and *C. quadrinotata* (Chevrolat, 1874) **nov**. **stat**. Among this assemblage of species, *C. andersoni* **n**. **sp**. specimens may be distinguished by showing a concolorous reddish pronotal disc.

### *Description*

***Size***. – Length 5.8 mm. – Width 2.0 mm.

***Form***. – As in Fig. 411.

***Color***. – *Forebody* and *pterothorax* red-brown. – *Antenna*, *legs*, and *abdomen* testaceous. – *Elytra* mostly testaceous, with brown macula at basal 1/4, and irregular brown fascia near *elytral apex*.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular

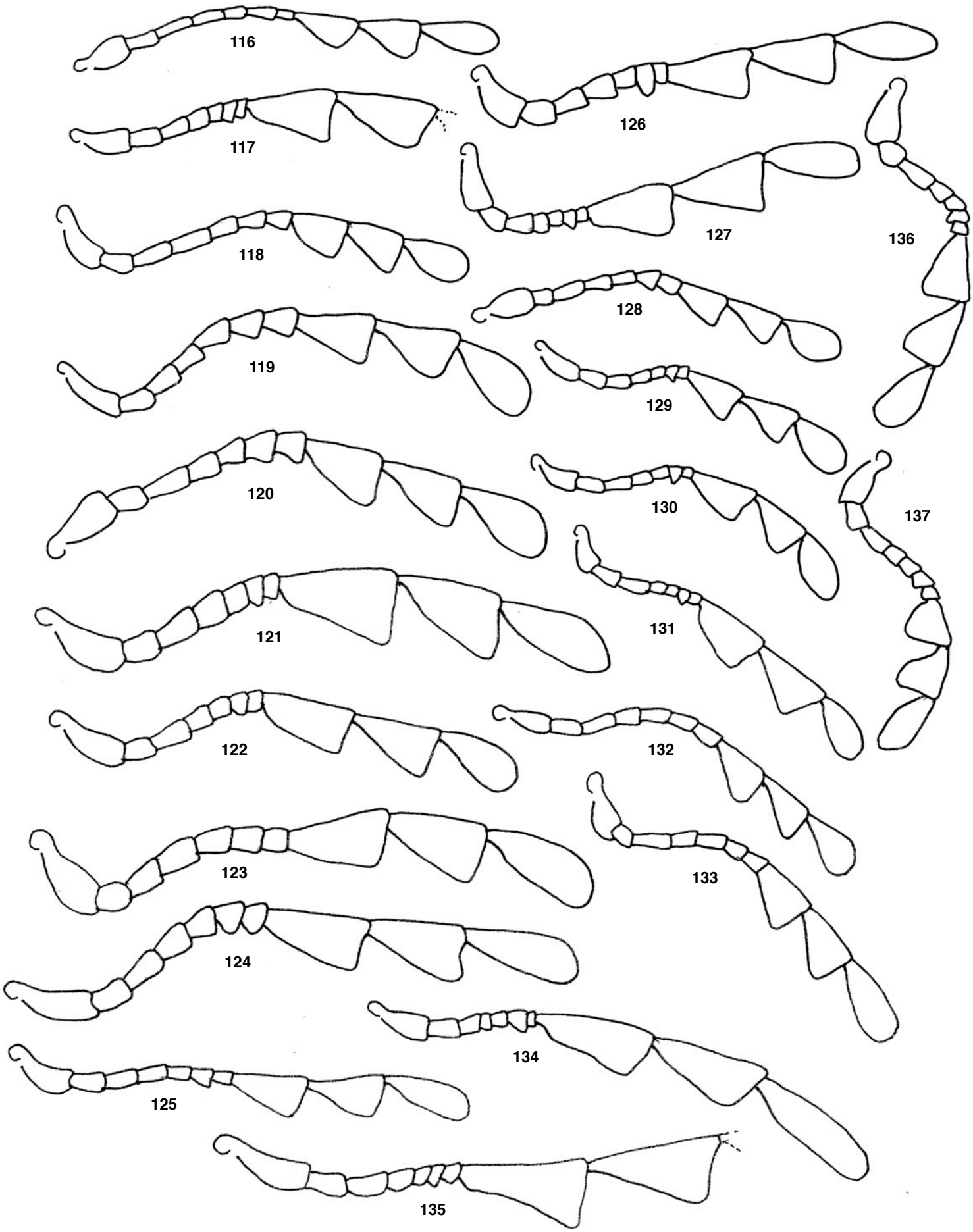



**Fig**. **116-137**. - Antennae. **(116)** *Cregya agnosta* **n**. **sp**. **(117)** *C. caraca* **n**. **sp**. **(118)** *C. assumenta* **n**. **sp**. **(119)** *C. fimbriolata* (Chevrolat, 1843). **(120)** *C. goias* **n**. **sp**. **(121)** *C. guyanensis* (Chevrolat, 1876). **(122)** *C. teretis* **n**. **sp**. **(123)** *C. ametra* **n**. **sp**. **(124)** *C. gemina* (Schenkling, 1900). **(125)** *C. hexalineata* **n**. **sp**. **(126)** *C. apanthesa* **n**. **sp**. **(127)** *C. chevrolati* Corporaal, 1950. **(128)** *C. caruaru* **n**. **sp**. **(129)** *C. gutta* **n**. **sp**. **(130)** *C. hamatilis* **n**. **sp**. **(131)** *C. kreagris* **n**. **sp**. **(132)** *C. ungula* **n**. **sp**. **(133)** *C. dybasi* **n**. **sp**. **(134)** *C. juxta* **n**. **sp**. **(135)** *C. mekosa* **n**. **sp**. **(136)** *C. cariari* **n**. **sp**. **(137)** *C. panna* **n**. **sp**.

(Fig. 77), antennomere 10 obovate. – *Eye* narrower than width of frons (EW/FW 20/40).

***Thorax***. – *Pronotum* (Fig. 191) quadrate (PW/PL 90/90), side margin with well-developed tubercle, disc uniformly punctate. – *Elytra* with 9 asetiferous punctiferous striae, striae end at elytral distal 4/5th (EL/EW 215/60).

***Abdomen***. – Phallic post-apical flap long, anterior phallic plate short, posterior phallic plate very broad (Fig. 293).

***Variations***. – Size: Length 5.5-5.8 mm; width 1.8-2.0 mm. – Except for body size, the available specimens are quite homogeneous.

***Natural History***. – The available specimens were collected during July, at 1,400 m.

***Distribution*** (Fig. 382). – Known from México.

***Etymology***. – The trivial name, *andersoni*, is a patronymic. It honors Robert S. Anderson, the collector of the holotype.

### 22. *Cregya apicula* Opitz **n**. **sp**.

(Fig. 67, 181, 294, 379, 412)

ZooBank : http://zoobank.org/127889E2-7E5C-468D-ACCB-FD27095E8386

**Holotype**. ♀. Bs. Aires-Argentina, San Fernando, ?-XII-1953, J. B. Daguerre (MNHN).

**Paratypes**. 19 specimens.

**Brazil**

– **Estado do Minas Gerais**, Rio Piracicaba, ?-II-1885, P. Germain (WOPC, 1);

– Inst. Cath., ?-?-1907, collector not noted (MNHN, 1);

– Sertão de Diamantina, Fazenda das Fiancias, 10-II-1902, E. Gounelle (WOPC, 1);

– **Estado do São Paulo**, Quéluz, collection date not noted, P Germain (MNHN, 1; WOPC, 2);

– **Estado do Rio De Janeiro**, Nova Friburgo, ?-II-1884, P. Germain (MNHN, 2; WOPC, 2);

– Petropolis, ?-V-1885, P. Germain (MNHN, 1);

– "Brazil" (MNHN, 1).

**Argentina**

– **Provincia de Buenos Aires**, Isla Martin Garcia, ?-V-1935, M. J. Viana (MLPA, 1);

– San Fernando, ?-XII-1953, J. Daguerre (MNHN, 3; WOPC, 3).

***Diagnosis***. – The *elytral apex* is brown. This characteristic will distinguish the members of this species from those of *C. lita* **n**. **sp**., in which the elytral apex is testaceous.

***Size***. – Length 5.5 mm. – Width 1.8 mm.

***Form***. – As in Fig. 412.

***Color***. – Mostly testaceous. – *Cranium*, *frons* and *postgenae* infuscated. – *Pronotum*, *disc* with two broad black lines. – *Elytra* with infuscation near *mesoscutellum* and with 2 dark spots anterior to middle of *disc*, *disc apex* broadly black.

***Head***. – *Funicle* shorter than *capitulum*, capitular antennomeres 8 and 9 triangular (Fig. 67), antennomere 10 obovate. – *Eyes* narrower than *frons* (EW/FW 2/37).

***Thorax***. – *Pronotum* (Fig. 181) quadrate (PW/PL 80/80), side margin with well-developed tubercle, disc coarsely punctate and with small swellings; elytra with 10 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 220/60).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad, infuscate in distal region (Fig. 294).

***Variations***. – Size: Length 4.8-6.0 mm; width 1.3-1.8 mm. Except for body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected during December, February, and May.

***Distribution*** (Fig. 379). – Known from Brazil and Argentina.

***Etymology***. – The trivial name, *apicula*, is a Latin noun that stems from *apex* (= tip). I call attention the black coloration of the apex of the elytra.

### 23. *Cregya aragua* Opitz **n**. **sp**.

(Fig. 78, 192, 295, 379, 413)

ZooBank : http://zoobank.org/7921C364-7C18-441E-AE09-8E551F27E987

**Holotype**. ♂. VENEZUELA, Aragua, Rancho Grande, 9-VII-1973, 1100 m, col. J. Salcedo & J. Clavijo (FSCA).

**Paratypes**. 48 specimens.

**Venezuela**:

– **Estado de Aragua**, Rancho Grande, 9-VII-1973, 1100 m, J. Salcedo & J. Clavijo (WOPC, 11);

– *idem*, 14-21-II-1969, Mercury Vapor Lamp, P. & P. Spangler (JMLC, 1; USNM, 1);

– *idem*, 15-VIII-1973, 1050 m, J. Clavijo & L. J. Garcia (WOPC, 5);

– *idem*, 17-V-1973 (WOPC, 1);

– *idem*, 20-21-II-1971, H. & A Howden (CMNC, 1; WOPC, 2);

– *idem*, 22-23-II-1971, H. & A. Howden (CMNC, 1);

– *idem*, 24-25-II-1971, H. & A. Howden (CMNC, 1; WOPC, 1);

– *idem*, ?-X-1973, J. Salcedo & J. Clavijo (WOPC, 11);

– *idem*, 25-26-I-1978, blacklight, cloud forest, J. B. Hebner (FSCA, 1);

– J. Salcedo & J. Clavijo (FMNH, 1; WOPC, 10);

– *idem*, 20 km NW Maracay, 2-IV-1992, black light, L. Herman (AMNH, 1);

– *idem*, 22-31-VII-1967, 1100 m, R. W. Poole (WOPC, 1);

– *idem*, ?-I-1954, G. U. H. Frey (WOPC, 2);

– *idem*, 19-VII-1984, Bordon (WOPC, 2);

– *idem*, collection date & collector not noted (WOPC, 4);

– *idem*, Parque Nacional Pittier, Rancho Grande, 21-VI-1987, M. A. Ivie (MAIC, 2);

– Portachuelo Pass, 12-VII-1987, R. S. Miller (CMNC, 1).

***Diagnosis***. – Specimens of *C. aragua* **n**. **sp**. resemble superficially those of *C. tambopata* **n**. **sp**., from which they can be conveniently distinguished by showing a testaceous cranium. The cranium is black in specimens of *C. tambopata* **n**. **sp**.

### *Description*

***Size***. – Length 5.5 mm. – Width 2.0 mm.

***Form***. – As in Fig. 413.

***Color***. – *Cranium*, *prothorax* and *mesothorax* yellow. – *Antenna* mostly dark brown, *scape* yellow. – *Metathorax* and *abdomen* black. – *Elytra* mostly yellow, humeral angle and posterior region of disc with punctiform brown macula.

***Head***. – *Funicular antennomeres* subfiliform to subquadrate, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 78), antennomere 10 obovate. – *Eye* narrower than width of frons (EW/FW 20/37).

***Thorax***. – *Pronotum* (Fig. 192) transverse (PW/PL 90/80), side margin with well-developed tubercle, disc uniformly impressed with shallow punctures. – *Elytra* with 10 asetiferous punctiferous striae, striae end at elytral distal 3/4th (EL/EW 220/72).

***Abdomen***. – Phallic post-apical flap long, anterior phallic plate short, posterior phallic plate very broad (Fig. 295).

***Variations***. – Size: Length 4.5-5.8 mm; width 1.8-2.0 mm. Except for body size, the available specimens are quite homogeneous.

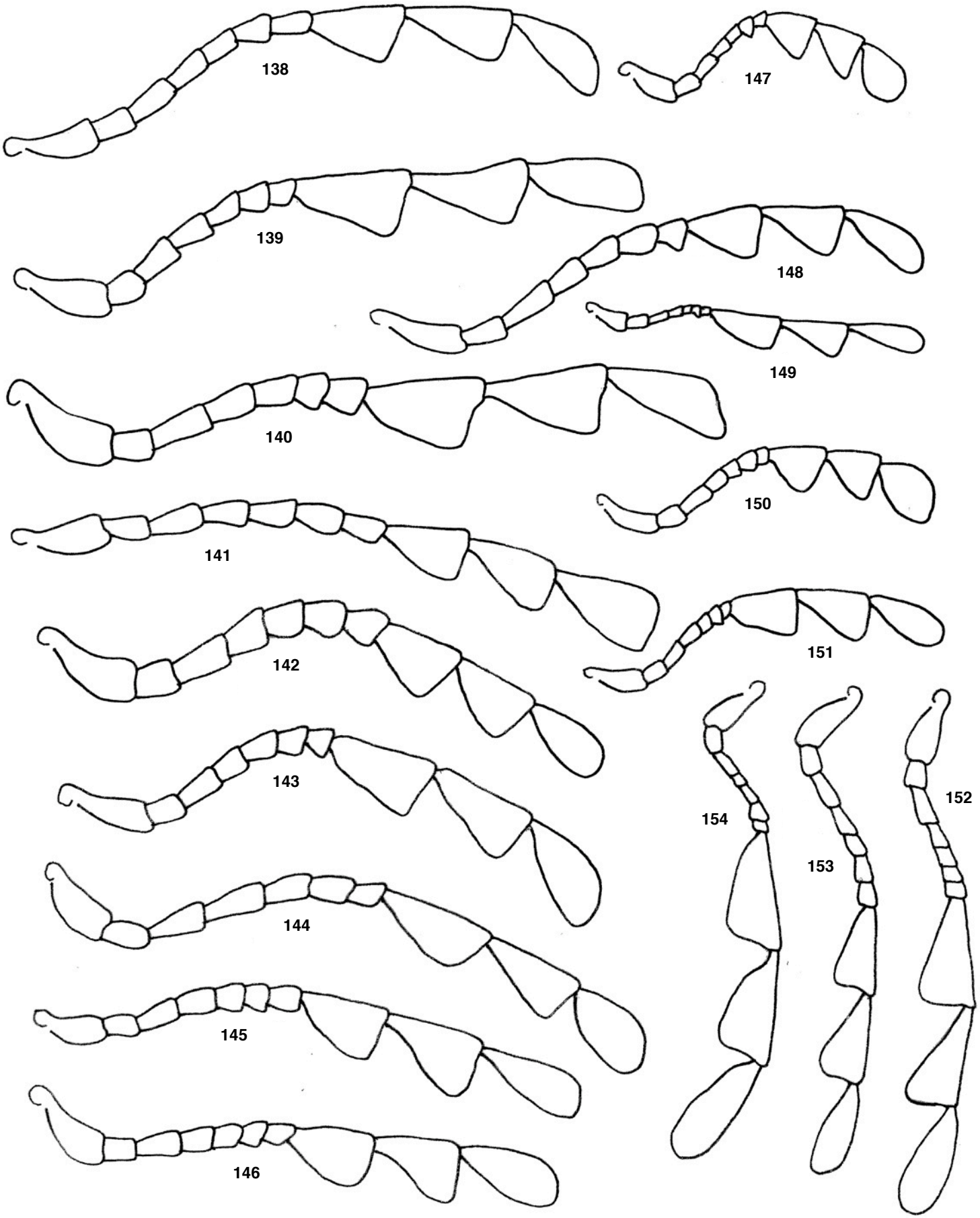



**Fig. 138-154**. - Antennae. **(138)** *Cregya kraatzi* (Schenkling, 1900). **(139)** *C. nubilosa* **n. sp. (140)** *C. trilineata* **n. sp. (141)** *C. verticula* **n. sp. (142)** *C. terapoto* **n. sp. (143)** *C. glena* **n. sp. (144)** *C. castanea* **n. sp. (145)** *C. diffusa* **n. sp. (146)** *C. elegantula* **n. sp. (147)** *C. morrisi* **n. sp. (148)** *C. odonta* **n. sp. (149)** *C. ardis* **n. sp. (150)** *C. cerina* **n. sp. (151)** *C. variegata* **n. sp. (152)** *C. lita* **n. sp. (153)** *C. villavera* **n. sp. (154)** *C. decima* **n. sp.**

***Natural History***. – The available specimens were collected throughout the year, at elevations that range from 1,050 to 1,100 m.

***Distribution*** (Fig. 379). – Known from Venezuela.

***Etymology***. – The trivial name, *aragua*, constitutes a noun in apposition and refers to the type locality.

### 24. ***Cregya ardis*** Opitz **n**. **sp**.

(Fig. 149, 176, 296, 379, 414)

ZooBank : http://zoobank.org/F76438BC-9907-495F-8F1D-04933161F2A3

**Holotype**. ♂. Rio Jan. (Rio de Janeiro, Brazil) (MNHN)

***Diagnosis***. – *C. ardis* **n**. **sp**. specimens resemble superficially those of *C. guttula* **n**. **sp**., but specimens of *C. ardis* **n**. **sp**. have the last antennomere completely black This antennomere is partially yellow in specimens of *C. guttula* **n**. **sp**.

#### *Description*

***Size***. – Length 3.8 mm. – Width 1.2 mm.

***Form***. – As in Fig. 414.

***Color***. – Castaneous, except yellow elytral epipleural margin, elytral apex, and legs.

***Head***. – *Funicular antennomeres* subquadrate, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 149), antennomere 10 obovate. – *Eyes* as wide as frons (EW/FW 20/20).

***Thorax***. – *Pronotum* (Fig. 176) slightly transverse (PW/PL 54/50), side margin with well-developed tubercle, disc coarsely punctate. – *Elytra* with 9 asetiferous punctiferous striae, striae end at elytral distal 3/4$^{th}$ (EL/EW 160/50).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 296).

***Distribution*** (Fig. 379). – Known from Brazil.

***Etymology***. – The trivial name, *ardis*, is a Greek noun with a meaning "point of an arrow"; with reference to the body form of this beetle.

### 25. ***Cregya atracapitis*** Opitz **n**. **sp**.

(Fig. 79, 193, 297, 388, 415)

ZooBank : http://zoobank.org/D2599B7E-6233-4ACE-BCB4-13A5D5809826

**Holotype**. ♂. COSTA RICA, Turrialba, IICA, 7-VI-1969, G. Ekis (FSCA).

***Diagnosis***. – The cranium is black, the remainder of the integument is testaceous, except for the tibiae and tarsi, which are brown. This combination of characteristics will distinguish the members of this species from congeners.

#### *Description*

***Size***. – Length 5.2 mm. – Width 2.0 mm.

***Form***. – As in Fig. 415.

***Color***. – Yellow, except *cranium*, pedicel, *antennal funicle*, *tibiae*, and *tarsi* brown.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 79), antennomere 10 obovate. – *Eye* narrower than width of frons (EW/FW 25/30).

***Thorax***. – *Pronotum* (Fig. 193) slightly transverse (PW/PL 85/80), side margin with well-developed tubercle, disc punctate at sides, middle subglabrous. – *Elytra* with 9 asetiferous punctiferous striae, striae end at elytral distal 2/3$^{rd}$ (EL/EW 230/70).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 297).

***Natural History***. – The available specimen was collected during March.

***Distribution*** (Fig. 388). – Known from Costa Rica.

***Etymology***. – The trivial name, *atracapitis*, is a Latin compound name that stems from *atra* (= black) and *caput* (= head); with reference to the black color of the cranium.

### 26. ***Cregya bicolor*** (Laporte, 1836)

(Fig. 69, 170, 379, 416)

*Enoplium bicolor* Laporte, 1836: 52.

**Lectotype**. Gender not known. Colombia (MNHN). Corporaal 1950a: 286.

Laporte did not tag a specimen to be the name bearer. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

*Enoplium crinitum* Klug, 1842: 369. **nov**. **syn**.

*Pelonium collaris* Spinola, 1844: 364.

*Enoplium flavum* Spinola, 1844: 364.

***Diagnosis***. – Forebody red-brown and elytron entirely dark brown. This combination of characteristic will distinguish the members of this species from other South American *Cregya*.

#### *Redescription*

***Size***. – Length 4.4 mm. – Width 1.5 mm.

***Form***. – As in Fig. 416.

***Color***. – *Forebody* yellow-brown. – *Antenna* brown. – *Pterothorax* and *abdomen* brown. – *Elytra* dark brown. – *Legs* bicolorous, *prothoracic femur* mostly yellow, infuscated distally, *prothoracic tibia* dark brown. – *Mesothoracic* and *metathoracic femora* mostly yellow, slightly infuscated at extremities. – *Tarsi* dark brown.

***Head***. – *Funicle* about as long as length of capitulum, capitular antennomeres 8 and 9 triangular (Fig. 69), antennomere 10 obovate. – *Eyes* wider than width of frons (EW/FW 27/22).

***Thorax***. – *Pronotum* (Fig. 170) quadrate (PW/PL 78/78), side margin with well-developed tubercle, disc with shallow punctures. – *Elytra* with 10 punctiferous striae, striae end at elytral distal 4/5$^{th}$ (EL/EW 230/60).

***Abdomen***. – *Pygidium* scutiform.

***Variations***. – The *epicranium* may be dark brown, otherwise, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected during January and May, one at 77 m.

***Distribution*** (Fig. 379). – I examined 6 specimens:

**Colombia**

– **Departamento de Magdalena**, Valledupar, 22-24-V-1968, B. Malkin. "Colombia".

**Venezuela**

– **Estado de Guárico**, 28 km SW Calabozo, 23-V-1988, 250 feet, C. W. & L. O'Brien & G. Wibner;

– Isla C. Mánamo, 25 km S Tucupita, Terr. Delta Amao, 3-8-I-1967, Bordon.

Specimens are deposited in FMNH, MNHN, and WOPC.

***Notes***. – I examined the type of *E. crinitum* Klug and *P. collare* Spinola in 1974. I did not see the type of *E. bicolor*, however, Laportes' description leaves no doubt as to the identity of his species

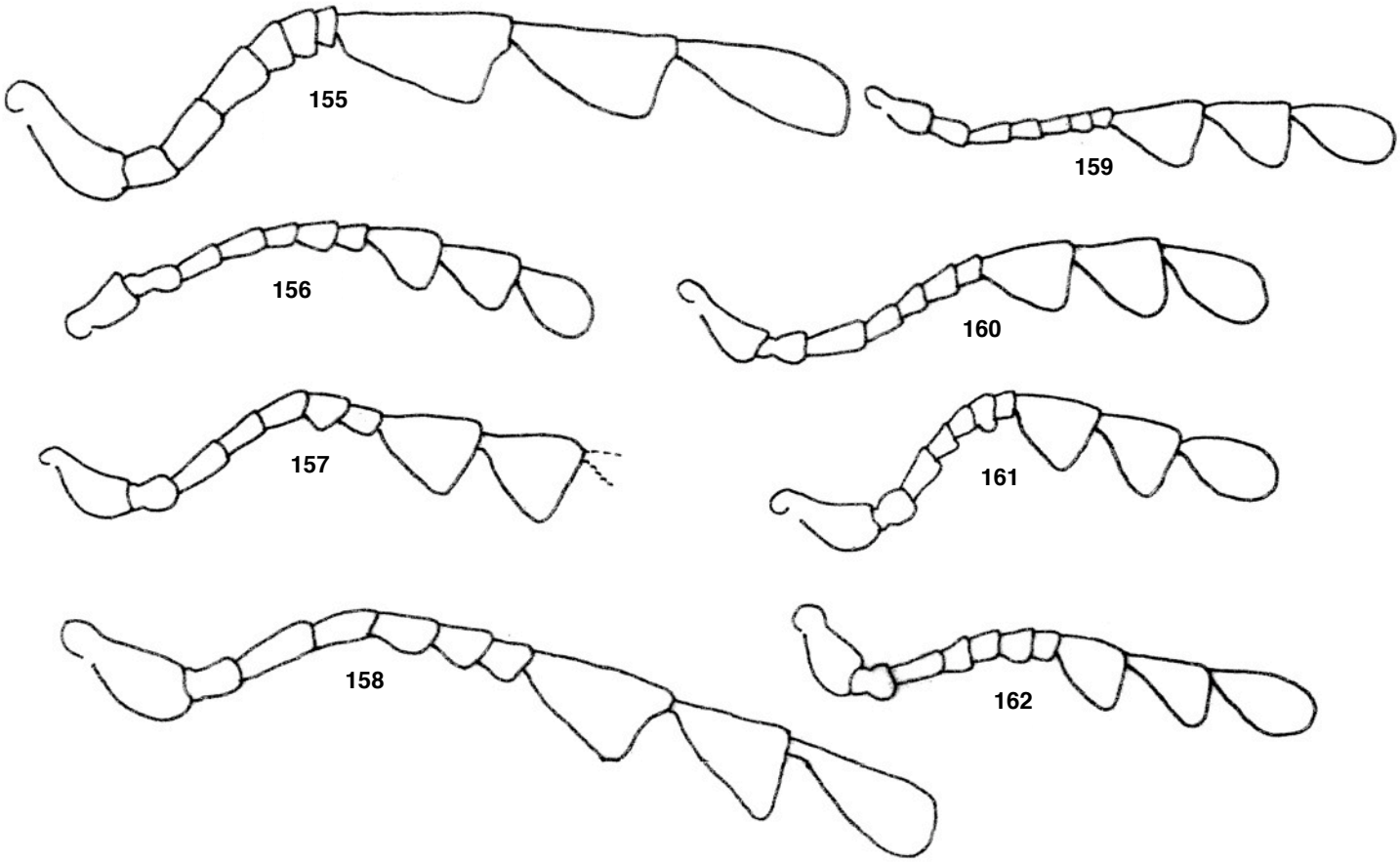



**Fig**. **155-162**. - Antennae. **(155)** *Cregya seabrai* Peracchi, 1962. **(156)** *C. turrialba* **n**. **sp**. **(157)** *C. furfurosi* **n**. **sp**. **(158)** *C. duodecimpunctata* (Klug, 1842), ♂. **(159)** *C. decusoris* **n**. **sp**. **(160)** *C. andros* **n**. **sp**. **(161)** *C. bipunctipennis* **n**. **sp**. **(162)** *C. versicula* **n**. **sp**.

and the recognition of the synonyms. This species description is based on a non-type specimen.

27. ***Cregya bilineicolle*** (Chevrolat, 1874) **nov**. **stat**.
(Fig. 80, 194, 298, 382, 417)

*Pelonium bilineicolle* Chevrolat, 1874: 327.

**Lectotype**. ♀. Here designated. Mexico, D. Salle (MNHN). Corporaal 1950a: 283.

**Paralectotypes**. 3 specimens.

**México**

– **Estado de Veracruz**, Córdova, Salle (MNHN);
– México, Salle, 1859 (MNHN);
– México (MNHN).

Chevrolat did not tag a specimen to be the name bearer; therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

***Diagnosis***. – The elytral disc has a large preapical black macula that extends medially into a narrow angula line to the sutural margin (see Fig. 417). This elytral characteristic is found in specimens of *C. bilineicolle* (Chevrolat, 1874) **nov**. **stat**., *C. abdita* Wolcott, 1927, *C. inscripta* (Gorham, 1883), and *C. turrialba* **n**. **sp**. Among this assemblage, *C. bilineicolle* (Chevrolat, 1874) **nov**. **stat**. is most closely related to *C. abdita* Wolcott, 1927, from which it differs by showing 4 spots in the anterior third of the elytral disc. *C. abdita* Wolcott, 1927 specimens show 3 spots in this elytral region.

## *Redescription*

***Size***. – Length 4.5 mm. – Width 2.0 mm.

***Form***. – As in Fig. 417.

***Color***. – Mostly testaceous. – *Cranium*, frons and postgenae infuscated. – *Pronotum*, disc with two black diverging lines and a dark spot on the pronotal tubercle. – *Elytra* with infuscation near mesoscutellum and anterior to middle of disc, with angular fascia near apex.

***Head***. – *Funicle* about as long as length of capitulum, capitular antennomeres 8 and 9 triangular (Fig. 80), antennomere 10 obovate. – *Eyes* narrower than width of frons (EW/FW 15/35).

***Thorax***. – Pronotum (Fig. 194) slightly oblong (PW/PL 68/75), side margin with well-developed tubercle, disc coarsely punctate; elytra with 9 punctiferous striae, striae end at elytral posterior 3/4$^{th}$ (EL/EW 200/50).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate very long, posterior phallic plate very broad, infuscate in distal region (Fig. 298).

***Variations***. – Size: Length 4.2-5.0 mm; width 1.5-2.0 mm. – The black infuscations on the cranium, pronotum, and elytra vary in prominence.

***Natural History***. – Specimens were collected throughout the year in a Malaise trap, at altitudes ranging from 1000-1860 m.

***Distribution*** (Fig. 382). – In addition to the three types, I examined 83 specimens from:

**México**. – No other information available.

**Guatemala**

– **Departamento de Guatemala**, Puerta Parada, 9-16-IV-2005, 1860 m, J. C. Schuster;
– *idem*, 22-29-IV-2006, 1,860 m, J. C. Schuster;
– *idem*, 6-13-V-2006, 1850 m, J. C. Schuster;
– *idem*, 19-III-9-IV-2005, 1,880 m, J. C. Schuster;
– *idem*, 18-IV-13-VI-2015, 1850 m, J. C. Schuster;
– *idem*, 8-II-1-III-2014, 1850 m, J. C. Schuster;
– *idem*, 27-III-3-VIII-2013, 1,850 m, J. C. Schuster;
– *idem*, 12-IV-12-VII-2014, 1,850 m, J. C. Schuster;
– *idem*, 17-24-I-2015, 1,850 m, J. C. Schuster;
– *idem*, 16-13-V-2006, 1,850 m, J. C. Schuster;
– *idem*, 29-IV-4-V-2006, 1,850 m, J. C. Schuster;

– *idem*, 10-17-IV-2010, 1,850 m, J. C. Schuster;
– *idem*, 5-19-I-2013, J. C. Schuster;
– *idem*, 9-16-II-2013, 1,860 m, J. C. Schuster;
– Fraijanes, km 2.5 Carr. Ca EL Salvador, 16-III-2014, P. Munoz;
– Capetillo, G. C. Champion;
– **Departamento de Sololá**, Panajachel, 18-XI-1991, R. Baranowski;
– **Departamento de Suchitepequez**, Los Terrales Reserve, 6-VI-2005, 1,000 m, R. Turnbow.

Specimens are deposited in AMNH, ANSP, BMNH, CASC, CMNC, CMNH, CNCI, CSCA, CSUC, EMEC, FMNH, FSCA, JNRC, MCZC, MEMU, MNHN, RHTC, SDEI, SEMC, TAMU, UCDC, USNM, UVGC, WFBM, and WOPC.

### 28. ***Cregya casselorum*** (Opitz, 2014)

(Fig. 81, 195, 299, 379, 418)

ZooBank : http://zoobank.org/3F04C2C0-3309-4FEB-9A46-1D2D9FB9093E

*Pujoliclerus casselorum* Opitz, 2014: 741.

**Holotype**. ♂. BOLIVIA, Santa Cruz: 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 1729S-6333W, 405 m, 5-15-X-2001, tropical transition forest, M. C. Thomas & B. K. Dozier (MNKM).

**Paratypes**. 127 specimens deposited in repositories as noted in Opitz, 2014: 741.

***Diagnosis***. – The members of this species are similar superficially to those of *C. catarina* (Opitz, 2014), from which they differ by having the pronotal sides more testaceous. In *C. catarina* (Opitz, 2014) specimens the testaceous region of the pronotum is limited to the pronotal anterior angles.

***Description***. – This species (Figs. 81, 195, 418) was adequately described and illustrated in Opitz (2014: 741).
Additional characteristics involve:
– Elytra with 10 punctiferous striae, striae end near elytral apex;
– Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 299).

***Variations***. – A newly noted variation involves the presence of red coloration on the anterior third of the pronotum.

***Distribution*** (Fig. 379). – In addition to examination of types, I examined 23 specimens from:

**Bolivia**
– **Departamento de Santa Cruz**, Buena Vista, vicinity Flora & Fauna Hotel, 17-20-X-2000, R. Morris;
– *idem*, 23-25-X-2000, R. Morris;
– **Departamento de Cochabamba**: Cochabamba.

Specimens are deposited in: ACMT, FSCA, MNHN, MNKM, RFMC, and WOPC.

### 29. ***Cregya casusa*** Opitz **n. sp.**

(Fig. 71, 196, 300, 379, 419)

ZooBank : http://zoobank.org/E4845FC5-64B2-416B-8231-428B130DF8DC

**Holotype**. ♂. Marco da Leğua (Para) (Brazil) Gounelle, ?-3. 1895 (MNHN).

**Paratypes**. 3 specimens.

**Brazil**
– **Estado do Minas Gerais**, Caraca, ?-XII-1895, E. Gounelle (WOPC, 1);
– Matusinhos, 3-IV-1885, E. Gounelle (MNHN,1);
– **Estado do São Paulo**, Constancia, ?-I-1857, J. Gray (WOPC, 1).

***Diagnosis***. – The combination of color characteristics as depicted in Fig. 419 distinguishes the members of this species from congeners.

***Description***

***Size***. – Length 4.0 mm. – Width 1.5 mm.

***Form***. – As in Fig. 419.

***Color***. – *Cranium*, *metathorax*, and *abdomen* black, *antenna* brown, *prothorax* and *mesothorax* castaneous, *elytra* bicolorous, broadly outlined in brown, brown region particularly evident in posterior region, anterior 2/3rd of disc yellow.

***Head***. – *Funicular antennomeres* filiform to subquadrate, capitulum much longer than combined length of funicular antennomeres; capitular antennomeres 8 and 9 long triangular (Fig. 71), antennomere 10 obovate. – *Eye* wider than frons (EW/FW 22/17).

***Thorax***. – *Pronotum* (Fig. 196) quadrate (PW/PL 60/60), side margin with well-developed tubercle, disc punctures widely separated, midline of disc broadly glabrous. – *Elytra* with 10 punctiferous striae, punctures very small, striae end at elytral distal 1/2th. – *Epipleural fold* particularly prominent (EL/EW 180/55).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate very short, posterior phallic plate very broad (Fig. 300).

***Natural History***. – Specimens were collected during December, January, and April.

***Distribution*** (Fig. 379). – Known from Brazil.

***Etymology***. – The trivial name, *casusa*, is a Latin adjective derived from *casus* (= decline); with reference to the decline of asetiferous punctations on the elytral disc.

### 30. ***Cregya catarina*** (Opitz, 2014)

(Fig. 82, 197, 301, 380, 420)

ZooBank : http://zoobank.org/2C45BA77-765E-49A3-8877-660AE365FD79

*Pujoliclerus catarina* Opitz, 2014: 742.

**Holotype**. ♂. BRAZIL, Santa Catarina; Nova Teutonia, I-1974, 300-500 m, Fritz Plaumann (FSCA).

**Paratypes**. 5 specimens deposited in repositories as noted in Opitz, 2014: 742.

***Diagnosis***. – The members of this species are similar superficially to those of *C. casselorum* (Opitz, 2014), from which they differ by having the testaceous region of the pronotum limited to the pronotal anterior angles. In *C. casselorum* (Opitz, 2014) specimens, the pronotal sides more testaceous.

***Description***. – This species (Figs. 82, 197, 420) was adequately described and illustrated in Opitz (2014: 742).
Additional characteristics involve:
– Elytra with 9 punctiferous striae, striae end near elytral apex;
– Elytral interstitial spaces arenose;
– Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad, phallic apex subacuminate (Fig. 301).

***Distribution*** (Fig. 380). – In addition to examination of types, I examined 24 specimens from:

**Brazil**
– **Estado do Santa Catarina**, Nova Teutonia, 27°11'S-5°28'W, 27-V-1938, F. Plaumann;
–?-XII-1973, F. Plaumann (WFBM, 1; WOPC, 1);
– Salto do Pirahy, Pres Jaraguam ?-?-1915, E. Gounelle;
– **Estado do São Paulo**, Alto da Serra, 28-III-1912;
– Constancia, ?-I-1857, J. Gray;
– **Estado do Rio de Janeiro**, Nova Friburgo, ?-II-1884, P. Germain;
– Tijuca, ?-I-1857, H. Clark;
– Petropolis, ?-II-1857, J. Gray;
– **Estado do Pernambuco**, Serra de Communaty, 12-III-1893, Gounelle;
– **Estado do Mato Grosso**, ?-?-1886, P. Germain.

Specimens are deposited in: AMNH, BMNH, FMNH, FSCA, MLPA, MNHN, and WOPC.

### 31. ***Cregya contaminata*** (Klug, 1842)

(Fig. 72, 198, 302, 374, 380, 421)

*Enoplium contaminatum* Klug, 1842: 368.

**Lectotype**. Gender not known. Here designated. Colombia (ZMHB). Corporaal 1950a: 280.

Klug did not indicate the number of specimens that were before him when he made his description. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

*Enoplium obsoletum* Blanchard, 1844: 95.

***Diagnosis***. – The combination of color characteristics as depicted in Fig. 421 distinguishes the members of this species from congeners.

## *Redescription*

***Size***. – Length 4.5 mm. – Width 2.0 mm.

***Form***. – As in Fig. 421.

***Color***. – Mostly testaceous. – *Cranium*, frons, and postgenae infuscated. – *Pronotum*, disc with 2 black irregular lines. – *Elytra* with infuscation near *mesoscutellum* and with 3 dark spots anterior to middle of disc, with angular infuscation near *apex*.

***Head***. – *Funicle* about as long as length of capitulum, capitular antennomeres 8 and 9 triangular (Fig. 72), antennomere 10 obovate. – *Eyes* as wide frons (EW/FW 22/22).

***Thorax***. – *Pronotum* (Fig. 198) quadrate (PW/PL 70/70), side margin with well-developed tubercle, disc coarsely punctate, disc with 2 small paralateral umbones; elytra with 9 punctiferous striae, striae end at elytral distal 4/5$^{th}$ (EL/EW 200/60).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad, infuscate in distal region (Fig. 302).

***Variations***. – Size: Length 4.8-6.0 mm; width 1.3-1.7 mm. – The black infuscations on the cranium, pronotum, and elytra vary in extent of presence.

***Natural History***. – Specimens were collected throughout the year, at altitudes ranging from 140 to 1,800 m.

***Distribution*** (Figs. 374, 380). – In addition to the three types, I examined 47 specimens from:

**Panamá**

– **Provincia de Panamá**, Bayano, 3 km W Ipeti, 30-IV-3-V-1992, E. Giesbert.

– **Provincia de Chiriquí**, David, collection date not noted, Champion.

**Colombia**

– **Departamento de Vichada**, Tuparro, Cerro Tomás, 5°21'N-67°51'W, 8-17-XII-2000, 140 m, Malaise, W. Villalba;

– *idem*, 5-14-I-2001, 140 m, Malaise, W. Villalba;

– *idem*, 17-26-XII-2000, W. Villalba.

**Venezuela**

– **Estado de Miranda**, Caracas, collection date not noted, E. Simon;

– **Estado de Guárico**, 45 km S Santa Maria de Ipire, 21-VI-1996, H. & A. Howden.

**Bolivia**

– **Departamento de Santa Cruz**, Buena Vista, vicinity Flora & Fauna Hotel, 23-25-X-2000, R. Morris;

– *idem*, 29-X-1999, 410 m, at light, C. Porter & L. Stange;

– 4-6 km SSE Buena Vista Hotel F & F, 14-16-X-2000, Wappes 7 Morris;

– 4 miles E Santa Cruz, 21-IV-1978, C. W. O'Brien;

– 5 km ESE Warnes, Hotel Rio Selva, 20-X-2000, black light trap, M. C. Thomas;

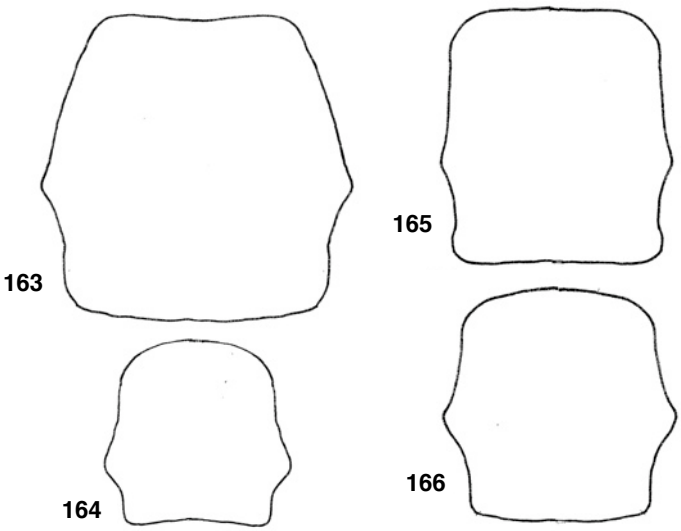



**Fig. 163-166**. - Pronota. **(163)** *C. terapoto* **n. sp**. **(164)** *C. tetralineata* **n. sp**. **(165)** *C. jatai* **n. sp**. **(166)** *C. inscripta* (Gorham, 1883).

– **Departamento de La Paz**, Coroico, 6-12-1955, 1800 m, L. E. Peña;

– **Departamento de Cochabamba**, 1 km E Villa Tunari, 8-12-X-1992, E. Giesbert;

– Cochabamba, collection date not noted, Germain.

**Brazil**

– **Estado do Rondônia**, 62 km SW Ariquemes, Fazenda Rancho Grande, 7-X-1993, C. W. & L. B. O'Brien;

– **Estado do Bahia**, Encruzilhada, ?-XI-1972, 960 m, Moacir Alvarenga;

– Villa Victoria, ?-? 1890, Ch Pujol;

– **Estado do Mato Grosso**, ?-?-1886, P. Germain;

– San Antonia da Barra, collection date not noted, Ch Pujol;

– **Estado do Pernambuco**, Serra de Communaty, 3-XII-1892, Gounelle;

– **Estado do Rio de Janeiro**, Petropolis, ?-V-1885, P. Germain;

– **Estado do Goías**, Jataí, collection date and collector not noted;

– **Estado do Minas Gerais**, Sertão de Diamantina, 10-XI-1902, E. Gounelle.

**Argentina**

– **Provincia de Tucumán**, Trancas-Tacanas, 1-30-XI-1968, L. Stange.

Specimens are deposited in ACMT, AMNH, CASC, CMNC, FSCA, IMLA, JNRC, MCZC, MNHN, RFMC, WFBM, and WOPC.

***Notes***. – I examined the lectotype in 1974. At that time, I selected a Neotype upon which this description is based.

### 32. ***Cregya corumba*** Opitz **n. sp.**

(Fig. 83, 199, 303, 380, 422)

ZooBank : http://zoobank.org/80EB35E2-C62F-4C6E-B0E0-9D584EBD6737

**Holotype**. ♂. Corumba, Mato Grosso (Brazil) (MNHN).

**Paratypes**. Two specimens.

**Brazil**

– **Estado do Pará**, Santarem (WOPC).

– **Estado do Bahia**, Chapada, ?-XI-? (CMNH).

***Diagnosis***. – These specimens show two pairs of brown lines that extend from the anterior margin of the pronotum to the basal 1/3$^{rd}$ of the elytral disc. This characteristic will distinguish the members of this species from congeners.

## *Description*

***Size***. – Length 4.8 mm. – Width 1.5 mm.

***Form***. – As in Fig. 422.

***Color***. – Testaceous, except *pronotum* with two paralateral brown lines and elytral disc infuscated in basal half, near apex, and near sutural margin.

***Head***. – *Funicular antennomeres* subquadrate, capitulum longer than funicle; capitular antennomeres 8 and 9 short triangular (Fig. 83), antennomere 10 obovate. – *Eye* narrower than width of frons (EW/FW 20/25).

***Thorax***. – Pronotum (Fig. 199) slightly oblong (PW/PL 58/62), side margin with well-developed tubercle, disc shallowly punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 170/50).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate long, posterior phallic plate very broad (Fig. 303).

***Variations***. – The infuscations on the elytral disc vary in intensity of presence.

***Natural History***. – One of the paratypes was collected during November.

***Distribution*** (Fig. 380). – Known from Brazil.

***Etymology***. – The trivial name, *corumba*, constitutes a noun in apposition and refers to the type locality.

### 33. *Cregya cruzvera* Opitz **n. sp.**

(Fig. 73, 200, 304, 382, 423)

ZooBank : http://zoobank.org/2B68D84F-6C29-4FD4-89B8-FEE4E5A31759

**Holotype**. ♀. MEXICO, VER., LOS TUXTLAS, VIC. BALZAPOTE, APRIL 29-MAY 6, 1989, E. GIESBERT (FSCA).

**Paratypes**. 5 specimens.

**México**

– **Estado de Veracruz**, 14-16 km, W Sontecompan, 10-13-IV-1993, J. E. Wappes (ACMT, 1);

– Los Tuxtlas, vicinity Balzapote, 29-IV-6-V-1989, E. Giesbert (WOPC, 1);

– Estación Biologica Veracruz, 20/30-IV-1991, F. Hovore (WFBM, 1);

– **Estado de Chiapas**, Lag. Belgica, 16 km NW, Ocozocoautla, 13-VI-1990, B. Gill (CNCI, 2).

**Guatemala**

– **Departamento de Izabal**, 25 km SE Morales, 21-24-V-1996, 2800 feet, E. Giesbert (WOPC, 1).

***Diagnosis***. – These specimens show a cranium and pronotal arch that are black, and each elytral disc is marked by 2 large black maculae (see Fig. 423). This combination of characteristics will distinguish the members of this species from congeners.

#### *Description*

***Size***. – Length 6.0 mm. – Width 2.0 mm.

***Form***. – As in Fig. 423.

***Color***. – *Cranium* black. – *Antenna*, *prothoracic venter*, *pterothorax*, *legs*, and *abdomen* testaceous. – *Pronotal arch* black, *pronotal disc* with 5 black spots. – *Elytra* bicolorous, mostly testaceous, disc with 4 large maculae, and 2 punctiform black spots near *elytral base*.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 73), antennomere 10 obovate. – *Eye* as wide as frons (EW/FW 30/30).

***Thorax***. – *Pronotum* (Fig. 200) quadrate (PW/PL 100/100), side margin with well-developed tubercle, disc uniformly punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 245/80).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 304).

***Variations***. – Size: Length 4.5-6.0 mm; width 1.7-2.0 mm. – The two punctiform black spots near the elytral base vary in prominence.

***Natural History***. – The available specimens were collected during April and May, one at 854 m.

***Distribution*** (Fig. 382). – Known from México and Guatemala.

***Etymology***. – The trivial name, *cruzvera*, is an anagram of Veracruz, the type locality.

### 34. *Cregya ekteina* Opitz **n. sp.**

(Fig. 84, 201, 305, 380, 424)

ZooBank : http://zoobank.org/F7B01362-881A-4F96-80FB-150A22AC2149

**Holotype**. ♂. BOLIVIA, Santa Cruz, Buena Vista, 410 m, 29-X-1999, C. Porter, L. Stange, disturbed tropical forest, at light (FSCA).

***Diagnosis***. – In these specimens, the pronotal disc shows a broad black line followed by 2 black lines at the basal 1/3rd of the elytral disc. This combination of characteristics will distinguish the members of this species from congeners.

#### *Description*

***Size***. – Length 4.5 mm. – Width 1.5 mm.

***Form***. – As in Fig. 424.

***Color***. – Testaceous, except *epicranium* infuscated. – *Pronotum* with broad black line at middle. – Each *elytron* with black streak extended from anterior margin proximal to *mesoscutellum*, and with brown macula near *elytral apex* near sutural margin.

***Head***. – *Funicular antennomeres* subquadrate, *capitulum* longer than funicle. – Capitular antennomeres 8 and 9 short triangular (Fig. 84), antennomere 10 obovate. – *Eyes* coarsely facetted and bulging, eye as wide as width of frons (EW/FW 23/23).

***Thorax***. – *Pronotum* (Fig. 201) quadrate (PW/PL 75/75), side margin with well-developed tubercle, disc shallowly punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 210/60).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate long, posterior phallic plate very broad (Fig. 305).

***Natural History***. – The holotype was collected during October, at 410 m.

***Distribution*** (Fig. 380)). – Known from Bolivia.

***Etymology***. – The trivial name, *ekteina*, is a Greek name that stems from *ekteino* (= stretched out); with reference to the lengthened anterior plate of the phallus.

### 35. *Cregya helva* Opitz **n. sp.**

(Fig. 74, 202, 306, 380, 425)

ZooBank : http://zoobank.org/AB02A720-5C7C-4EFB-AA19-561845EA2050

**Holotype**. ♀. Corumba, Brazil, Acc. No. 2966 (CMNH). A second label reads: March. A third label reds: Lowland.

**Paratypes**. One specimen. – **Brazil**, **Estado do Mata Grosso**, Corumba (WOPC).

***Diagnosis***. – Among specimens that have the elytron completely testaceous, only in specimens of *C. helva* **n. sp.** is the cranium dark brown and the pronotum speckled with brown markings.

***Size***. – Length 4.5 mm. – Width 1.4 mm.

***Form***. – As in Fig. 425.

***Color***. – Testaceous, except *cranium* castaneous and *pronotum* with two paralateral castaneous lines.

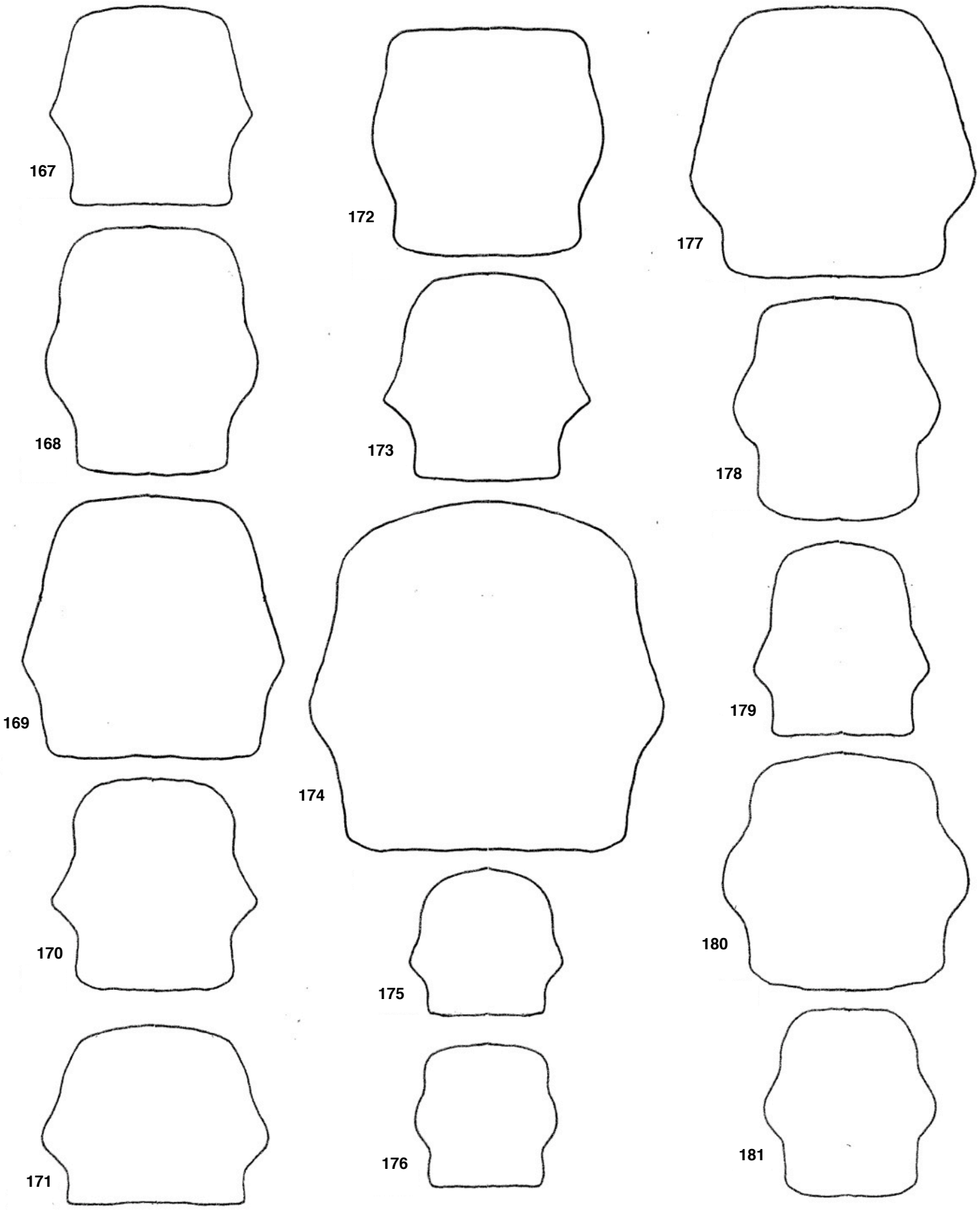



**Fig. 167-181**. - Pronota. **(167)** *Cregya abacula* **n. sp. (168)** *C. andros* **n. sp. (169)** *C. bipunctipennis* **n. sp. (170)** *C. bicolor* (Laporte, 1836). **(171)** *C. campana* **n. sp. (172)** *C. cerina* **n. sp. (173)** *C. decusoris* **n. sp. (174)** *C. duodecimpunctata* (Klug, 1842). **(175)** *C. tambopata* **n. sp. (176)** *C. ardis* **n. sp. (177)** *C. elegantula* **n. sp. (178)** *C. ferratilis* **n. sp. (179)** *C. guttula* **n. sp. (180)** *C. hedra* **n. sp. (181)** *C. apicula* **n. sp.**

***Head***. – *Funicular antennomeres* subquadrate, *capitulum* longer than funicle, 7th antennomere slightly widened; capitular antennomeres 8 and 9 short triangular (Fig. 74), antennomere 10 obovate. – *Eye* narrower than width of frons (EW/FW 18/27).

***Thorax***. – *Pronotum* (Fig. 202) quadrate (PW/PL 64/64), side margin with well-developed tubercle, disc shallowly punctated. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 190/50).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 306).

***Distribution*** (Fig. 380). – Known from Brazil.

***Etymology***. – The trivial name, *helva*, is a Latin adjective that stems from *helvus* (= yellow). I refer to the predominant yellowish color of this beetle.

### 36. ***Cregya infula*** Opitz **n**. **sp**.

(Fig. 86, 203, 380, 426)

ZooBank : http://zoobank.org/324401C3-DBCF-4B74-88CC-3D78904323F3

**Holotype**. ♀. Corumba, Mato Grosso (Brazil) (MNHN).

***Diagnosis***. – Specimens of this species resemble superficially those of *C. corumba* **n**. **sp**., from which they differ by showing much longer brown lines near the sutural margin of the elytral disc.

## *Description*

***Size***. – Length 4.2 mm. – Width 1.5 mm.

***Form***. – As in Fig. 426.

***Color***. – Testaceous, except *cranium* and *antenna* brown, *pronotum* infuscated at middle of anterior margin and at base, each *elytron* with broad brown streak that extends to near *elytral apex*, latter brown.

***Head***. – *Funicular antennomeres* subquadrate, *capitulum* longer than funicle. – Capitular antennomeres 8 and 9 short triangular (Fig. 86), antennomere 10 obovate. – *Eye* as wide as width of frons (EW/FW 17/17).

***Thorax***. – *Pronotum* (Fig. 203) quadrate (PW/PL 47/47), side margin with slightly-developed tubercle, side of disc coarsely punctate, middle of disc shallowly punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 2/3rd (EL/EW 150/48).

***Abdomen***. – *Pygidium* scutiform.

***Distribution*** (Fig. 380). – Known from Brazil.

***Etymology***. – The trivial name, *infula*, is a Latin name that translates as "band"; with reference to the lengthened black band at the center of the elytra.

### 37. ***Cregya inornata*** Opitz **n**. **sp**.

(Fig. 75, 204, 307, 382, 427)

ZooBank : http://zoobank.org/2F1F6F27-5601-4815-ABC5-E3F10263484B

**Holotype**. ♂. MEXICO, Guerrero, 22 km N Taxco, 27-VII-1989, R. Turnbow (FSCA).

**Paratypes**. 13 specimens.

**México**

– **Estado de Guerrero**, 4.5 km SW Xochipala, 15-VII-1992, 1,400 m, thorn scrub, R. S. Anderson (CMNC,1);

– *idem*, 16-VII-1992, 1,400 m, thorn scrub, R. S. Anderson (WOPC, 1);

– 11 km W Xochipala, 17-IX-1989, E. Giesbert (FSCA, 1);

– Highway 95, 11 km N Rio Mexcala, 23-VII-1992, on *Acacia cochliacantha*, G. H. Nelson (WOPC, 1);

– 4 miles W Chilpancingo, 15-VII-1984, Carroll, Schaffner, Friedlander (TAMU, 1);

– **Estado de Puebla**, 14 miles N Acatlán, 12-VIII-1978, J. Shaffner, D. Plitt (TAMU, 1);

– 33.8 SE Acatlán, 2-VII-1992, B. K. Dozier (FSCA, 1; WFBM, 1);

– 45 miles Acatlán, 30-VII-1963, J. Doyen (EMEC, 1);

– **Estado de Morelos**, 5 miles S Cuernavaca, 9-VIII-1960, J. M. Mathieu (WOPC, 1);

– San Andres de la Cal, 4-IX-2013, beating/sweeping, 1498 m, J. Rifkind, R. Reyes, I. Villanueva, A. Hernández, J. Matinez, G. Cordero (JNRC, 1);

– 4.4 miles E Cuernavaca, 27-29-VII-1976, Peigler, Gruetzmacher, R. & M. Murray, Shaffner (TAMU, 1);

– 3 miles E Chazumba, 11-VII-1973, Mastro & Schaffner (WOPC, 1).

***Diagnosis***. – There are 5 species of *Cregya* whose body color is entirely testaceous: *C. inornata* **n**. **sp**., *C. andros* **n**. **sp**., *C. insignata* Pic, 1952, *C. withlocoochee*, and *C. palaga* **n**. **sp**. Male specimens of these species are readily distinguished by differences in the aedeagus. From this assemblage of species, only *C. inornata* **n**. **sp**. is known from México.

## *Description*

***Size***. – Length 5.0 mm – Width 2.0 mm.

***Form***. – As in Fig. 427.

***Color***. – Testaceous, except *antennal capitulum* brown.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards *capitulum*, 4th funicular antennomere slightly expanded, capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 75), antennomere 10 obovate – *Eye* broader than width of frons (EW/FW 28/22).

***Thorax***. – *Pronotum* (Fig. 204) quadrate (PW/PL 78/78), side margin with well-developed tubercle, disc uniformly punctate; elytra with 9 punctiferous striae, striae end at elytral distal 3/4th (EL/EW 225/70).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 307).

***Variations***. – Size: Length 4.2-6.5 mm; width 1.6-2.3 mm. – The brown region on the elytral disc varies in prominence.

***Natural History***. – The available specimens were collected during July, August, and September, on the boatspine acacia [*Acacia cochliacantha* Willd. (Fabaceae)]. Altitudinally, these beetles were collected from 1,400 to 1,498 m.

***Distribution*** (Fig. 382). – Known from México.

***Etymology***. – The trivial name, *inornata*, is a Latin adjective that stems from *inornatus* (= unadorned). I refer to the unicolorous condition of the body of these beetles.

### 38. ***Cregya insularis*** (Gorham, 1898)

(Fig. 87, 205, 380, 428)

*Pelonium insulare* Gorham, 1898: 322.

**Holotype**. ♀. Mount Gay Est. (Leeward side) Grenada, W. I., H. H. Smith, 266 (BMNH).

**Paratypes**. One specimen. – **Saint Vincent**, West Indies, Leeward side, H. H. Smith (MNHN). Corporaal 1950a: 281.

***Diagnosis***. – These beetles show a reddish forebody, the elytral disc is mostly dark brown, and the sutural margin is broadly testaceous. This combination of characteristics will distinguish the members of this species from congeners.

## *Redescription*

***Size***. – Length 5.0 mm – Width 1.3 mm.

***Form***. – As in Fig. 428.

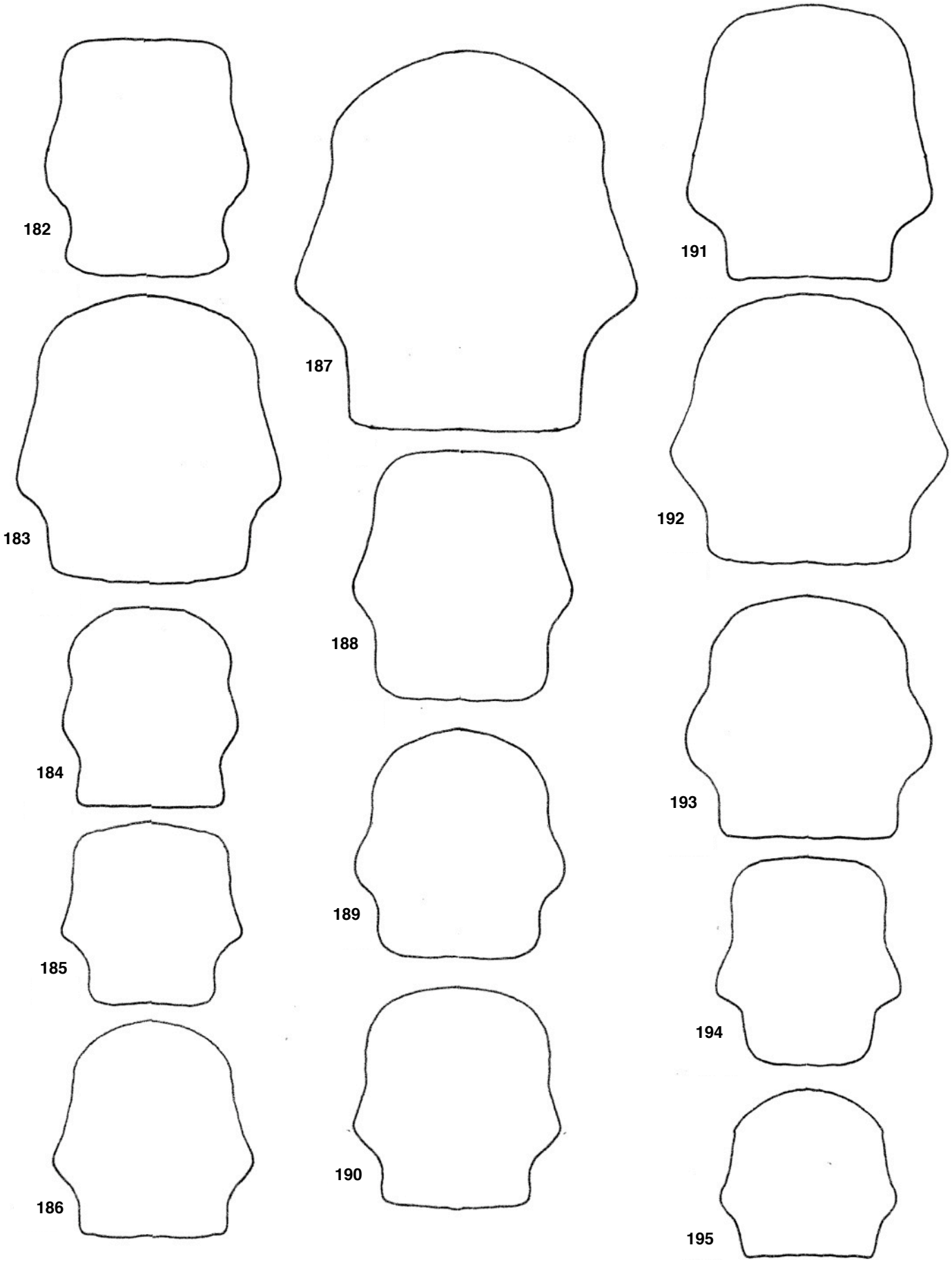



**Fig**. **182-195**. - Pronota. **(182)** *Cregya insignata* Pic, 1952. **(183)** *C. lita* **n**. **sp**. **(184)** *C. lunulata* (Pic, 1940). **(185)** *C. paragramma* **n**. **sp**. **(186)** *C. america* **n**. **sp**. **(187)** *C. seabrai* Peracchi, 1962. **(188)** *C. stricta* **n**. **sp**. **(189)** *C. abdita* Wolcott, 1927. **(190)** *C. alicula* **n**. **sp**. **(191)** *C. andersoni* **n**. **sp**. **(192)** *C. aragua* **n**. **sp**. **(193)** *C. atracapitis* **n**. **sp**. **(194)** *C. bilineicolle* (Chevrolat, 1874) **nov**. **stat**. **(195)** *C. casselorum* (Opitz, 2014).

***Color***. – *Cranium*, *pterothorax*, and *abdomen* black. – *Antenna* brown, except *scape* yellow. – *Prothorax* and *legs* yellow. – *Elytra* outlines in yellow, disc brown.

***Head***. – *Funicular antennomeres* subquadrate, funicle shorter than length of *capitulum*, capitular antennomeres 8 and 9 triangular (Fig. 87), antennomere 10 obovate. – *Eyes* narrower than width of frons (EW/FW 18/30).

***Thorax***. – *Pronotum* (Fig. 205) slightly transverse (PW/PL 75/70), side margin with well-developed tubercle, disc coarsely punctate at sides, shallowly punctate at middle. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 210/55).

***Abdomen***. – *Pygidium* scutiform.

***Variations***. – The specimen from Bolivia has the prothoracic femur infuscated distally, and the prothoracic and mesothoracic tibiae, and all tarsi, are dark brown.

***Distribution*** (Fig. 380). – In addition to the two types, I examined one specimen:

**Bolivia**

– **Departamento de Cochabamba**, Cochabamba, Germain.

Specimens are deposited in BMNH, MNHN, and WOPC.

### 39. *Cregya karafucosa* Opitz **n. sp.**

(Fig. 85, 206, 308, 388, 429)

ZooBank : http://zoobank.org/AC397855-B6A0-4F77-B42D-D34BBF353F90

**Holotype**. ♂. Est. Cacao, 1000-1400 m, Lado suroeste del Volcan Cacao, prov. Guan., COSTA RICA, II curso Parataxon, Jun 1990 (FSCA).

**Paratypes**. 11 specimens.

**Costa Rica**

– **Provincia de Puntarenas**, San Luis, Monteverde, 12-13-V-1996, 3,900 feet, E. Giesbert (WOPC, 1);
– *idem*, 11-14-IV-1981, E. Giesbert (WOPC, 1);
– *idem*, 23-27-V-1987, E. Giesbert (FSCA, 3);
– *idem*, Hotel Sapo Dorado, 18-19-V-2003, J. & A. Rifkind, F. Gum (JNRC, 1);
– *idem*, 4-6-VI-1980, J. E. Wappes (ACMT, 1);
– *idem*, 3-7-V-1985, F. T. Hovore (WFBM, 1);
– *idem*, 21-26-V-1979, J. M. & B. A. Campbell (CNCI, 1);
– *idem*, 7-V-1985, black light, A. J. Gilbert (CSCA, 1);
– Monteverde, 26-V-3-VI-1984, E. Riley, D. Rider & D. LeDoux (TAMU, 1).

***Diagnosis***. – Specimens from Costa Rica belong to this species if they show a red forebody and dark brown elytral disc whose margins are testaceous.

#### *Description*

***Size***. – Length 3.7 mm. – Width 1.2 mm.

***Form***. – As in Fig. 429.

***Color***. – *Forebody* red. – *Antenna* brown. – *Legs* mostly yellow, *prothoracic femur* infuscated distally, *tibiae* infuscated basally. – *Pterothorax* and *abdomen* dark brown. – *Elytra* bicolorous, yellow disc outlined in dark brown.

***Head***. – *Funicular antennomeres* subquadrate, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular (Fig. 85), antennomere 10 obovate. – *Eye* narrower than frons (EW/FW 20/25).

***Thorax***. – *Pronotum* (Fig. 206) oblong (PW/PL 60/65), side margin with well-developed tubercle, disc punctures widely separated. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4th (EL/EW 180/45).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 308).

***Variations***. – Size: Length 3.7-6.0 mm; width 1.2-2.0 mm. – Other than body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected during April through June, at elevations that range from 1,000 to 1,400 m.

***Distribution*** (Fig. 388). – Known from Costa Rica.

***Etymology***. – The trivial name, *karafucosa*, is a compound name derived from the Greek *kara* (= head) and the Latin *fuco* (= rouge); with reference to the red color of the forebody.

### 40. *Cregya lenticula* Opitz **n. sp.**

(Fig. 88, 207, 309, 382, 430)

ZooBank : http://zoobank.org/C7F0FCF8-09A6-4C8F-B482-B1A6FB9A1E8F

**Holotype**. ♂. Cordoba, Ver., Mexico, V-15-1943, J. & D. Palister (AMNH).

**Paratypes**. 3 specimens. – **México**, **Estado de Veracruz**, Córdova, 15-V-1943, J. & D. Palister (AMNH, 2; WOPC, 1).

***Diagnosis***. – The four spots on the pronotal disc will distinguish the members of this species from congeners.

#### *Description*

***Size***. – Length 6.0 mm. – Width 2.2 mm.

***Form***. – As in Fig. 430.

***Color***. – *Forebody* mostly testaceous, *cranium* with infuscations near *eye*, *pronotum* with 4 black punctiform maculae. – *Antenna* brown. – *Prothoracic legs* bicolorous, *femora* mostly testaceous, distal region infuscated, *mesothoracic* and *metathoracic legs* unicolorous, testaceous. – *Pterothorax* testaceous; elytra bicolorous, outline testaceous, disc broadly brown. – *Abdomen* brown.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 88), antennomere 10 obovate. – *Eye* narrower than width of frons (EW/FW 25/30).

***Thorax***. – *Pronotum* (Fig. 207) quadrate (PW/PL 85/85), side margin with well-developed tubercle, disc uniformly punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 250/70).

***Abdomen***. – Phallic post-apical flap long, anterior phallic plate long, posterior phallic plate very broad (Fig. 309).

***Variations***. – Length 4.5-6.0 mm; width 1.8-2.2 mm. The brown region on the elytral disc varies in prominence.

***Natural History***. – The available specimens were collected during May.

***Distribution*** (Fig. 382). – Known from México.

***Etymology***. – The trivial name, *lenticula*, is a Latin noun (= freckle); with regard to the spots on the pronotal disc.

### 41. *Cregya linea* Opitz **n. sp.**

(Fig. 91, 208, 310, 380, 431)

ZooBank : http://zoobank.org/C4DA968A-85C3-461B-9FE5-35224050474F

**Holotype**. ♂. PERU, Madre de Dios, Rio Tambopata Res., 30 km (air), sw Pto. Maldonado, 290 m, 12°50'S-069°20'W. A second label reads: Smithsonian Institution Canopy Fogging Project, T. L. Erwin, et al, colls, 14Sept84 (01/01/022) (USNM). A third label reads: FOGGING 0022005.

**Paratypes**. One specimen.

– **Peru**, **Provincia de Tambopata**, Madre de Dios, Rio Tambopata Res., 30 km (air), sw Pto. Maldonado, 290 m, 12°50'S 069°20'W, Smithsonian Institution Canopy Fogging Project, 14-IX-1984, T. L. Erwin (USNM, 1).

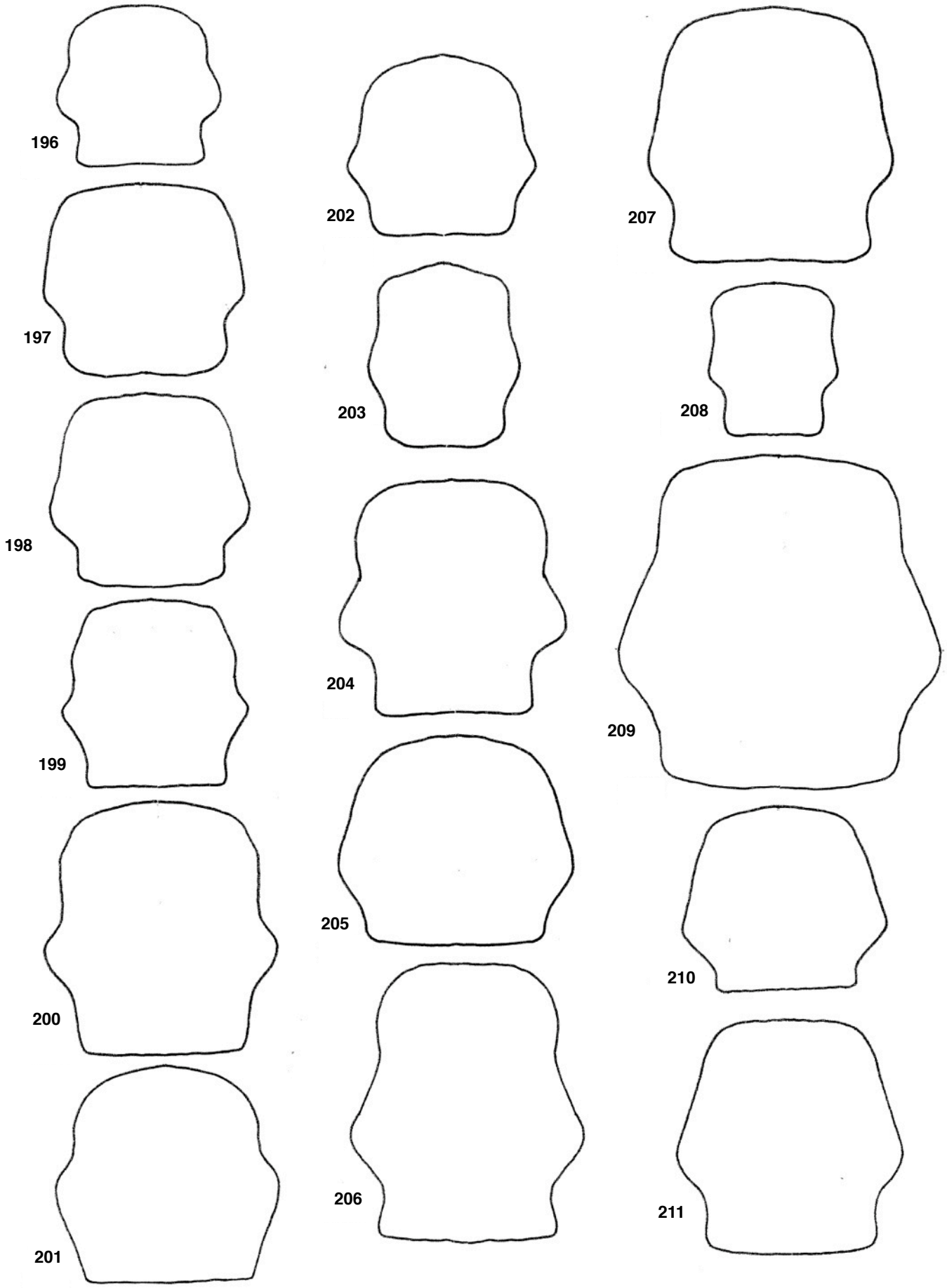



**Fig**. **196-211**. - Pronota. **(196)** *Cregya casusa* **n**. **sp**. **(197)** *C. catarina* (Opitz, 2014). **(198)** *C. contaminata* (Klug, 1842). **(199)** *C. corumba* **n**. **sp**. **(200)** *C. cruzvera* **n**. **sp**. **(201)** *C. ekteina* **n**. **sp**. **(202)** *C. helva* **n**. **sp**. **(203)** *C. infula* **n**. **sp**. **(204)** *C. inornata* **n**. **sp**. **(205)** *C. insularis* (Gorham, 1898). **(206)** *C. karafucosa* **n**. **sp**. **(207)** *C. lenticula* **n**. **sp**. **(208)** *C. linea* **n**. **sp**. **(209)** *C. lineolata* (Gorham, 1883). **(210)** *C. linomolina* **n**. **sp**. **(211)** C. *marysearsi* **n**. **sp**.

***Diagnosis***. – In these specimens, the pronotal collar is black, the elytral disc is mostly brown and outlined by a broad testaceous line, and the elytral apex is brown. These characteristics are well illustrated in Fig. 431, and serve to distinguish the members of this species from congeners.

### *Description*

***Size***. – Length 3.5 mm. – Width 1.0 mm.

***Form***. – As in Fig. 431.

***Color***. – Testaceous, except *cranium* and *antenna* brown, *pronotum* infuscated at middle of anterior margin and at base, each *elytron* with broad brown streak that extends to near *elytral apex*, latter brown, elytral streak proximal to sutural margin.

***Head***. – *Funicular antennomeres* subquadrate, *capitulum* longer than funicle. – Capitular antennomeres 8 and 9 short triangular (Fig. 91), antennomere 10 obovate. – *Eye* as wide as width of frons (EW/FW 18/18).

***Thorax***. – *Pronotum* (Fig. 208) quadrate (PW/PL 50/50), pronotal disc shallowly punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral posterior 2/3rd (EL/EW 120/40).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate long, posterior phallic plate very broad (Fig. 310).

***Natural History***. – The available specimens were collected in September, at 290 m, by tree canopy fogging.

***Distribution*** (Fig. 380). – Known from Peru.

***Etymology***. – The trivial name, *linea*, is a Latin name that translates as (= line); with reference to the broad brown band at the center of the elytra.

## 42. ***Cregya lineolata*** (Gorham, 1883)

(Fig. 89, 209, 311, 382, 432)

*Pelonium lineolatum* Gorham, 1883: 191.

**Lectotype**. Gender ♂. Capetillo, Guatemala. Here designated. (BMNH). Corporaal 1950a: 282.

Five paralectotypes have not been located. Gorham indicated that there were 6 specimens available when he made his description, but he did not select one specimen as the name bearer of this species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

***Diagnosis***. – Members of this species resemble superficially those of *C. karafucosa* **n**. **sp**., from which they differ by showing brown markings on the pronotal disc.

### *Redescription*

***Size***. – Length 7.0 mm. – Width 2.0 mm.

***Form***. – As in Fig. 432.

***Color***. – *Cranium* castaneous, except lower frons infuscated. – *Antenna* brown. – *Pronotum* bicolorous, outline and midline narrowly testaceous, remainder of disc black. – *Pterothorax* and *abdomen* brown. – *Legs* bicolorous, *prothoracic femur* yellow in basal half, brown in remainder, *prothoracic tibia* brown, *mesothoracic* and *metathoracic legs* mostly yellow, *tibiae* infuscated distally, *tarsi* brown. – *Elytral disc* brown, *sutural margin* slightly lighter.

***Head***. – Funicle shorter than length of *capitulum*, capitular antennomeres 8 and 9 triangular (Fig. 89), antennomere 10 obovate. – *Eyes* as wide as frons (EW/FW 28/28).

***Thorax***. – *Pronotum* (Fig. 209) quadrate (PW/PL 95/95), disc coarsely punctate. – *Elytra* with 10 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 280/80).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate very long, posterior phallic plate very broad, infuscate in distal region, phallic apex very long (Fig. 311).

***Variations***. – Size: Length 4.5-7.5 mm; width 1.3-2.4 mm. – Except for body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected throughout the year at altitudes ranging from 970 to 1,100 m. One specimen was collected from a tree of *Virola koschnyi* Warb (Myristicaceae).

***Distribution*** (Fig. 382). – In addition to the lectotype, I examined 9 specimens from:

**México**

– **Estado de Chiapas**, Laguna Belgica, 16 km NW Ocotzocoautla, 7-VI-1990, 970 m, H. & A. Howden.

**Honduras**

– **Departamento de Intibucá**, 14 km E La Esperanza, 2-XII-1995, R. Turnbow;

– **Departamento de El Paraiso**, Agua Fria, Danlí, 20-II-1988, R. D. Cave.

**Costa Rica**

– **Provincia de San José**, San José, 24-XI-1924, F. Nevermann;

– Estación Bijagual, Reserva de Biologia Carara, ?-?-1989, R. Zuniga;

– **Provincia de Alajuela**, Santa Clara, Las Mercedes, 17-XI-1921, F. Nevermann;

– **Provincia de Heredia**, Estación de Biologia La Selva, 10°26'N-84°01'W, 3-X-1994, *Virola koschnyi*, collector not noted;

– **Provincia de Puntarenas**, Monteverde, 3-8-I-1989, F. Hovore;

– San Luis Ecolodge, San Luis, 27-VI-1997, 1,100 m, beating horizontal tangle of vegetation, J. Rifkind, H. Lezama.

Specimens are deposited in CMNC, RHTC, JNRC, USNM, and WOPC.

## 43. ***Cregya linomolina*** Opitz **n**. **sp**.

(Fig. 90, 210, 312, 380, 433)

ZooBank : http://zoobank.org/C26FAE98-A870-491A-A427-CB6503CA718F

**Holotype**. ♂. BOLIVIA, Santa Cruz Dist., Potrerillos del Guenda, Preserva Natural, 17°40'S-63°27'W, 370m, 17-22-OCT-2007, J. & F. Romero, ex. MV/BL (FSCA).

**Paratypes**. 6 specimens.

**Bolivia**

– **Departamento de Santa Cruz**, Potreillos del Guenda, Preserva Natural, 17°40'S-63°27'W, 370m, 17-22-OCT-2007, MV/BL, J. & F. Romero (WOPC, 1);

– *idem*, 17-22-OCT-2007, MV/BL, J. Romero (WOPC, 3);

– *idem*, 40 km NW Santa Cruz, 17°40'S-63°27'W, 3-X-2007, light, R. Morris (RFMC, 1);

– **Departamento de Cochabamba**, Cochabamba, Germain (MNHN, 1: WOPC, 1).

***Diagnosis***. – The 2 black maculae on the pronotal collar, as shown in Fig 433, will distinguish the members of this species from congeners.

### *Description*

***Size***. – Length 3.8 mm. – Width 1.2 mm.

***Form***. – As in Fig. 433.

***Color***. – *Cranium* black, *antenna* bicolorous, mostly dark brown, capitular antennomeres partially or entirely yellow. – *Prothorax* and *mesothorax* yellow. – *Metathorax* brown. – *Elytra* dark brown. – *Legs* bicolorous, *femora* yellow, *prothoracic tibia* brown, *mesothoracic* and *metathoracic tibiae* yellow, *tarsi* brown.

***Head***. – *Funicular antennomeres* subquadrate, progressively shorter towards capitulum, 4th funicular antennomere slightly expanded,

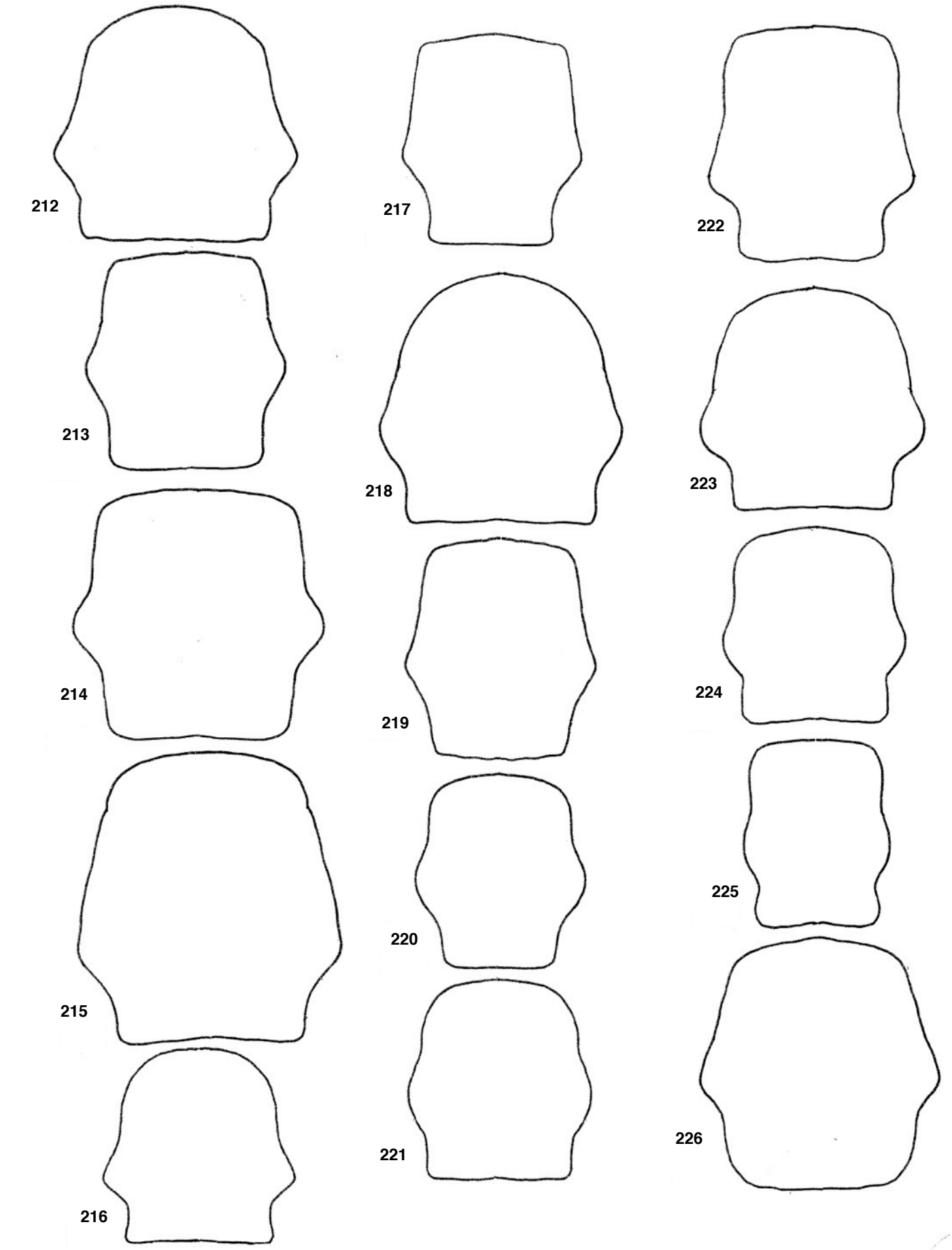



**Fig**. **212-226**. - Pronota. **(212)** *Cregya mexcala* **n**. **sp**. **(213)** *C. mixta* LeConte, 1865. **(214)** *C. mocagua* **n**. **sp**. **(215)** *C. oculata* (Say, 1835). **(216)** *C. pannusa* **n**. **sp**. **(217)** *C. palaga* **n**. **sp**. **(218)** *C. pallida* **n**. **sp**. **(219)** *C. pereira* **n**. **sp**. **(220)** *C. pictila* **n**. **sp**. **(221)** *C. preclara* **n**. **sp**. **(222)** *C. quadrinotata* (Chevrolat, 1874) **nov**. **stat**. **(223)** *C. quadrisignata* (Spinola, 1844). **(224)** *C. rifkindi* **n**. **sp**. **(225)** *C. rileyi* **n**. **sp**. **(226)** *C. robusta* **n**. **sp**.

*capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 90), antennomere 10 obovate. – *Eyes* small, narrower than width of frons (EW/FW 17/25).

***Thorax***. – *Pronotum* (Fig. 210) quadrate (PW/PL 60/60), side margin with well-developed tubercle, disc sides shallowly punctate, middle of disc subglabrous. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4th, punctures diminish in posterior region near sutural margin (EL/EW 160/55).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate very long, posterior phallic plate very broad (Fig. 312).

***Variations***. – The available specimens are quite homogeneous.

***Natural History***. – The available specimens were collected during October by fogging tree canopy. One specimen was collected at light.

***Distribution*** (Fig. 380). – This species is known from Bolivia.

***Etymology***. – The trivial name, *linomolina*, is a Latin compound name that stems from *lino* (= smear) and *molinus* (= mark); with reference to the coloration of the pronotal disc.

### 44. *Cregya marysearsi* Opitz **n. sp.**

(Fig. 1, 92, 211, 313, 380)

ZooBank : http://zoobank.org/9570FC37-5C91-468D-B6CA-9AA3000E28C6

**Holotype**. ♀. ECUADOR, PICHINCHA, 17 km E STO. DOMINGO, DEC 23-28 1998, E. GIESBERT, COLL. (FSCA).

**Paratypes**. 3 specimens.

**Ecuador**

– **Provincia de Pichincha**, 17 km E Santo Domingo, 23-28-XII-1998, E. Giesbert (WOPC, 1);

– 15 km E Santo Domingo, Tinalandia, 26-II-1981, 700 m, H. F. Howden (CMNC, 1).

**Colombia**

– **Departamento de Cundinamarca**, Puerto Salgar, 31-VII-1938, collector not noted (WOPC, 1).

***Diagnosis***. – *C. marysearsi* **n. sp**. specimens resemble superficially those of *C. abacula* **n. sp**., but specimens of the former species have the last antennomere yellow, whereas those of *C. abacula* **n. sp**. have the last antennomere black.

## *Description*

***Size***. – Length 5.2 mm. – Width 1.7 mm.

***Form***. – As in Fig. 1.

***Color***. – *Cranium*, anterior margin of *pronotum* and *metathorax* black. – *Antenna* brown. – *Prothorax* mostly yellow. – *Elytra* bicolorous, basal 1/4th and subapical 1/4th black, middle of disc and elytral apical region yellow. – *Legs* bicolorous, *prothoracic femur* mostly yellow, infuscated distally, *mesothoracic* and *metathoracic femora* yellow. – *Prothoracic* and *metathoracic tibiae* brown, *metathoracic tibia* yellow, *tarsi* light brown. – *Abdomen* brown.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 92), antennomere 10 obovate. – Eye narrower than width of frons (EW/FW 20/30).

***Thorax***. – *Pronotum* (Fig. 211) quadrate (PW/PL 80/80), side margin with well-developed tubercle, disc sides shallowly punctate, middle of disc subglabrous. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4th, punctures diminish in posterior region near sutural margin (EL/EW 115/60).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 313).

***Variations***. – Size: Length 4.5-5.5 mm; width 1.8-2.0 mm. – The antennal capitulum may be entirely black and the frons may show a testaceous punctiform macula.

***Natural History***. – The available specimens were collected during July and December. One specimen was collected from Ecuador during February, at 700 m.

***Distribution*** (Fig. 380). – Known from Colombia and Ecuador.

***Etymology***. – The trivial name, *marysearsi*, is a patronymic. It honors my informally adopted sister, Mary Sears, who has been immensely kind in finding for me historical literature in the Ernst Mayr Library, MCZ.

### 45. *Cregya mexcala* Opitz **n. sp.**

(Fig. 93, 212, 314, 382, 434)

ZooBank : http://zoobank.org/513002C6-A253-49FF-B43A-BC6BE8CF2EF1

**Holotype**. ♂. MEX., GUERRERO, Hwy 95, 6 mi S Rio Mexcala, VIII-6-1965. A second label reads: Yellow blossomed *Acacia*. A third label reads: Collector G. H. Nelson (FSCA).

**Paratypes**. 92 specimens.

**México**

– **Estado de Guerrero**, Highway 95, 9.6 miles S Rio Mexcala, 5-VIII-1965, on *Acacia*, G. H. Nelson (WOPC, 1);

– *idem,* 6-VIII-1965, on yellow blossomed *Acacia*, G. H. Nelson (FSCA, 2);

– Highway 95, 3.6 km S Zumpango del Rio, 23-VII-1992, on *Acacia cochliacantha*, G. H. Nelson (WOPC, 1);

– *idem,* 24-VII-1992, on *Acacia cochliacantha*, G. H. Nelson (FSCA, 2);

– Mexcala, 29-VI-1951, P. D. Hurd (EMEC, 2; WOPC, 1);

– 51 km NW Ixtapa, 18-VII-1985, R. Turnbow (RHTC, 2);

– 43.7 km NW Ixtapa, 20-VI-1985, mv + bl, R. Turnbow (RHTC, 1);

– 59.4 km N Chilpancingo, 26, VII-1987, R. H. Turnbow (WOPC, 2);

– 4 miles W Chilpancingo, 15-VII-1984, 4,000 feet, J. B. Woolley;

– 2-4 miles N, Chilpancingo, 24-VI-1983, B. K. Dozier (FSCA, 1);

– Highway 95, 6 km N Zumpango del Rio, 16-VII-1992, 960 m, R. L. Westcott (WFBM, 2; WOPC, 3);

– 30 miles S Iguala, 5-VIII-1954, 1,450 feet, J. G. Chilicott (WOPC, 1);

– 3km N Mezcala, 16-VII-1992, 565 m, C. Bellamy (TAMU, 5);

– **Estado de Jalisco**, 16 km S Chamela Station along Cuitzmala River, 19°24.910N 104°09.375W, 8-VII-2003, 50 feet, A. J. Gilbert (WOPC, 1);

– 17.6 km N Chamela, 16-VII-1987, R. Turnbow (RHTC, 4);

– 27.4 km S Chamela, 17-VII-1987, R. H. Turnbow (WOPC, 1);

– 8.6 km N Chamela, 18-VII-1987, mv + bl, R. H. Turnbow (WOPC, 1);

– Estación de la Biologica UNAM, 17-VII-1987, mv + bl, R. Turnbow (WOPC, 1);

– 23.8 km S Chamela, 19-VII-1987, R. H. Turnbow (RHTC, 1);

– Estación de la Biologica Chamela, 5-VIII-1994, swept from *Leucaena lanceolate,* R. L. Westcott (WFBM, 2);

– *idem,*26-VII-1994, R. L. Westcott (WOPC, 1);

– Careyes, Playa Teopa, 6-VII-1991, beating *Acacia* in thorn forest, J. Rifkind, P. Gum (JNRC, 2);

– *idem,* Hotel Costa Careyes, 5-6-VI-1991, beating tropical deciduous forest, J. & E. Beierl (WOPC, 1);

– Highway 200, 5.2 km S Tequesquite, 8-VII-1993, tropical deciduous forest, J. & E. Beierl (JNRC, 1);

– Municipio La Huerta, Highway 200 at Rio San Nicolas, 8-VII-1993, beating riparian woodland, J. & E. Beierl (JNRC, 1);

– Highway 200 at El Tuito, 8-VII-1993, 650 m, beating in tropical deciduous forest, J. & E. Beierl (JNRC, 1);

– Highway 200, 8 km S J. M. Pino Suares, 8-VII-1993, beating riparian woodland, J. & E. Beierl (WOPC, 1);

– Highway 200, 1.2 km S La Cumbre, 28-VII-2011, Skillman & Turnbow (FWSC, 1);

– Playa Perula, 30-VII-2011, beating mangrove, Skillman & Turnbow (WOPC, 1);

– **Estado de Nayarit**, Punta Mita, 11-VI-1983, beating *Prosopis*, W. F. Barr (WFBM, 1);

– *idem,* 26-VII-1990, W. F. Barr (WOPC, 1);

– Playa Piedra Blanca, vicinity of Punta de Mita, 22-VII-1993, mv & bl in tropical deciduous forest, Rifkind & Bellamy (WOPC, 1);

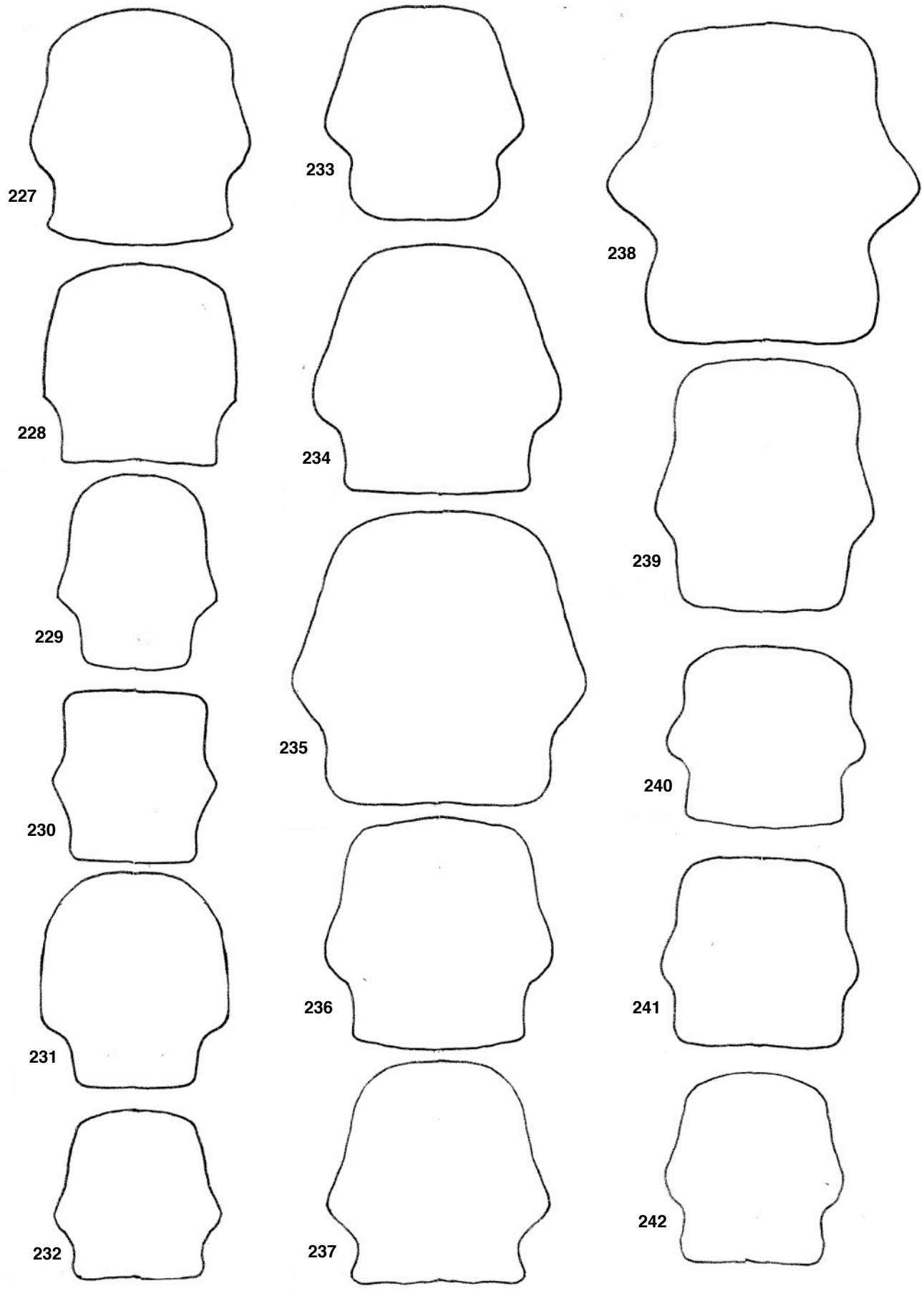



**Fig**. **227-242**. - Pronota. **(227)** *Cregya sina* **n**. **sp**. **(228)** *C. tessara* **n**. **sp**. **(229)** *C. turrialba* **n**. **sp**. **(230)** *C. urica* **n**. **sp**. **(231)** *C. versicula* **n**. **sp**. **(232)** *C. yojoa* **n**. **sp**. **(233)** *C. vitticeps* (Blanchard, 1844). **(234)** *C. vittipennis* (Schenkling, 1906). **(235)** *C. withlacoochee* Rifkind, 2012. **(236)** *C. zacapa* **n**. **sp**. **(237)** *C. agnosta* **n**. **sp**. **(238)** *C. castanea* **n**. **sp**. **(239)** *C. apanthesa* **n**. **sp**. **(240)** *C. caraca* **n**. **sp**. **(241)** *C. chevrolati* Corporaal, 1950. **(242)** C. *variegata* **n**. **sp**.

– 2 km E Punta de Mita, 22-VII-1993, beating *Acacia*, Rifkind, Bellamy, Reifschneider (WOPC, 3);

– 2 km E Punta de Mita, 30-VII-1993, C. L. Bellamy (WOPC, 1);

– 12.3 miles W Compostela, 7-VII-1983, F. G. Andrews;

– 15 miles SW Compostela, 25-VII-1984, B. K. Dozier (FSCA, 1);

– Bucerias, 14/15-X-1988, beating fallen trees, F. T. Hovore (WOPC, 1);

– **Estado de Michoacán**, 13.1 miles S Nueva Italia, 9-VII-1985, Wooley & Zolnerowich (TAMU, 1);

– 18-20 miles S Capirilo, 21-22-VII-1984, B. K. Dozier (WOPC, 2);

– 13 km WNW Zicuirán, kilometer 160, Highway to Cuatro Caminos, N18°55.874'-W102°03.200', beating, 250 m, 23-VII-2003, C. L. Bellamy (CSCA, 1);

– 12.5 km WNW Zicuirán, Highway 120, N18°55'.50"-W102°03'.10", sweeping & beating, 745 feet, 23-VII-2003, C. L. Bellamy (CSCA, 1; WOPC, 1);

– Kilometer 167.5, Highway 37, 32 km S Cuatro Caminos, N18°47.643'-W102°04.782', 24/25-VII-2003, R. L. Westcott (WFBM, 1; WOPC, 1);

– 13 miles W Cuatro Caminos, 12-VII-1972, G. H. Nelson (FSCA, 1);

– **Estado de Colima**, San Antonio, N of Comala, 21-VII-1995, J. Rifkind, A. Reifschneider (JNRC, 1; WOPC, 1);

– Highway 120, 18 km W Tepalcatepec, 13-VII-2006, slash pile, *Acacia*, weeds, Skillman & Hildebrandt (FWSC, 1);

– **Estado de Sinaloa**, Mazatlán, 22-VII-1954, M. Cazier, W. Gerisch, Bradts (AMNH, 1);

– 5 miles N Mazatlán, 28-VII-1973, E. Giesbert (FSCA, 1);

– 5 miles N Mazatlán, 19-VII-1972, G. H. Nelson (WOPC, 1);

– Mazatlán, Northern beaches area, 1-XII-1989, Rifkind, Gum, Williams (JNRC, 1);

– **Estado de Puebla**, Puerto del Gato, 12 km NM Tehuitzingo, 4-VII-1992, R. L. Westcott (JNRC, 1; WOPC, 1);

– **Estado de Morelos**, Vicinity Contlalco above Rio Amacizac, N18˚.39-W 99˚.27, 16-VII-1999, beating, 1,050 m, C. L. Bellamy (WOPC, 1);

– Sierra de Huaultla Tilzapotla, El Zapote road, N18.29-W 99.19, 17-VII-1999, C. L. Bellamy (JNRC, 1; WOPC, 1);

– Sierra de Huaultla, vicinity Estación Biologica El Limón, 6-IX-2013, J. Rifkind, V. Toledo, R. Reyes, I. Villanueva, A. Hernandez (JNRC, 1);

– Sierra de Huaultla Reserve, 18°28'14"N-99°00'27"W, 19-VI-1997, 1,050 m, R. L. Westcott (WFBM, 3);

– 2.5 km N, 4 km W Huaultla, Estación Ceamish,18˚.28' N-99˚.02' W, 10-VII-1996, R. L. Westcott (JNRC, 1; WFBM, 2; WOPC, 2);

– 4.2 km S Quilamula (5.8 km N Huaultla), 18˚.27'52"N-99˚.00'43"W, 24-VI-2000, R. L. Westcott (WFBM, 1);

– **Estado de San Luis Potosi**, Tamazunchale, 21-VI-1963, D. Bixler (WOPC, 1);

– **Estado de Oaxaca**, 10.5 km WSW Salina Cruz, 14-VII-1992, C. Bellamy (TAMU, 1).

***Diagnosis***. – Specimens from México belong to this species if they show a red forebody and the elytra are concolorous black or dark brown.

### *Description*

***Size***. – Length 3.3 mm. – Width 1.3 mm.

***Form***. – As in Fig. 434.

***Color***. – *Forebody*, *legs*, *pterothorax* reddish-brown. – *Antenna* bicolored, *antennal fundus* testaceous, *capitulum* brown. – *Abdomen* brown. – *Elytra* dark brown.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 93), antennomere 10 obovate. – *Eye* as wide as frons (EW/FW 20/20).

***Thorax***. – *Pronotum* (Fig. 212) quadrate (PW/PL 65/65), side margin with well-developed tubercle, disc uniformly punctate. – Elytral asetiferous punctations striate to subapex (EL/EW 175/55).

***Abdomen***. – Phallic post-apical flap long, anterior phallic plate short, posterior phallic plate very broad (Fig. 314).

***Variations***. – Size: Length 3.2-4.7 mm; width 1.0-1.5 mm. Other than body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected during June, July, and August; some on yellow blossomed *Acacia*, one on *Acacia cochliacantha* Willd. (Fabaceae), and one by sweeping *Leuanena lanceolate* S. Watson (Fabaceae). Most specimens were captured by beating/sweeping tree foliage and branches. Altitudinally, specimens were taken between 15 and 1,220 m.

***Distribution*** (Fig. 382). – Known from México.

***Etymology***. – The trivial name, *mexcala,* constitutes a noun in apposition and refers to the type locality.

## 46. ***Cregya mixta*** LeConte, 1865
(Fig. 22, 23, 104, 213, 315, 375, 435)

*Cregya mixta* LeConte, 1865: 98.

**Lectotype**. ♀. Here designated. USA: There is a pink disk attached to the pin and the description indicates "Maryland and Kentucky". MCZC type # 3577 (MCZC).

Gorham 1877: 416. Corporaal 1950a: 282. Knull 1951: 309. Two specimens were available to LeConte when he made his description of this species. I have seen only the lectotype. Leconte did not tag one of these to be the name bearer, therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

***Diagnosis***. – Members of this North American species are predominantly testaceous, but their pronotal and elytral discs are well pigmented as shown in Fig. 435.

### *Redescription*

***Size***. – Length 4.3 mm. – Width 1.2 mm.

***Form***. – As in Fig. 435.

***Color***. – Mouthparts yellow, except *mandible* brown. – *Antennal fundus* yellow, *capitulum* light brown. – *Cranium* brown, frons darkened. – *Prothorax* brown, sides of *pronotum* darkened. – *Pterothorax* and *legs* yellow, prothoracic legs slightly infuscated. – *Elytral disc* with 2 brown maculae, one extended from humeral angle, other positioned behind elytral middle.

***Head***. – **Funicle** about as long as length of *capitulum*, capitular antennomeres 8 and 9 triangular (Fig. 104), antennomere 10 obovate. – *Eyes* narrower than width of frons (EW/FW 15/30).

***Thorax***. – *Pronotum* (Fig. 213) quadrate (PW/PL 65/65), side margin with well-developed tubercle, disc coarsely punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 2/3rd (EL/EW 190/55).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad, infuscate in distal region (Fig. 315).

***Variations***. – Size: Length 3.5-4.5 mm; width 1.2-1.5 mm. A narrow brown streak may connect the elytral humeral and preapical brown maculae.

***Natural History***. – Specimens were collected from May through July; one on vegetation of the common hackberry [*Celtis occidentalis* Linnaeus (Cannabaceae)], another on the foliage of a species of elm [*Ulmus* Linnaeus (Ulmaceae)]. Josef N. Knull reports (Knull, 1951: 311) specimens of this species are, "recorded as a predator on powder post beetles infesting ash, hickory, persimmon, white oak, and *Xylobiops* Casey (Bostrichidae) and other borers in dry, seasoned wood." Members of this species have also been found abundant in *Lyctus* Fabricius (Bostrichidae) infestations.

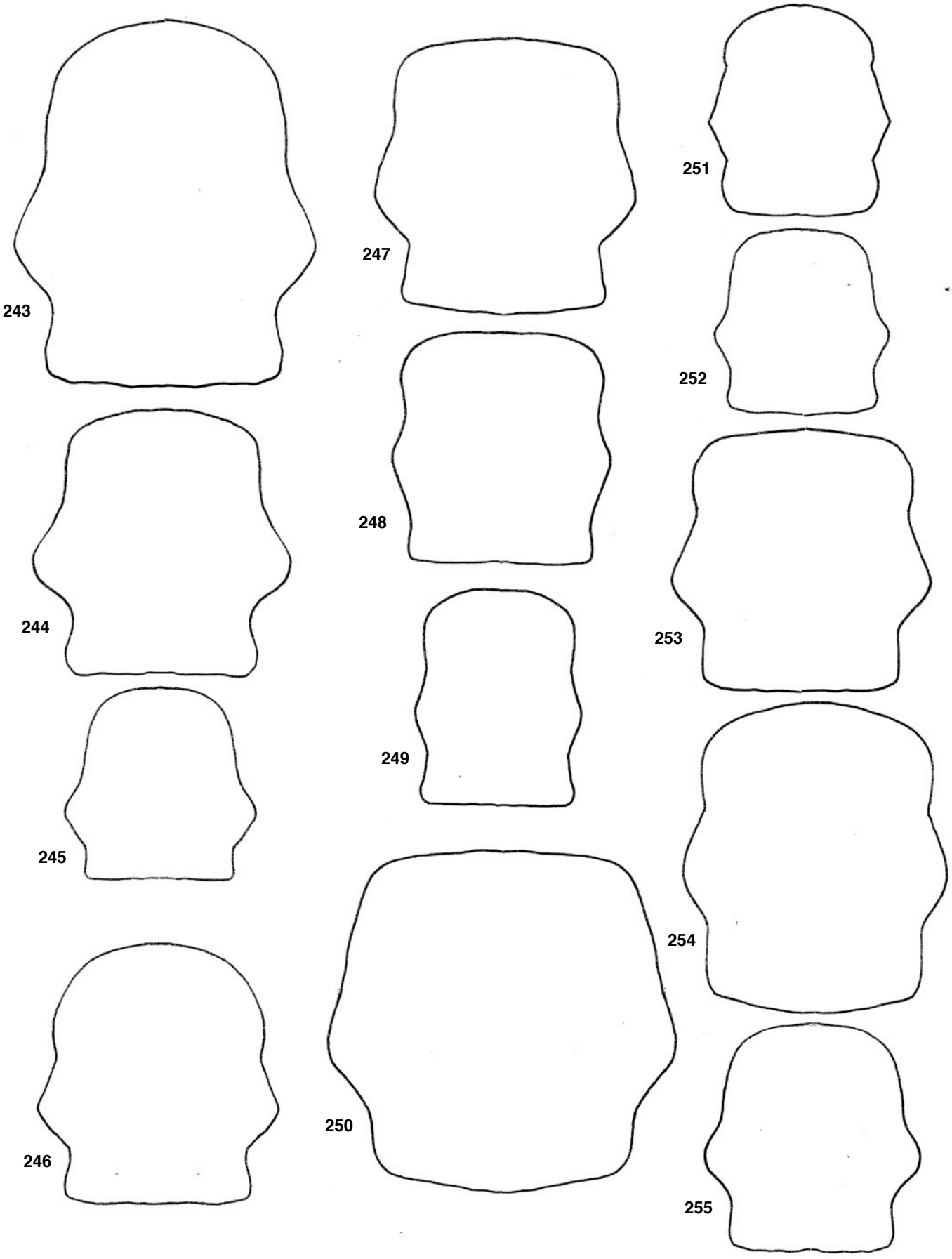



**Fig. 243-255**. - Pronota. **(243)** *Cregya ametra* **n. sp. (244)** *C. assumenta* **n. sp. (245)** *C. cariari* **n. sp. (246)** *C. caruaru* **n. sp. (247)** *C. fimbriolata* (Chevrolat, 1843). **(248)** *C. goias* **n. sp. (249)** *C. gutta* **n. sp. (250)** *C. guyanensis* (Chevrolat, 1876). **(251)** *C. hamatilis* **n. sp. (252)** *C. kreagris* **n. sp. (253)** *C. panna* **n. sp. (254)** *C. teretis* **n. sp. (255)** *C. ungula* **n. sp.**

***Distribution*** (Fig. 375). – In addition to the two types, I examined 148 specimens from:

**United States of America**

– **Pennsylvania**, *Chester* County, Kenneth Square, 26-VIII-1947, C. A. Thomas;

– **Indiana**, Monroe County, Bloomington, 15-16-VIII-1982, black light trap, F. N. Young;

– Posey County, Hovey Lake, 16-VII-1965, black light trap, Charles E. White;

– Parke County, 23-VI-1962, N. M. Downie;

– Tippecanoe County, 13-VI-1959, N. M. Downie;

– **Missouri**, Clay County, E of Missouri City, Coolie Lake, 5-VII-2000, on Celtis occidentalis, G. H. Nelson;

– Jackson County, Swope Park, 16-VII-1970, on Linden, G. H. Nelson;

– Raytown, 7-VIII-1973, ultraviolet light, G. H. Nelson;

– Kansas City, Swope Park, 16-VII-1990, G. H. Nelson;

– Wildcat Creek, 14-VII-1989, N.M. Downie;

– Randolph County, 1 mile E Moberly, 6-VIII-1972, E. G. Riley;

– **Ohio**, Green County, 19-VI-1962, D. J. & J. N Knull;

– Pickaway County, 22-VI-1945, D. J. & J. N Knull;

– Franklin County, Columbus, 14-VI-1999, B. & B. Valentine;

– Delaware County, Powel Bear Woods, 40°09'.50"N-83°05'.06"W, 23-VI-2012, J. E. Wappes;

– Ross County, 1mile S of Chillicothe, Route 50 at Scioto River, R. Androw & B. Smith;

– **Maryland**, Baltimore County, Sparrows Point, 9-VII-1932, J. W. Green;

– idem, 8-VII-1932, J. W. Green;

– Montgomery County, 2 miles E Silver Springs, NW Branch, 20-VII-1951, G. H. Nelson;

– 4 miles SW of Ashton, 39°06'30"N-77°01'30"W, 5-VII-2000, G. F. Hevel;

– Baltimore County, Sparrows Point, 9-VII-1932, J. W. Green;

– Butler, 15-VIII-1987, E, J. Ford;

– **Washington, D. C.**, 27-VIII-1970, T. L. Erwin;

– **Kentucky**, Christian County, 21-V-1961, beating, J. M. Campbell;

– idem, 3-VII-1961, beating elm, J. M. Campbell;

– Owen County, Herndon Farm, 38°33.32'N-84°59.23'W, 22-VI-8-VII-2009, Boring, Clutts, Yu, Sharkey & Leavengood;

– **Tennessee**, Washington County, Johnson City, East Tennessee State University, 21-VII-2000, C. W. O'Brien;

– Hardeman County, Highway 57 at Hatchie River, 4-VI-2007, R. Turnbow;

– Loudon County, 7 km NW Lanoir City, 6-VI-1999, UV light, R. A. Androw & H. Flanery;

– **Alabama**, Mobile County, Mobile, 30-VI-1962, B. K. Dozier;

– Walker County, near Jasper, Devil's Ladder, 31-VII-1977,T. King;

– Blount County, Highland Lake, 15-VII-2-VIII-2011, black light trap, T. King;

– Jefferson County, Birmingham, 22-VI-1969, T. King;

– Montgomery County;

– idem, 30-VI-1962, B. K. Dozier; 12.6 miles S Montgomery, 21-VII-1987, R. Turnbow;

– Elmore County, 6.2 miles S junction 14, 18-VI-1989, R. Turnbow;

– idem, 4-VI-1989, R. Turnbow;

– **Georgia**, Clarke County, Athens, 25-28-VII-1969, Malaise trap, R. & J. Matthews;

– Putnam County, 20-VII-29-IX-2011, D. R. Miller; Clarke County, Athens, 15-VII-1975, R. Turnbow;

– **North Carolina**, Buncombe County, Asheville, 20-VIII-1974, Lester L. Lampert;

– Stanly County, Badin, 19-VI-1956, D. M. Weisman;

– Davidson County, Fall-1953, at lights, Tom Daggy;

– **South Carolina**, Greenville County, Greenville, 4-17-1977, at light, R. S. Peigler;

– **Mississippi**, Itawamba County, highway 25, 1.9 miles S junction highway 78, 28-V-2017, R. Turnbow;

– Harrison County, Saucier (7 miles SE) Harrison Experimental Farm, 26-V-1976, at light, W. Suter;

– **Louisiana**, East Baton Rouge Parish, 11-VI-1986, C. B. Barr & E. G. Riley;

– Baton Rouge, 14-VI-1982, E. G. Riley;

– **Oklahoma**, Latimer County, ?-VI-1985, K. Stephan;

– **Texas**, Walker County, Huntsville, SHSU Center for Biological Field Studies, 25-VI-2000, E. G. Riley;

– Harris County, West Houston Airport, 21-V-1989, D. J. Heffern;

– idem, emerged from wood of Xanthoxylum on 21-31-V-1993, D. J. Heffern;

– idem, 1-15-IV-1991, D. J. Heffern; Brazos County, Bryan, 12-VI-1988, E. G. Riley;

– Colorado County, Columbus, 22-VI-?, E. A. Schwartz.

Specimens are deposited in ACMT, BYUC, CASC, EMEC, FSCA, NCSU, RHTC, TAMU, WFBM, and WOPC.

### 47. ***Cregya mocagua*** Opitz **n. sp.**

(Fig. 103, 214, 316, 381, 436)

ZooBank : http://zoobank.org/947F08BB-1ADC-49D9-A6B3-5193F0E8893C

**Holotype**. ♀. COLOMBIA, Amazonas, PNN Amacayacu Mocagua, 3°41'S-70°15'W 150 m, Malaise 16-22.v.2000, A. Parente (FSCA).

**Paratypes**. 11 specimens.

**Colombia**

– **Departamento de Amazonas**, PNN Amacayacu Mocagua, 3°41'S-70°15'W 150 m, Malaise 16-22-V-2000, A. Parente (WOPC, 1);

– **Departamento de Magdalena**, PNN SN de Santa Marta Betoma, 10°48'N-37°39'W, 7-V-1-VI-2001, 1,700 m, Malaise, J. Cantillo (WOPC, 1);

– **Departamento de Vichada**, PNN El Tuparro, Bosque Sabanam, 6°21'N-67°51'W, 27-XII-5-I-2001, 100 m, W. Villalba (WOPC, 1).

**Bolivia**

– **Departamento de Beni**, Prov. Vaca Diez, Isla Tumichucua, 9-VIII-1990, P. Berillo & P. Bettella (FMNH, 1).

**Brazil**

– **Estado do Amazonas**, collection date not noted, Hannel (MNHN, 1);

– **Estado do Rio de Janeiro**, Tijuca, ?-XII-1864, E. Gounelle (WOPC, 2);

– **Estado do Minas Gerais**, Mar de Hespanha, 16-I-1909, J. F. Zicán (FMNH, 1);

– "Brazil". No other information available (MNHN, 1; WOPC, 1).

**Argentina**

– **Provincia de Misiones**, Santa Maria, ?-X-1946, M. J. Viana (MLPA, 1).

***Diagnosis***. – Specimens of this species resemble superficially those of *C. pereira* **n. sp.**, from which they may be distinguished by showing infuscations on the pronotal collar.

## *Description*

***Size***. – Length 6.0 mm. – Width 1.8 mm.

***Form***. – As in Fig. 436.

***Color***. – *Cranium* bicolored, mostly testaceous, *frons* and *epicranium* infuscated. – *Antenna* mostly brown, capitular antennomeres partially yellow. – *Prothorax* mostly yellow, arch and collar infuscated. – *Elytra* mostly testaceous, discal region near anterior margin infuscated, posteriorly disc shows a black macula. – *Mesothorax* and *abdomen* testaceous. – *Pterothorax* brown. – *Legs* mostly yellow, *prothoracic femur* infuscated and *tarsi* brown.

***Head***. – *Funicular antennomeres* oblong to subquadrate, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 103), antennomere 10 obovate. – *Eye* slightly narrower than frons (EW/FW 25/30).

***Thorax***. – *Pronotum* (Fig. 214) quadrate (PW/PL 90/90), side margin with well-developed tubercle, disc coarsely punctate at sides, center of disc shallowly punctate. – *Elytra* with 10 punctiferous striae, striae end at elytral distal 4/5$^{th}$ (EL/EW 140/60).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 316).

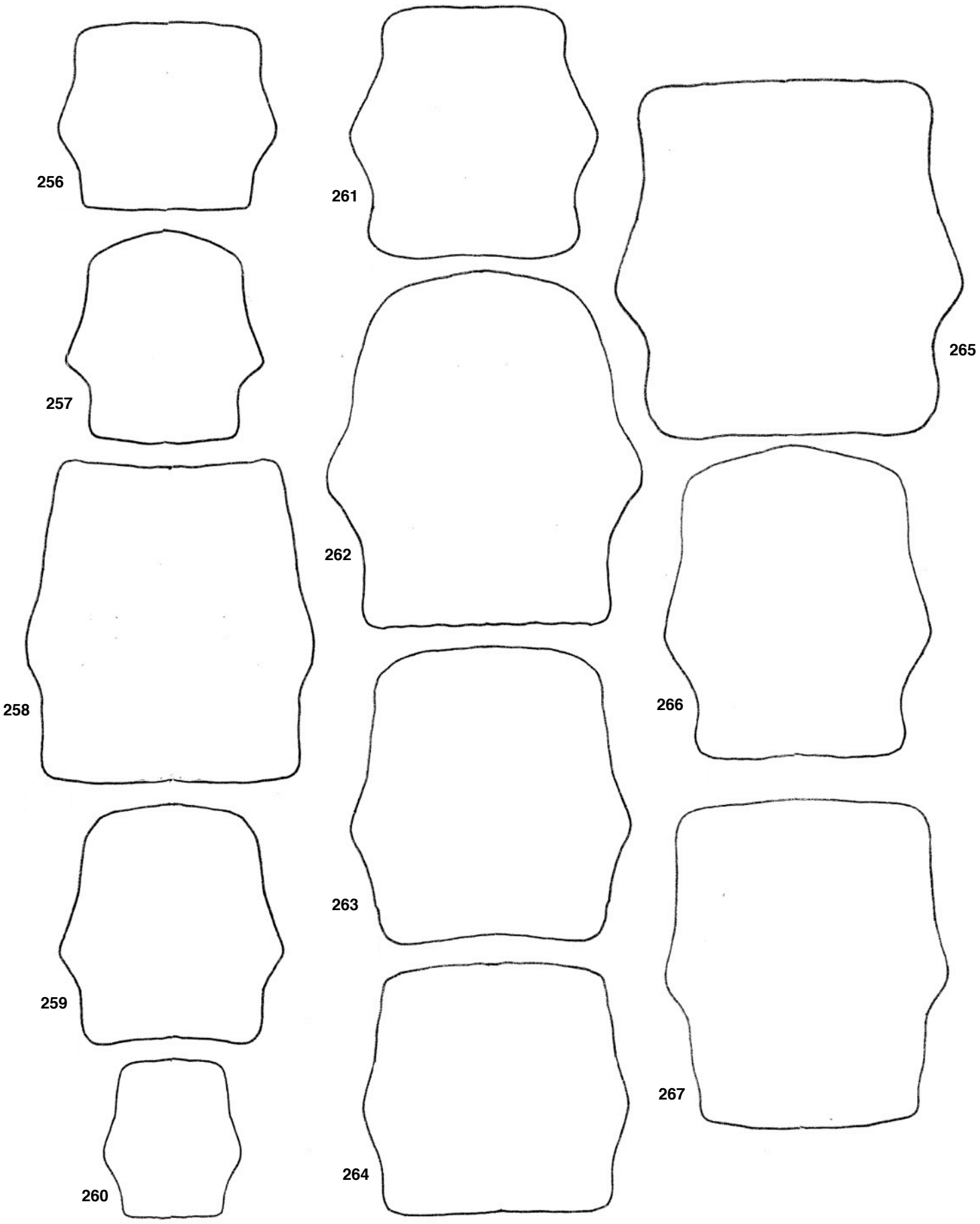



**Fig**. **256-267**. - Pronota. **(256)** *Cregya villavera* **n**. **sp**. **(257)** *C. decima* **n**. **sp**. **(258)** *C. diffusa* **n**. **sp**. **(259)** *C. dybasi* **n**. **sp**. **(260)** *C. juxta* **n**. **sp**. **(261)** *C. furfurosi* **n**. **sp**. **(262)** *C. gemina* (Schenkling, 1900). **(263)** *C. hexalineata* **n**. **sp**. **(264)** *C. mekosa* **n**. **sp**. **(265)** *C. nubilosa* **n**. **sp**. **(266)** *C. nigropunctata* (Chevrolat, 1876). **(267)** *C. stilastichosa* **n**. **sp**.

***Variations***. – Size: Length 4.5-6.0 mm; width 1.3-2.5 mm. The infuscation on the pronotal arch and the pronotal collar varies in intensity of presence.

***Natural History***. – The available specimens were collected throughout the year, at altitudes that range from 100 to 1700 m.

***Distribution*** (Fig. 381). – Known from Colombia, Bolivia, Brazil, and Argentina.

***Etymology***. – The trivial name, *mocagua*, constitutes a noun in apposition and refers to the type locality.

### 48. ***Cregya oculata*** (Say, 1835)

(Fig. 3-7, 8-11, 14-18, 25, 28-37, 105, 215, 317, 376, 437)

*Clerus oculatus* Say, 1835: 163.

**Holotype**. Gender not known. USA: Massachusetts, MCZC type # 33613 (MCZC). Corporaal 1950a: 283. Knull, 1951: 308. Opitz 2017: 44.

***Diagnosis***. – Only in specimens of this North American species do we find the pronotum showing 2 brown spots and an elytral disc that is mostly dark brown, but peripherally testaceous.

#### *Redescription*

***Size***. – Length 5.2 mm. – Width 1.8 mm.

***Form***. – As in Fig. 437.

***Color***. – *Mouthparts* testaceous, except *mandible* brown. – *Scape*, *pedicel* testaceous, *funicular antennomeres* and *capitulum* brown. – *Cranium* light brown, frons with testaceous macula. – *Prothorax* testaceous, *pronotum* with two punctiform brown spots. – *Mesosternum* testaceous, *metasternum* brown. – *Legs*, *femora* testaceous, infuscated distally, *protibia* brown, *mesothoracic tibia* and *metathoracic tibia* testaceous. – *Elytral disc* brown, *epipleural* and *sutural margins* testaceous.

***Head***. – *Funicle* shorter than length of *capitulum*, capitular antennomeres 8 and 9 triangular (Fig. 105), antennomere 10 obovate. – *Eyes* narrower than width of frons (EW/FW 23/32).

***Thorax***. – *Pronotum* (Fig. 215) quadrate (PW/PL 81/81), *disc* coarsely punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5$^{th}$ (EL/EW 175/27).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate very long, posterior phallic plate very broad, infuscate in distal region (Fig. 317).

***Variations***. – Size: Length 4.3-6.5 mm; width 1.4-2.2 mm. The pronotal disc may be devoid of the dark spots or most of the disc may be dark brown with a testaceous line down the middle. The specimen from Dallas, Texas, shows the testaceous marking of the sutural margin explanate at the middle.

***Natural History***. – Most specimens were collected during the Spring and Summer months, some at 447 m. Others of these beetles were found on the dead limbs of the common hackberry [*Celtis occidentalis* Linnaeus (Cannabaceae)], on foliage of the bur oak [*Quercus macrocarpa* Michx. (Fagaceae)], and on a species of ash [*Fraxinus* Linnaeus (Oleaseae)]. R. Reeve indicates that these checkered beetles are predatory on the southern pine beetle [*Dendroctonus frontalis* Zimmerman (Curculionidae)]. Josef N. Knull reports (Knull 1951: 309) that specimens of this species are, " recorded from dead pitch pine infested with Scolytidae and *Pogonocherus* Dejean (Cerambycidae); sumac infested with *Leiopus* Audinet-Serville (Cerambycidae) and scolytids; Virginia creeper infested with *Leiopus* AudinertServille (Cerambycidae); and chestnut infested with *Euderces picipes* (Fabricius) (Cerambycidae) and *Ecyrus dasycerus* (Say) (Cerambycidae)."

***Distribution*** (Fig. 376). – I examined 386 specimens from:

**United States of America**

– **Connecticut**, Fairfield County, Chimon Island, Norwalk, VII-1984, Scott Magnotta;

– **Pennsylvania**, Fulton County, Route 915, Shorty's Place, 40.029706°N 78.15763°, 26-VI-2011, N. Delp;

– W Northampton County, Easton, 24-VI-1934, J. W. Green;

– Franklin County, Mount Alto, 4-VII-?, J. N. Knull;

– Montgomery County, Flourtown, 27-VII-1949, at light, W. F. Chamberlein;

– Huntingdon County, Charter Oak, 22-VI-1920, J. N. Knull;

– Dauphin County, Manada Gap, 3-VII-1933, J. N. Knull;

– Allegheny County;

– **Delaware**, New Castel County, near Wilmington, 29-VII-1930, L. A. Stearns;

– Sussex County, 29-VII-1933, Collector not noted;

– **New York**, Nassau County, Roslyn, Long Island, 9-IX-1930, J. N. Belkin;

– Tomkins County, 25-VI-1962, N. M. Downie;

– Essex County, vicinity Wilmington, 10-13-VII-1996, E. Giesbert;

– Cape May County, I-VII-?, J. W. Green;

– **New Jersey**, Bergen County, 24-VI-1948, collector not noted;

– Monmouth County, Freehold, 19-VII-1926, L.S. Slevin;

– Warren County, Phillipsburg, 1-VII-1917, J. W. Green;

– Atlantic County, Da Costa, 29-VI-?, J. W. Green;

– Ocean County, Lakehurst, 26-VII-1914;

– Essex County, Nutley, 12-VII-?, collector not noted;

– 20-VII-1935, A. Nicolay;

– Nutley, 12-VII-?, collector not noted;

– Burlington County, Atsion, 3-VII-1947, J. W. Green;

– **West Virginia**, Morgan County, Sleepy Creek Forest, 30-VII-2011, G. Glaser;

– **Virginia**, Fairfax County, Mount Vernon, 27-VI-1915, on hickory, W. L. McAtee;

– Matthews County, Fort Monroe, 30-V-?, Hubbard & Schwartz;

– Essex County, 1 mile SE Downsville, 37°52'N 76°48'W, 10-17-VI-1993, Malaise trap, D. R. Smith;

– **Ohio**, Hocking County, 3-VII-1947, D. J. & J. N. Knull;

– Delaware County, 21-VI-?, D. J. & J. N. Knull;

– Green County, 2-VII-1962, D. J. J. N. Knull;

– Highland County, 13-VIII-1960, E. L. Hazard;

– Franklin County, Columbus, 22-VI-1995, B. B. Valentine;

– **Indiana**, Porter County, Dunes State Park, 2-VII-1986, N. M. Downie;

– Marion County, Indianapolis, 27-VI-1963, Charles E. White;

– Floyd County, New Albany, back light trap, Charles E. White;

– Brown County, Bear Wallow, 25-VI-1966, black light trap, Charles E. White;

– Monroe County, Bloomington, 14-15-VIII-1997, F. N. Young;

– Tippecanoe County, 28-VI-1961, N. M. Downie;

– **Washington, D. C.** 6-VI-?, Hubbard & Schwartz;

– **Maryland**, Baltimore County, 12-VIII-1951, E. G. Gerberg;

– Montgomery County, 4 miles SW of Ashton, 39°06'30"N-77°01'30"W, 16-VI-2001, Malaise trap, G. F. Hevel;

– Prince George's County, College Park, 16-VI-1952, beating oak, B. K. Dozier;

– Talbot County, Wittman, 24-VIII-1974, W. E. Steiner;

– **Kentucky**, Hopkins County, Thomas Farm, 37°20.773'N-87°46.645'W, 3-22-VIII-2010, Malaise trap, J. M. Leavengood, Jr., M. Sharkey & S. Clutts;

– Owens County, Herndon Farm, 38°33.15'N-84°58.94'W, 9-22-VI-2009, Boring, Clutts, Yu, Sharkey & Leavengood;

– **Oklahoma**, Cleveland County, Norman, 6-VI-1975, light trap, William D. Shepard;

– Latimer County, ?-VII-1988, Karl Stephan;

– **Kansas**, Cherokee County, Galena, 2 miles S 37°2.64'N-94°38.18'W., 30-V-6-VI-2006, canopy trap, G. A. Salsbury;

– **Missouri**, Phelps County, Rolla, 30-V-3-VII-1980, black light, D. L. Wagner;

– Green County, near James River, 14-VI-1979, at light, 1,450 feet, R. Haswell;

– Henry County, 14 miles SE Clinton, 28-VI-1973, on dead limb of *Celtis occidentalis*, G. H. Nelson;

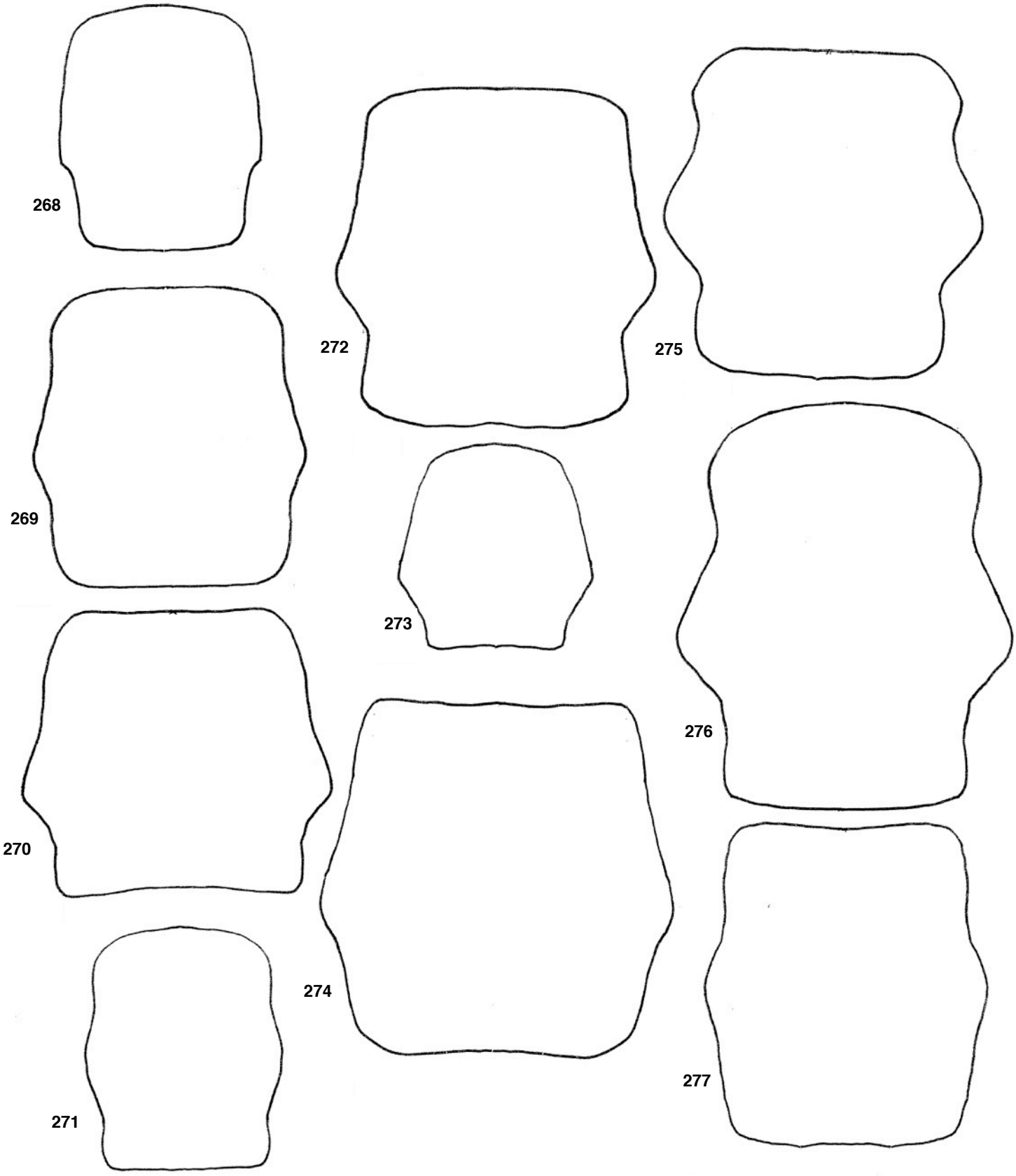



**Fig**. **268-277**. - Pronota. **(268)** *Cregya asarota* **n**. **sp**. **(269)** *C. catoma* **n**. **sp**. **(270)** *C. confluens* (Gorham, 1877). **(271)** *C. egeri* **n**. **sp**. **(272)** *C. kraatzi* (Schenkling, 1900). **(273)** *C. morrisi* **n**. **sp**. **(274)** *C. odonta* **n**. **sp**. **(275)** *C. sexnotata* (Klug, 1842). **(276)** *C. trilineata* **n**. **sp**. **(277)** *C. verticula* **n**. **sp**.

– Clay County, Coolie lake, marsh & open forest, 17-VII-1971, on *Quercus*, G. H. Nelson, R. Heintzman;
– Boone County, 3 miles N Columbia, just off highway 763, 26-V-2001, on *Quercus macrocarpa*, G. H. Nelson;
– Oregon County, Mark Twain National Forest, McCormack Lake, 3-VI-1976, beating *Fraxinus*, G. H. Nelson;
– Clinton County, Clinton, ?-VII-1973, G. B. Nelson;
– Taney County, Mark Twain National Forest, Hercules, 9-VI-2010, Malaise trap, J. R. Fisher;
– **Arkansas**, Mississippi County, 4-VI-1971, Malaise trap in cotton, R. Kirkton;
– Ouachita National Forest,13-V-1972, collector not noted;
– Newton County, Buffalo Nt. River, Steel Creek, 10-VII-2010, J. R. Fisher & Keeler;
– **North Carolina**, Durham County, Durham, ?-VI-?, black light, S. Hughes & Schraeder;
– Haywood County, 6-VII-1961, at black light, H. W. Wheems, Jr.;
– Henderson County, Flecher, 17-VII-1971, Lester L. Lampert;
– Wake County, Raleigh, 18-VIII-1963, H. & A. Howden;
– Carteret County, Fort Macon State Park, 26-VI-2005, R. Newman;
– **South Carolina**, Colleton County, 20 km, S Ruffin, 24-IV-1979, R. S. Feigler;
– Beauford County, Hilton Head Island, 15-VII-1965, H. F. Howden;
– **Georgia**, Dawson County, Black Mountain, Tower, 8 miles SW Clayton, 2-VII-1964, L. Cambre;
– Tattnall County, 2 miles E 147, Ohoopee River, 11-VI-1999, R. Morris;
– Montgomery County, Uvalda, 14-VI-1998, R. Morris,
– Upson County, Turkey Creek Road, 10-VI-1986, R. Morris;
– Seminole County, Henry Cummings Landing, Lake Seminole, 23-V-1975;
– Wheeler County, highway 280, at Oconee River, 14-V-1988, R. Turnbow;
– Clarke County, Whitehall Forest, 2-VII-1976, R. Turnbow;
– Dekalb County, Stone Mountain Area, 21-VI-1969, J. E. Wappes;
– V. L., 23-V-1971;
– Bacon County, 3 miles E of Nichols on highway 32, 18-V-1992, R. Morris.
– **Florida**, Polk County, Green Swamp, WMA, 4-12-V-2001, Townes trap, R. Morris;
– Monroe County, Key Largo, collection date not noted, Beyer;
– Orange County, Paradise, 6-IV-?, J. N. Knull;
– Marion County, Silver River State Park, 5-VIII-1999, beating burned scrub, C. W. Mills;
– Leon County, Tallahassee, 6-V-2002, G. J. Wibner;
– Okaloosa County, Eglin Air Force Base, Santa Rosa Island, W. Destin, 17-VI-1995, P. E. Skelley;
– Taylor County, 13 miles S Steinhatchee, County Road 361, 13-V-1995, beating, M. C. Thomas;
– Miami-Dade County, Paradise Key, 10-IV-1921, J. N. Knull;
– Lee County, Lehigh Acres, 12-IV-1975, N. M. Downie;
– Hardee County, Ona, 14-VII-1967, R. H. Rhodes;
– Volusia County, Oak Hill, 8-IV-1963, R. H. Rhodes;
– Alachua County, 6-V-1968, M. L. May;
– Collier County, highway 41 E of 29, 18-IV-1998, R. Morris;
– Monroe County, Big Pine Key, 29-IV-1977, E. Giesbert;
– Dixie County, 4 miles N Old Town, 18-20-V-1978, E. Giesbert;
– Santa Rosa County, 11.7 miles E Gulf Breeze, 18-VI-1988, R. Turnbow;
– Gulf County, 10 miles W Wewahitchka, 7-V-1988, R. Turnbow;
– Wakulla County, 6 miles E Newport, 11-VI-1988, R. Turnbow;
– Highlands County, 2 miles S Sebring, 10-IV-1990, R. Turnbow;
– Dade County, 2 miles E Everglades National Park, 29-V-1983, R. Turnbow;
– Hernando County, Withlacoochee State Forest, Richloam Unit, 8-IV-1994, R. Turnbow;
– Liberty County, Toreya State Park, 25-VI-1989, R. Turnbow;
– Bay County, 5.4 N Lynn-Haven, 29-V-1989, R. Turnbow;
– Jefferson County, Aucilla, WMA, junction of highways 59+98, 30-VI-198l, R. Turnbow;
– Volusia County, South Daytona, 14-IV-1957, J. F. Brimley;
– Indian River County, SR 512, 0.5 miles W I-95, 18-24-IX-1975, Florida Medical Entomology Laboratory;
– *idem*, 29-III-2-IV-1976, Florida Medical Entomology Laboratory;
– Levy County, Manatee Springs State Park, 9-V-1982, M. C. Thomas;
– 5 miles N Otter Creek, 13-V-1979, E. Giesbert;
– Sumter County, Green Swamp, WMA, East, 4-13-V-2000, Morris, Nigg, Elliot;
– **Mississippi**, Winston County, Tombigbee National Forest, vicinity Hamil Spring, 31-V-2017, Skillman & Limon;
– Yalobusha County, Water Valley, 10-20-VII-1971, Malaise Trap, Michael Horan;
– Smith County, 2.3 miles E Polkvilla, 30-VI-1989, R. Turnbow;
– Warren County, 27-V-?, H. Soltau; Harrison County, Gulfport, ?-VI-1938, collected at light, R. E. Blackwelder;
– Newton County, vicinity Hickory, i-VI-1987, R. Morris;
– **Louisiana**, Orleans Parish, New Orleans, 13-VI-?, H. Soltau;
– **Alabama**, Walker County, near Jasper, Devil's Ladder, 26-VIII-1979, at light, T. King;
– Barbour County, 5 miles SE Batesville, 25-VII-1972, beating pine, R. L. Wescott;
– Blount County, Highland Lake, 15-VII-2-VIII-2011, black light trap, T. King;
– Marshall County, Rocky Ridge, 28-VII-1983, T. King;
– Jefferson County, Birmingham, 7-VI-1953, H. G. Steves;
– Coffee County, 1 mile E Enterprise, 21-31-V-1983, black light, R. Turnbow;
– Elmore County, highway 231, 6.2 miles S Junction14, 28-V-1981, R. Turnbow;
– Shelby County, Wilsonville, 20-V-1990, R. Turnbow;
– Dale County, Fort Rucker Military Reservation, 8-VI-1983, R. Turnbow;
– Clay County, Pyziton, collection date not noted, H. H. Smith;
– **Texas**, Trinity County, Apple Springs, 13-V-1974, predatory on *Dendroctonous frontalis*, R. Reeve;
– Nacogdoches County, Nacogdoches, 13-V-1967, at light, collector not noted;
– Dallas County, Dallas, collection date & collector not noted;
– Cass County, Atlanta, 26-V-1964, K. Stephan;
– Trinity County, Apple Springs, 13-V-1974, infestation of *Dendroctonus frontalis*, R. Reeve;
– Montgomery County, Jones State Forest, 8 miles S Conroe, 21-27-VI-1987, Malaise trap, R. Wharton;
– Sabine County, 9 miles E Hemphill;
– Beech Bottom, 5-17-VI-1989, beech-magnolia forest, Malaise trap, R, Anderson & E. Morris;
– Fort Bend County, highway 59 by Brazos River, 4-V-1986, D. J. Heffern;
– Harris County, near W. Houston Airport, 21/31-V-1993, reared from dead branch of *Zanthoxylum*, D. J. Haffern;
– Colorado County, Columbus, ?-24-1951, Hubbard & Schwartz.

Specimens are deposited in ACMT, CNCI, CSCA, FSCA, JMLC, PMNH, RFMC, TAMU, UGCA, USNM, WFBM, and WOPC.

***Notes***. – The illustrations (Figs 34-48) in Opitz 2017: 45 are of *Cregya oculata* (Say, 1835).

### 49. ***Cregya palaga*** Opitz **n. sp.**

(Fig. 94, 217, 381, 438)

ZooBank : http://zoobank.org/04F7C534-4FB7-4666-8848-B5E4779DFCD3

**Holotype**. ♂. PERU, 10 km S of Chiclayo, III-21-1951. A second label reads: Ross and Michelbacher Collectors (CASC).

***Diagnosis***. – There are 5 species of *Cregya* whose body color is entirely testaceous: *C. palaga* **n. sp.**, *C. inornata* **n. sp.**, *C. andros* **n. sp.**, *C. insignata* Pic, 1952, and *C. withlocoochee*. Male specimens of these species are readily distinguished by differences in the

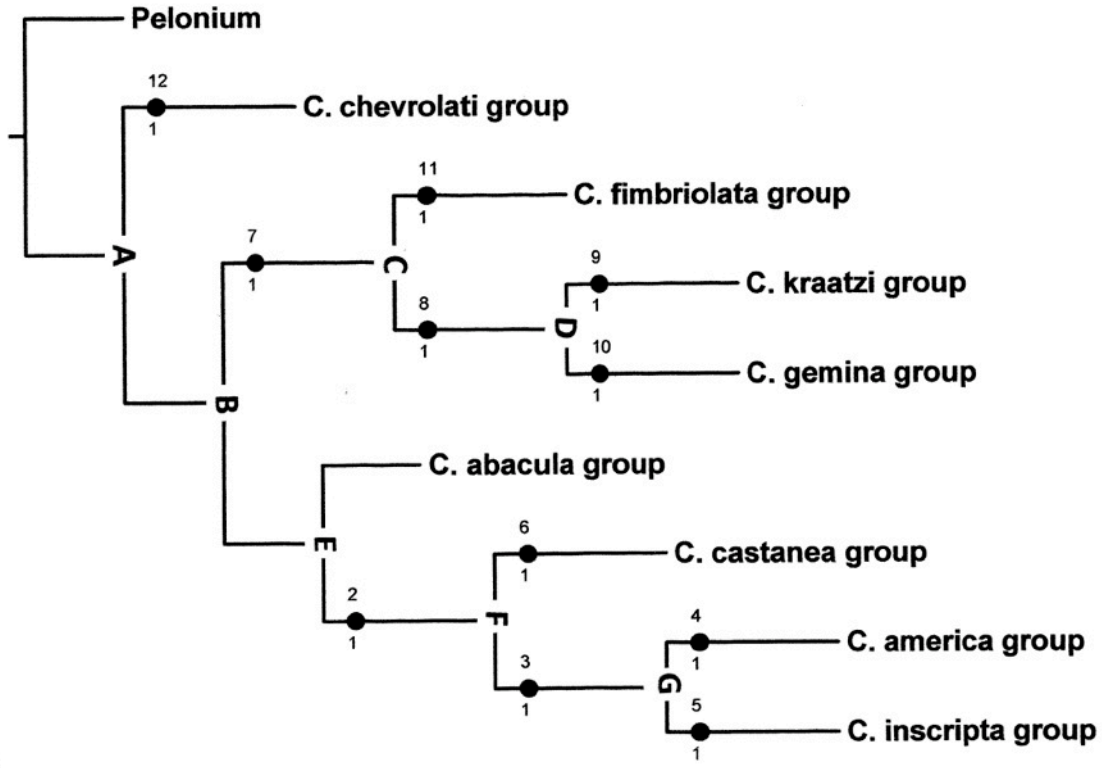



**Fig**. **278**. - Computer generated phylogeny of *Cregya* species groups.

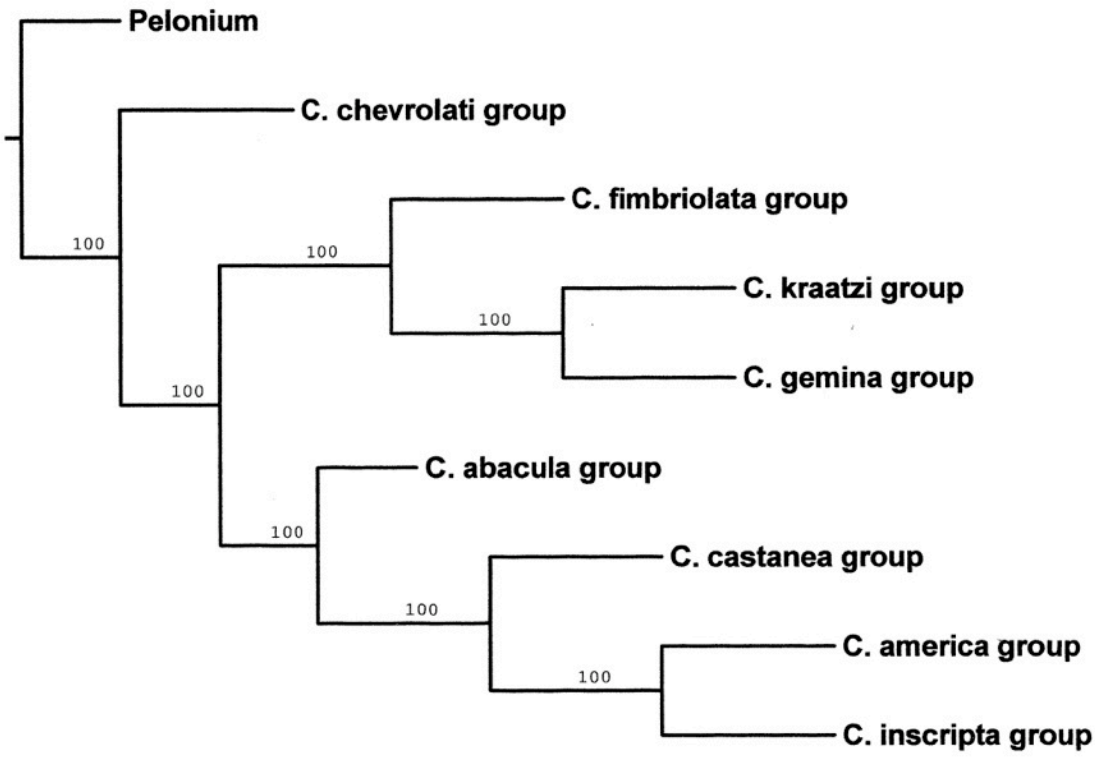



**Fig**. **279**. - Bootstrap computer generated phylogeny of *Cregya* species groups.

aedeagus. Two species of this assemblage of beetles are from South America, *C. palaga* **n. sp.** and C. *insignata* Pic, 1952. *C. palaga* **n. sp.** specimens may be distinguished from *C. insignata* Pic, 1952 specimens by showing a unicolorous antennal capitulum. The antennal capitulum is bicolorous in specimens of *C. insignata* Pic, 1952.

### *Description*

***Size***. – Length 4.5 mm;. – Width 1.3 mm.

***Form***. – As in Fig. 438.

***Color***. – Testaceous, except *pronotum* slightly infuscated at sides.

***Head***. – *Funicular antennomeres* subquadrate, capitulum longer than funicle. – Capitular antennomeres 8 and 9 short triangular (Fig. 94), antennomere 10 obovate. – *Eye* as wide as width of frons (EW/FW 20/20).

***Thorax***. – *Pronotum* (Fig. 217) quadrate (PW/PL 70/70), pronotal sides coarsely punctate, disc sparsely punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5rd (EL/EW 200/55).

***Abdomen***. – *Pygidium* scutiform.

***Natural History***. – The holotype was collected during March.

***Distribution*** (Fig. 381). – Known from Peru.

***Etymology***. – The trivial name, *palaga*, is a Latin name that translates as (= gold); with reference to the integumental color of this beetle.

## 50. ***Cregya pallida*** Opitz **n. sp.**

(Fig. 95, 218, 318, 381, 439)

ZooBank : http://zoobank.org/89ED259F-2778-462F-AC15-C5E122C28CD0

**Holotype**. ♀. Bolivia, Santa Cruz, Estación Experimental General Saavedra, X-1973, L. Stange & C. Porter (FSCA).

**Paratypes**. 18 specimens.

**Bolivia**

– **Departamento de Cochabamba**, Cochabamba, Germain (MNHN, 1; WOPC, 1);

– **Departamento de Santa Cruz**, 4-6 km SSE Buena Vista, F & F Hotel, 27-29-X-2000, Wappes & Morris (ACMT, 1);

– *idem*, 1-8-XI-2002, J. E. Wappes (ACMT, 1);

– *idem*, 23-25-X-2000, R. Morris (RFMC, 1; WOPC, 1);

– *idem*, 7-10-2004, Morris & Wappes (RFMC, 1);

– 5 km ESE Warnes, Hotel Rio Selva, 20-X-2000, black light, M. C. Thomas (FSCA, 1);

– Potrerillos del Guenda, 21-24-X-2011, Wappes & Skillman (WOPC, 1);

– Reserva Natural, 17°40'S-63°22'W, 370 m, 17-22-X-2007, black light, mercury vapor, A. R. Cline & J. E. Wappes (CSCA, 1);

– Estación Experimental General Saavedra, ?-X-1973, Malaise trap, L. Stange & C. Porter (WOPC, 1);

–?-VIII-1973, L. Stange & C. Porter (FSCA, 1);

– **Departamento de Beni**, Rio Itenez, at mouth of Rio Baures, 12-X-1964, J. K. Bouseman (AMNH, 1);

– Rio Mamore, approximately 10 km E San Antonio, 13-VIII-1965, J. K. Bouseman (WOPC, 1).

**Brazil**

– **Estado do Mato Grosso do Sul**, Corumbá, collection date and collector not noted (CMNH, 1; FMNH, 1, WOPC, 1);

– Três Lagoas International Paper, Horto Rio Verde, 8-X-1992, ethanol baited FIT, *Eucalyptus grandis* stand, C. A. H. Flechtmann (UEPB, 1).

***Diagnosis***. – The elytral region near the mesoscutellum is only slightly infuscated in specimens of this species. This characteristic will distinguish the member of this species from the superficially similar specimens of *C. quadrisignata* (Spinola, 1844), in which the entire basal region of the elytra are copiously black.

### *Description*

***Size***. – Length 4.5 mm. – Width 2.0 mm.

***Form***. – As in Fig. 439.

***Color***. – *Cranium* castaneous, lower *frons* and *epicranium* slightly darker. – *Antenna* bicolorous, antennal fundus testaceous, capitular antennomeres mostly brown, yellow at extremities. – *Prothorax*, *legs* yellow. – *Pterothorax* light brown. – *Elytra* bicolorous, infuscated near *mesoscutellum* and near *elytral apex*.

***Head***. – *Funicular antennomeres* filiform to subquadrate, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 95), antennomere 10 obovate. – *Eye* narrower than width of frons (EW/FW 20/30).

***Thorax***. – *Pronotum* (Fig. 218) quadrate (PW/PL 67/67), side margin with well-developed tubercle, disc sides coarsely punctate, disc middle shallowly punctate to subglabrous. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4th (EL/EW 190/45).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 318).

***Natural History***. – Specimens were collected during August, October, and November; one with an Ethanol baited FIT set in a stand of rose gum [*Eucalyptus grandis* W. Hill ex Maiden (Myrtaceae)].

***Variations***. – Size: Length 4.3-5.5 mm; width 1.8-2.2 mm. Other than body size, the available specimens are quite homogeneous.

***Distribution*** (Fig. 381). – Known from Bolivia and Brazil.

***Etymology***. – The trivial name, *pallida*, is a Latin adjective that stems from *pallidis* (= pale); about the mostly pale body color of these beetles.

## 51. ***Cregya pannusa*** Opitz **n. sp.**

(Fig. 106, 216, 319, 381, 440)

ZooBank : http://zoobank.org/F87A3B0D-71C7-4F63-AC1F-4FABFF589F30

**Holotype**. ♂. SURINAME, Saramaca, Damboentong, 8-27-IV-2008, coll. Alies van Sauers-Muller, Malaise trap (FSCA).

**Paratypes**. 20 specimens.

**Suriname**

– **Districto de Saramacca**, 5°.81775'N 55°.59064'W, 15-25-IX-2005, 6 m, G. Steck (WOPC, 3);

– vicinity Sidiredjo 5°.81775'N 55°.59064'W, 15-25-IX-2005, 6 m, G. Steck (WOPC, 1).

**Trinidad**

– **Saint George County**, Simla, Arima, Blanchisseuse Road, ?-VII-1975, black light trap, J. Price (NHMB, 1);

– *idem*, 17-27-V-1977, P. Feinsinger (WOPC, 1);

– 5 miles N Arima, 20-VIII-1969, H. & A. Howden (CMNC, 1);

**French Guiana**

– **Subdivision of Kourou**, Roches de Kourou, collection date and collector not noted (MNHN, 2; WOPC, 1);

– Passouro, ?-?-1907, E. Le Moult (WOPC, 1);

– **Subdivision Saint Laurent du Maroni**, ?-V-1909, E. Le Moult (MNHN, 1).

**Bolivia**

– **Departamento de Santa Cruz**, Potrerillos del Guenda, Reserva Natural, 17°40'S-63°27'W, 17-22-X-2007, 370 m, black light, F. Romero (WOPC, 1).

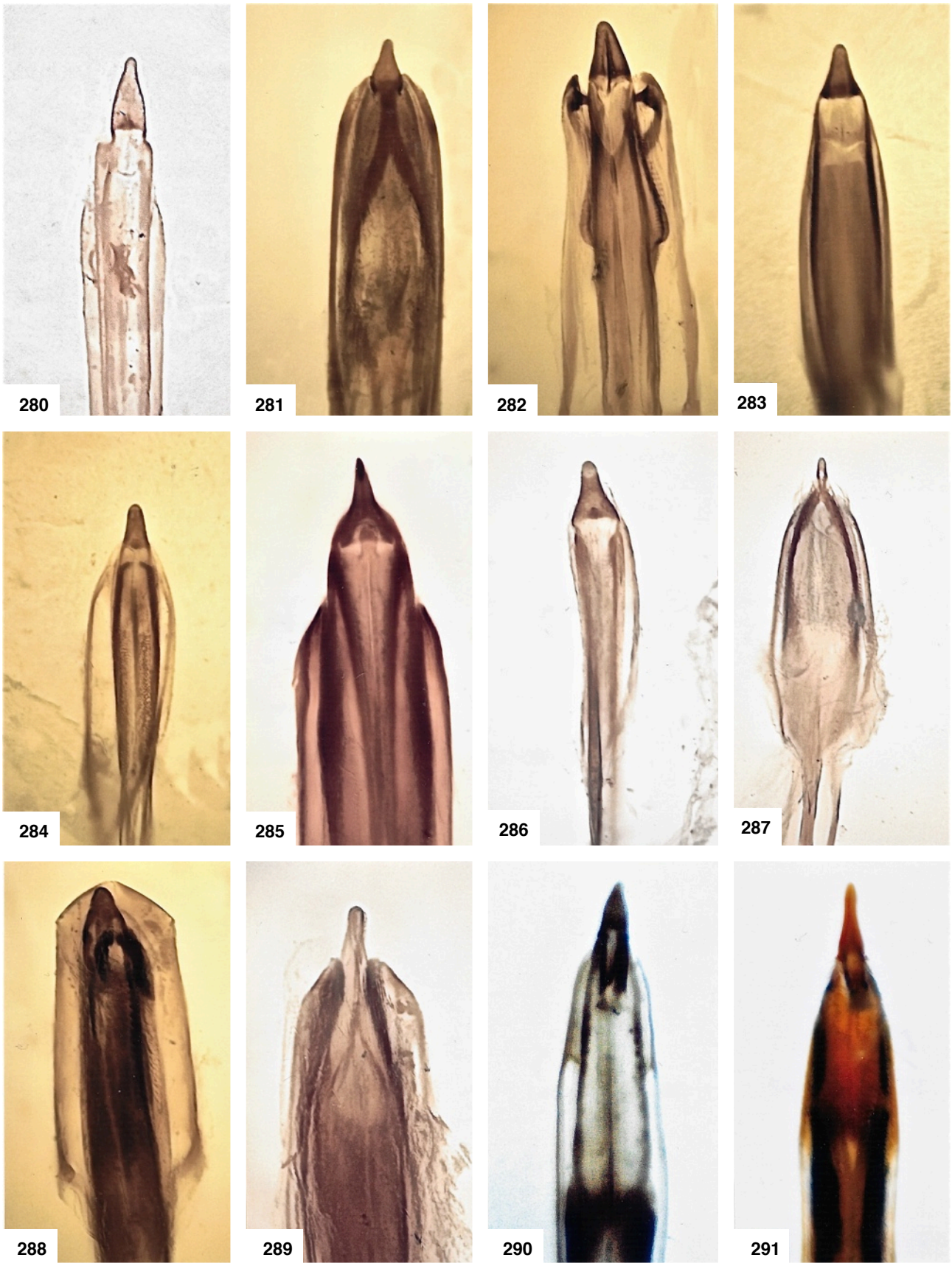



**Fig. 280-291**. - Aedeagi. **(280)** *Cregya abacula* **n. sp. (281)** *C. andros* **n. sp. (282)** *C. campana* **n. sp. (283)** *C. cerina* **n. sp. (284)** *C. decusoris* **n. sp. (285)** *C. duodecimpunctata* (Klug, 1842). **(286)** *C. guttula* **n. sp. (287)** *C. lunulata* (Pic, 1940). **(288)** *C. lita* **n. sp. (289)** *C. seabrai* Peracchi, 1962. **(290)** *C. abdita* Wolcott, 1927. **(291)** *C. alicula* **n. sp.**

**Ecuador**

– **Provincia de Napo**, Station Yasuni, 23-IX-1995, Malaise trap, E. Baquero, F. Maza (WOPC, 1).

**Brazil**

– **Estado do Minas Gerais**, Caraca, ?-?-1884, P. Germain (MNHN, 1; WOPC, 2);

– Minas Gerais, ?-?-1919, J. De Gaulle (WOPC, 1);

– Ins. Cath., ?-?-1907 collector not noted (MNHN, 1).

– **Estado do Pernambuco**, Pernambuco, 12-III-1893, Gounelle (MNHN, 1).

***Diagnosis***. – In specimens of this species the elytral apex is black. This characteristic will separate the members of *C. pannusa* **n. sp.** from those of superficially similar specimens of *C. pallida* **n. sp.**, in which the black posterior elytral macula is preapical.

## *Description*

***Size***. – Length 4.5 mm. – Width 1.2 mm.

***Form***. – As in Fig. 440.

***Color***. – *Cranium*, *antenna* brown. – *Thorax*, *legs*, and *abdomen* testaceous. – *Elytra* bicolorous, mostly testaceous, anterior margin and posterior region of disc dark brown.

***Head***. – *Funicular antennomeres* subquadrate (Fig. 106), progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eye* as wide as frons (EW/FW 25/25).

***Thorax***. – *Pronotum* (Fig. 216) quadrate (PW/PL 70/70), side margin with well-developed tubercle, disc coarsely punctate at sides, center of disc shallowly punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 180/55).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate long, posterior phallic plate very broad (Fig. 319).

***Variations***. – Size: Length 4.0-6.0 mm; width 1.2-2.0 mm. Except for body size, the available specimens are quite homogeneous

***Natural History***. – The available specimens were collected throughout the year, some at 6 m.

***Distribution*** (Fig. 381. – Known from Trinidad, French Guiana, Suriname, Ecuador, Bolivia, and Brazil.

***Etymology***. – The trivial name, *pannusa*, is a Latin noun that stems from *pannus* (= patch); with reference to the brown macula at the apex of the elytra.

### 52. *Cregya pereira* Opitz **n. sp.**

(Fig. 96, 219, 320, 381, 441)

ZooBank : http://zoobank.org/1998476E-99E7-4871-80BC-78318A25635C

**Holotype**. ♀. Pereira, 1400 m, Colombien (Colombia), XII. 1960, G. Frey (FSCA).

**Paratypes**. One specimen. – **Colombia**, **Departamento de Risaralda**, Pereira, ?-XII-1960, G. Frey (WOPC).

***Diagnosis***. – Specimens of this species resemble superficially those of *C. mocagua* **n. sp.**, from which they may be distinguished by showing a completely testaceous pronotal collar.

## *Description*

***Size***. – Length 5.5 mm. – Width 2.0 mm.

***Form***. – As in Fig. 441.

***Color***. – *Cranium* dark brown. – *Antenna* testaceous. – *Pronotum* mostly testaceous, infuscated at sides. – *Mesothorax* testaceous. – *Metathorax* and *abdomen* brown. – *Elytra* mostly testaceous, each *elytron* with a pair of large brown maculae, one at humeral region and one near elytral *apex*. – *Legs* testaceous.

***Head***. – *Funicular antennomeres* filiform to subquadrate (Fig. 96), *capitulum* longer than *funicle*. – Capitular antennomeres 8 and 9 long triangular, antennomere 10 obovate. – *Eye* narrower than width of frons (EW/FW 20/31).

***Thorax***. – *Pronotum* (Fig. 219) quadrate (PW/PL 75/75), side margin with well-developed tubercle, disc coarsely punctated. – *Elytra* with 9 punctiferous striae, striae end at elytral 4/5th (EL/EW 230/55).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 320).

***Variations***. – Size: Length 4.8-5.5 mm; width 1.5-2.0 mm. The pronotal disc of the paratype is entirely testaceous.

***Natural History***. – The types were collected in December.

***Distribution*** (Fig. 381). – Known from Colombia.

***Etymology***. – The trivial name, *pereira*, constitutes a noun in apposition and refers to the type locality.

### 53. *Cregya pictila* Opitz **n. sp.**

(Fig. 107, 220, 321, 381, 442)

ZooBank : http://zoobank.org/65323983-2898-4786-815F-7A846DC051BC

**Holotype**. ♀. Cochabamba (Bolivie) (Bolivia) Germain (MNHN).

**Paratypes**. 4 specimens. – **Bolivia**, **Departamento de Cochabamba**, Cochabamba, Germain (MNHN, 2; WOPC, 2).

***Diagnosis***. – The reddish forebody, in combination with the elytral color as exhibited in Fig. 442, will distinguish the members of this species from congeners.

## *Description*

***Size***. – Length 5.0 mm. – Width 1.7 mm.

***Form***. – As in Fig. 442.

***Color***. – *Forebody* ferruginous. – *Antenna* and *abdomen* dark brown. – *Pterothorax* ferruginous. – *Elytra* bicolorous, humeral region with quadrate macula, elytral middle 1/3 yellow, posterior 1/3 of elytral disc dark brown. – *Legs* bicolorous, *prothoracic* and *mesothoracic femora* mostly yellow, infuscated, *metathoracic femur* yellow, *prothoracic* and *mesothoracic tibiae* brown, *metathoracic tibia* yellow, *tarsi* brown.

***Head***. – *Funicular antennomeres* subquadrate (Fig. 107), progressively shorter towards *capitulum*, 4th funicular antennomere slightly expanded, capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eyes* small, eye much narrower than width of frons (EW/FW 15/35).

***Thorax***. – *Pronotum* (Fig. 220) slightly transverse (PW/PL 80/75), side margin with well-developed tubercle, disc sides shallowly punctate, middle of disc subglabrous. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4th (EL/EW 200/60).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 321).

***Variations***. – Size: Length 3.7-5.0 mm; width 1.0-1.7 mm. Other than body size, the available specimens are quite homogeneous.

***Distribution*** (Fig. 381). – Known from Bolivia.

***Etymology***. – The trivial name, *pictila*, is a Latin adjective that stems from *pictilis* (= colored); with reference to the colorful body of these beetles.

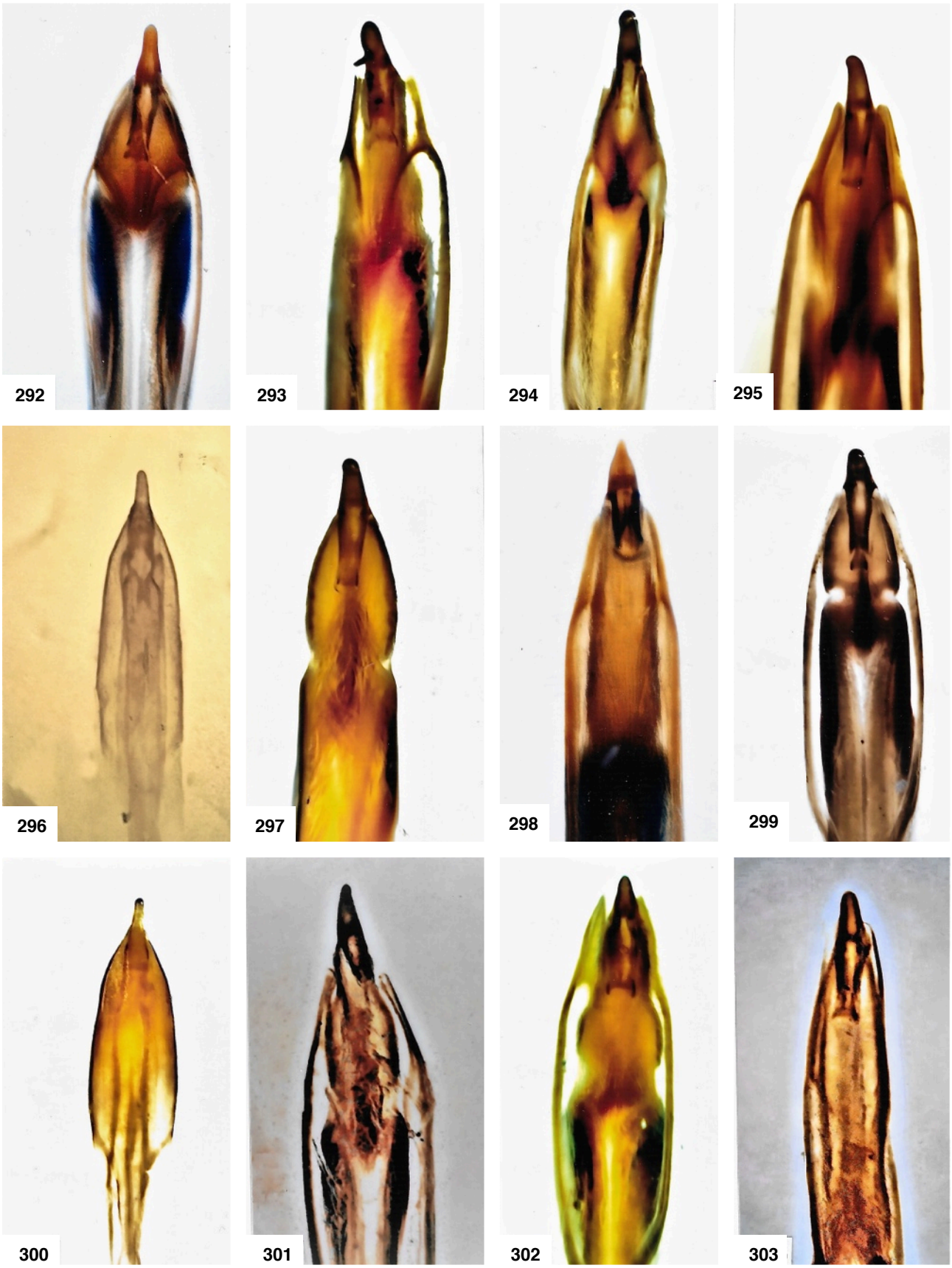



**Fig. 292-303**. - Aedeagi. **(292)** *Cregya america* **n. sp. (293)** *C. andersoni* **n. sp. (294)** *C. apicula* **n. sp. (295)** *C. aragua* **n. sp. (296)** *C. ardis* **n. sp. (297)** *C. atracapitis* **n. sp. (298)** *C. bilineicolle* (Chevrolat, 1874) **nov. stat. (299)** *C. casselorum* (Opitz, 2014). **(300)** *C. casusa* **n. sp. (301)** *C. catarina* (Opitz, 2014). **(302)** *C. contaminata* (Klug, 1842). **(303)** *C. corumba* **n. sp.**

54. ***Cregya preclara*** Opitz **n**. **sp**.

(Fig. 97, 221, 322, 388, 443)

ZooBank : http://zoobank.org/5FD15689-1F80-4805-AB95-10183E5F7467

**Holotype**. ♂. Panamá, Chiriquí, Cerro Pando, 1535 m, 24-V-1973, G. Ekis (FSCA).

***Diagnosis***. – Forebody testaceous, remainder blue-black. This combination of integumental color will distinguish the members of this species from congeners.

## *Description*

***Size***. – Length 4.8 mm. – Width 1.3 mm.

***Form***. – As in Fig. 443.

***Color***. – *Forebody* yellow. – *Antenna* black. – *Mesothorax* yellow. – *Metathorax*, *legs*, and *abdomen* black. – *Elytra* blue-black.

***Head***. – *Funicular antennomeres* subquadrate, *capitulum* much longer than combined length of funicular antennomeres. – Capitular antennomeres 8 and 9 triangular (Fig. 97), antennomere 10 obovate; eye narrower than width of frons (EW/FW 19/35).

***Thorax***. – *Pronotum* (Fig. 221) transverse (PW/PL 75/67), side margin with well-developed tubercle, disc punctures shallow, widely separated, midline of disc broadly glabrous. – *Elytra* with 10 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 210/50).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad, infuscate in distal region (Fig. 322).

***Natural History***. – The holotype was collected during May, at 1,535 m.

***Distribution*** (Fig. 388). – Known from Panamá.

***Etymology***. – The trivial name, *preclara*, is a Latin adjective with a meaning of "beautiful"; with reference to the attractive color of this beetle.

55. ***Cregya quadrinotata*** (Chevrolat, 1874) **nov**. **stat**.

(Fig. 98, 222, 323, 377, 444)

*Pelonium quadrinotatum* Chevrolat, 1874: 328.

**Lectotype**. Gender not known. Here designated. Texas (MNHN). Corporaal 1950a: 283.

It is not known how many specimens were available when Chevrolat made the description of this species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

***Diagnosis***. – These beetles show each elytron with a large humeral and a preapical macula. This characteristic is found in North American, Mexoamerican, and Middle American specimens of *C. america* **n**. **sp**., *C. andersoni* **n**. **sp**., and *C. quadrinotata* (Chevrolat, 1874) **nov**. **stat**. Among this assemblage of species, *C. quadrinotata* specimens may be distinguished by showing small pots on the pronotal disc. As in *C. andersoni* **n**. **sp**. there no markings between the elytral basal and preapical maculae.

## *Redescription*

***Size***. – Length 4.3 mm. – Width 1.5 mm.

***Form***. – As in Fig. 444.

***Color***. – *Cranium* dark brown. – *Antenna* testaceous, *prothorax* testaceous, *pronotum* with two punctiform brown spots. – *Pterothorax* and *legs* testaceous. – *Elytral disc* bicolored, mostly testaceous, each *elytron* with a crescentic brown macula in the *humeral region* and a more rounded one just before elytral *apex*.

***Head***. – *Funicle* shorter than length of *capitulum* (Fig. 98), capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eyes* twice narrower than width of frons (EW/FW 15/30).

***Thorax***. – *Pronotum* (Fig. 222) slightly oblong (PW/PL 67/74), disc coarsely punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4th (EL/EW 215/50).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate very short, posterior phallic plate very broad (Fig. 323).

***Variations***. – Size: Length 3.5-6.0 mm; width 1.0-2.2 mm. The pronotal dark spots may be faintly visible, rarely absent, and the large elytral maculae vary in size. In a specimen from Texas, USA, the two large black maculae on the elytral disc are confluent along the epipleural margin.

***Natural History***. – Specimens were collected throughout the year; some by beating foliage of the false willow [*Baccharis neglecta* Britt. (Asteraceae)], the boat-thorned acacia [*Acacia cochliacantha* Willd. (Fabaceae)], and a species of fig [ *Ficus* Linnaeus (Moraceae)].

***Distribution*** (Fig. 377). – I examined 164 specimens from:

**United States of America**

**Texas**

– Bastrop County, Smithville, Stengl Biological Station, 30°.2808'N 97°.7769'W, 20-V-to 3-VI-2011, T. H. Atkinson;

– Gonzales County, Palmetto State Park, 13-X-1985, J. Rawlins & R. Davidson;

– Goliad County, Goliad State Park, 17-18-V-1980, R. L. Penrose;

– Cameron County, Sabal Palm Grove Refuge, 25.85158°N-97.42028°W, 18-X-2008, palm forest margin, Resaca bank areas, E. G. Riley;

– *idem*, 25.85012°N-97.41604°W, 4-IV-2009, re-vegetated area, E. G. Riley;

– *idem*, 25.85158°N-97.42018°W, 20-IX-2008, palm forest margin, Resaca Bank, E. G. Riley;

– *idem*, 25.05611°N-97.03635°W, 26-III-2009, re-vegetated site, J. King & E. G. Riley;

– *idem*, 26.22375°N-97.35454°W, 20-V-2009, beating dense coastal brush, E. G. Riley;

– *idem*, 25.84964°N-97.41798°W, 5-VI-2010, beating palm forest, E. G. Riley;

– Cameron County, Brownsville, 27-VI-1952, H. E. Cott;

– *idem*, Esperanza Ranch, 27-VII-?, collector not noted;

– Hidalgo County, 11-IV-1946, beaten from foliage of *Baccharis neglecta*, George B. Vogt;

– Matagorda County, 2 miles SE Blessing, 19-IV-1984, Marlin Rice;

– Travis County, Austin BFL, 301655N-974645W, 29-V-4-VI-1990, Malaise Trap, 170 m, M. Kish;

– Wharton County, 8 miles NW El Campo, 19-IV-1986, D. J. Heffern;

**México**

– **Estado de Colima**, Manzanillo, Peninsula Juluapan, 3-4 km SE El Naranjo, 20-VII-1995, J. Rifkind;

– **Estado de Tabasco**, 8 miles W Cardenas, 7-X-1976, Cate & Clark;

– **Estado de Guerrero**, highway 95, 3.6 km S Zumpango del Rio, 24-VII-1992, on *Acacia cochliacantha*, G. H. Nelson;

– 6.8 km S Zumpango, del Rio, 11-X-1999, R. L. Wescott;

– **Estado de Quintana Roo**, 11 Km N Carrillo Puerto, 17-VI-1990, M. C. Thomas;

– 20 km Felipe Carrilo Puerto, 12-14-VI-1983, E. Riley;

– **Estado de Veracruz**, Plan del Rio, 22-III-1983, R. D. Cave;

– 28-VII-1970, A. R. Hardy;

– Los Tuxtlas, vicinity of Balzapote, 29-IV-6-V-1989, E. Giesbert;

– **Estado de Morelos**, 6 km W Yautepec, 17-18-X-1984, E. Giesbert;

– **Estado de Chiapas**, El Aguacero, 16 km W Cocozocoautla, 16-23-X-1988, E. Giesbert;

– 5 miles W Arriaga, highway 200, 27-V-1983, C. W., L. O'Brien, & G. B. Marshall;

– **Estado de Yucatán**, 16-VI-1990, Jeff Huether;

– **Estado de Oaxaca**, 17 miles N Matias Romero, 21-VI-1971, C. W. O'Brien;

– **Estado de Campeche**, 29 km E Xpujil, 19-VI-1990;

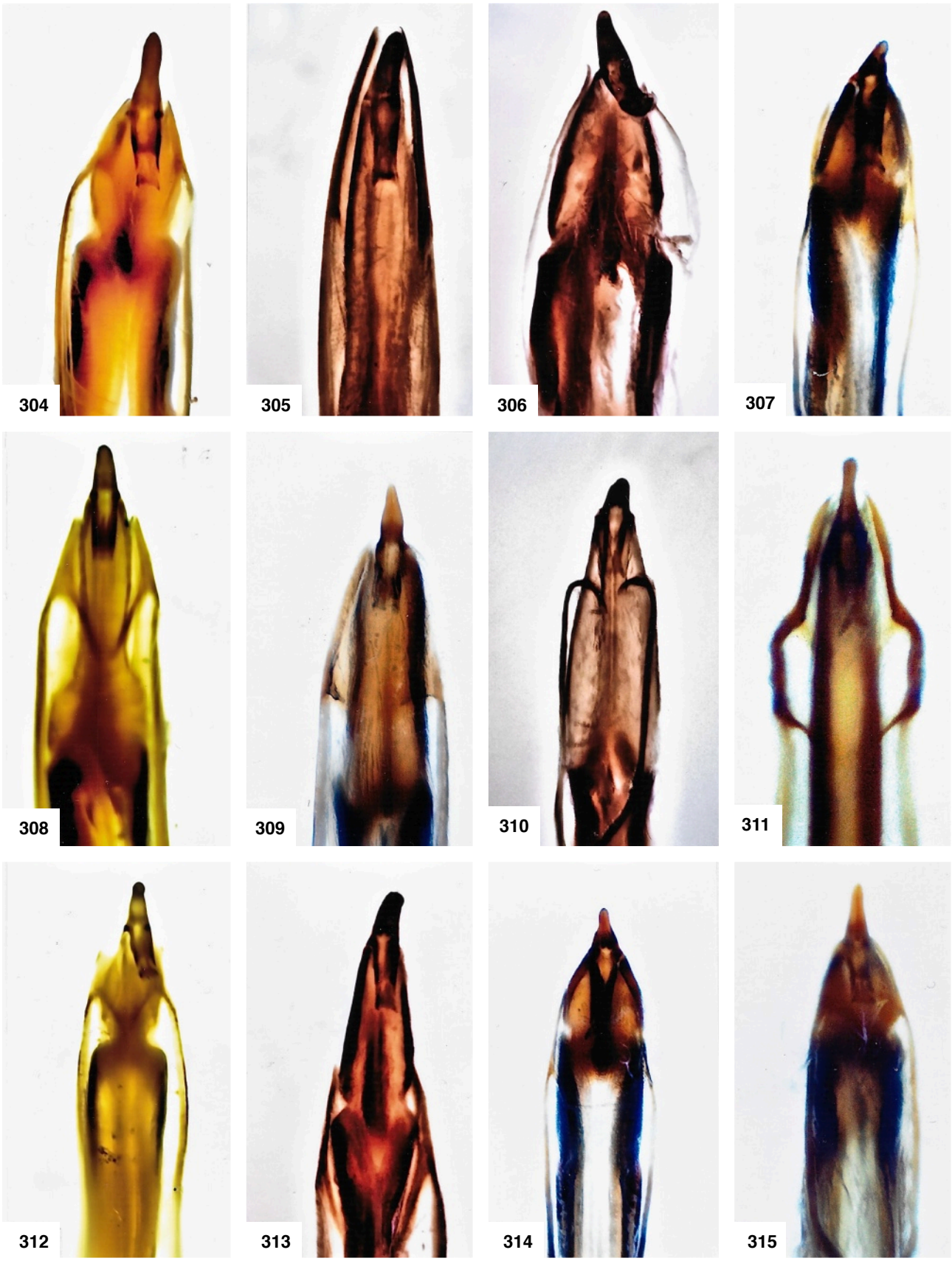



**Fig. 304-315**. - Aedeagi. **(304)** *Cregya cruzvera* **n. sp. (305)** *C. ekteina* **n. sp. (306)** *C. helva* **n. sp. (307)** *C. inornata* **n. sp. (308)** *C. karafucosa* **n. sp. (309)** *C. lenticula* **n. sp. (310)** *C. linea* **n. sp. (311)** *C. lineolata* (Gorham, 1883). **(312)** *C. linomolina* **n. sp. (313)** *C. marysearsi* **n. sp. (314)** *C. mexcala* **n. sp. (315)** *C. mixta* LeConte, 1865.

– **Estado de Sonora**, 13.4 miles E Guamas, 3-IX-1972, black like, E. Kane & B. Villegas;

– **Estado de Tamaulipas**, Bocatoma, w.s., 7 km SSE Gomez Farias, 1-VI-1982, R. Turnbow;

– **Estado de Sal Luis Potosi**, 69.5 km N Tamazunchale, 5-VI-1987, R. Turnbow.

– **Estado de Jalisco**, 7.6 km N Chamela, 16-VII-1987, at light, R. Turnbow.

**Guatemala**

– **Departamento de Suchitepequez**, Cuyotenango, Finca San Rafael Olimpo, 15-II-1966, J.M. Campbell;

– **Departamento de Zacapa**, road to San Lorenzo, 1-2 km N Santa Cruz, 14-X-2006, R. Turnbow;

– **Departamento de Alta Verapaz**, Chacoj, Champion; Chiacam, Champion;

– **Departamento de Suchitepéquez**, Volcán, Atitlán, 2500-3500 feet, Champion.

**Honduras**

– **Departamento de Francisco Morazán**, Zamorano, 27-V-2002, R. Turnbow;

– *idem*, 1-XII-1995, R. Turnbow;

– Escuela Agricultura Panamericana, El Zamorano, 2-II-1988, R. D. Cave;

– 2 KM S Zamorano, 27-VI-1994, 900 m, riparian *Ficus* grove, R. Anderson;

– **Departamento de Yoro**, Las Combas, 7-XII-1995;

– **Departamento de Islas de Bahía**, West end of La Isla de Roatán, 26-30-VI-1978, E. Giesbert;

– **Departamento de Comayagua**, 12 km NW Comayagua, Rio Humuya, 26-VII-1977, O'Briens & Marshall.

**Nicaragua**

– **Departamento de Granada**, Volcán Mombacho, Finca Santa Ana, 2-VI-1998, Malaise trap in organic coffee, 600 m, J. M. Maes.

**Costa Rica**

– **Provincia de Puntarenas**, vicinity Tarcoles, 19-22-XII-1985, E. Giesbert;

– **Provincia de Guanacaste**, Parque Nacional Santa Rosa, ?-?-1977, A. Forsyth.

Specimens are deposited in ACMT, CSCA, FSCA, RFMC, RHTC, UTBC, TAMU, USNM, and WFBM

### 56. ***Cregya quadrisignata*** (Spinola, 1844)

(Fig. 19, 99, 223, 324, 381, 445)

*Pelonium quadrisignatum* Spinola, 1844: 365.

**Lectotype**. Gender not known. Colombia. Here designated. Texas (MNHN). Corporaal 1950a: 283. Ekis (now Opitz) 1975: 54.

It is not known how many specimens were available when Spinola made the description of this species, therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

***Diagnosis***. – Only genitalic differences and geographic distribution separate *C. quadrisignata* (Spinola, 1844) from *C. quadrinotata* (Chevrolat, 1874) **nov**. **stat**. (compare Figs. 323, 324). *C. quadrisignata* (Spinola, 1844) is found in Colombia and *C. quadrinotata* (Chevrolat, 1874) **nov**. **stat**. in North America, Mexoamerica, and Middle America.

#### *Redescription*

***Size***. – Length 5.0 mm. – Width 1.8 mm.

***Form***. – As in Fig. 445.

***Color***. – *Cranium* black, except *frons* castaneous. – *Scape*, *pedicel*, and *funicle* testaceous, *capitulum* brown. – *Prothorax*, *mesothorax*, and *legs* testaceous, *metathorax* brown. – *Elytral disc* bicolored, each *elytron* with a brown macula in *humeral region* and more rounded one just before *elytral apex*.

***Head***. – *Funicular antennomeres* from filiform the subquadrate (Fig. 99), funicle shorter than length of *capitulum*, capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eyes* narrower than width of frons (EW/FW 22/32).

***Thorax***. – *Pronotum* (Fig. 223) quadrate (PW/PL 80/80), disc coarsely punctate at sides, shallowly punctate at middle. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4$^{th}$ (EL/EW 220/65).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 324).

***Variations***. – Size: Length 3.8-5.5 mm; width 1.3-2.0 mm. Other than body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected in July, one at 1524 m.

***Distribution*** (Fig. 381). – In addition to the holotype, I examined 3 specimens from:

**Colombia**

– **Departamento de Cauca**, Valle de Pinchada, 18-VII-1970, 5000 feet, H. & A Howden;

– Rio Jamundi, 10 miles S Cali, 13-VII-1970, 3,000 feet, H. & A. Howden;

– **Departamento de Cundinamarca**, Anolaima, 10-IX-1965.

Specimens are deposited in CMNC and WOPC.

### 57. ***Cregya rifkindi*** Opitz **n**. **sp**.

(Fig. 68, 224, 382, 446)

ZooBank : http://zoobank.org/8DAAB421-5F88-4800-9521-7FEF62ABB69F

**Holotype**. ♀. MEXICO, Oaxaca, 42.6 km E Hwy. 185, Rd. to Chimalapa, Sierra Mixe. A second label reads: N16° 51.733' W094° 43. 864', 1233', Trop. Forest, X-8-2015. A third label reads: beating flowering *Melastome*, J. Rifkind, coll (CSCA).

***Diagnosis***. – The brown color fades in the posterior half of the elytral disc. This, fading, "smoky", color of the elytral disc will distinguish the members of this species from congeners.

#### *Description*

***Size***. – Length 4.5 mm. – Width 1.5 mm.

***Form***. – As in Fig. 446.

***Color***. – *Forebody* yellow, except *frons* infuscated, *antenna*, *pterothorax*, and *abdomen* black. – *Legs*, yellow, except *prothoracic femur* black distally and *prothoracic tibia* black. – Elytral outline yellow, disc infuscation diminishes towards *elytral apex*.

***Head***. – *Funicular antennomeres* subquadrate, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 68), antennomere 10 obovate. – *Eyes* as wide as frons (EW/FW 23/23).

***Thorax***. – *Pronotum* (Fig. 224) oblong (PW/PL 65/80), side margin with well-developed tubercle, disc shallowly punctate; elytra with 9 asetiferous punctiferous striae, striae end at elytral distal 3/4$^{th}$ (EL/EW 180/55).

***Abdomen***. – *Pygidium* scutiform.

***Natural History***. – The holotype was collected in October by beating a flowering species of *Melastoma* Linnaeus (Melastomaceae).

***Distribution*** (Fig. 382). – Known from México.

***Etymology***. – The trivial name, *rifkindi*, is a patronymic that honors Jacques Rifkind, a friend, an outstanding naturalist and taxonomist, and collector of the holotype.

### 58. ***Cregya rileyi*** Opitz **n**. **sp**.

(Fig. 114, 225, 325, 388, 447)

ZooBank : http://zoobank.org/F6A3A158-B29A-4E04-9D9A-FCC98FCC1D06

**Holotype**. ♂. COSTA RICA, Heredia, Estac. El Ceibo, 10 km SE La Virgen, 450-550 m, 10°20'N 84°05'W, 7-14-IV-2003, E. G. Riley (TAMU).

**Paratypes**. 3 specimens.

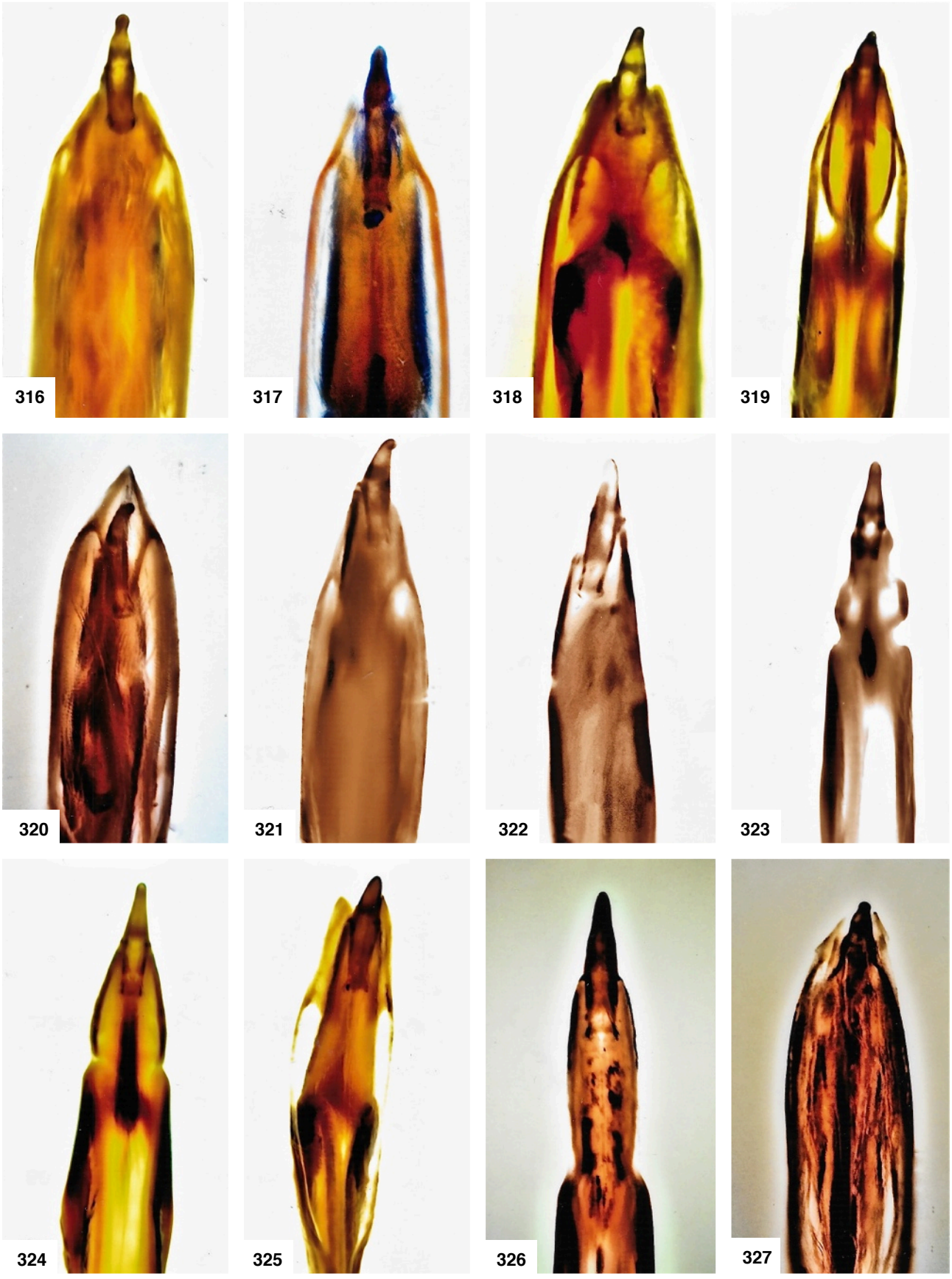



**Fig. 316-327**. - Aedeagi. **(316)** *Cregya mocagua* **n. sp. (317)** *C. oculata* (Say, 1835). **(318)** *C. pallida* **n. sp. (319)** *C. pannusa* **n. sp. (320)** *C. pereira* **n. sp. (321)** *C. pictila* **n. sp. (322)** *C. preclara* **n. sp. (323)** *C. quadrinotata* (Chevrolat, 1874) **nov. stat. (324)** *C. quadrisignata* (Spinola, 1844). **(325)** *C. rileyi* **n. sp. (326)** *C. robusta* **n. sp. (327)** *C. sina* **n. sp.**

**Costa Rica**

– **Provincia de Heredia**, Estación El Ceibo, 10 km SE La Virgen, 450-550 m, 10°20'N-84°05'W, 7-14-IV-2003, E. G. Riley (WOPC, 1);

– 10 km SE La Virgin, Estación El Ceibo, 1020N 8405W, 8-IV-2003, S. M. Clark (BYUC, 1);

– *idem*, 13-IV-2003, S. M. Clark (WOPC, 1).

***Diagnosis***. – Specimens of this species superficially resemble those of *C. decusoris*, but in *C. rileyi* **n**. **sp**. the pronotal sides are only slightly infuscated, whereas those in *C. decusoris* **n**. **sp**. the pronotal sides are broadly dark brown.

## *Description*

***Size***. – Length 4.0 mm. – Width 1.2 mm.

***Form***. – As in Fig. 447.

***Color***. – *Forebody* mostly yellow, upper *frons*, *epicranium* and *pronotal sides* infuscated. – *Antenna* brown. – *Mesothorax* and *abdomen* yellow. – *Metathorax* black. – *Elytra* bicolored, mostly yellow, with 4 brown streaks projecting from anterior margin and two broad brown streaks near posterior region of disc near sutural margin.

***Head***. – *Funicular antennomeres* subquadrate, *capitulum* much longer than combined length of funicular antennomeres (Fig. 114). – Capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eye* narrower than frons (EW/FW 17/24).

***Thorax***. – *Pronotum* (Fig. 225) slightly oblong (PW/PL 53/58), side margin with well-developed tubercle, disc punctures shallow, widely separated, midline of disc glabrous. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5$^{th}$ (EL/EW 160/48).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate long, posterior phallic plate very broad, infuscate in distal region (Fig. 325).

***Variations***. – The available specimens are quite homogeneous.

***Natural History***. – The types were collected during April, at an attitude between 450-550 m.

***Distribution*** (Fig. 388). – Known from Costa Rica.

***Etymology***. – The trivial name, *rileyi*, is a patronymic that honors Edward G. Riley for his many contributions to taxonomic Entomology.

### 59. ***Cregya robusta*** Opitz **n**. **sp**.

(Fig. 100, 226, 326, 381, 448)

ZooBank : http://zoobank.org/D68B97C2-C659-46C3-9BCD-0C2144C398EE

**Holotype**. ♂. Mar de Hespanha, E. Minas-Brazil, 28-I-1909, J. F. Zicán (FMNH).

**Paratypes**. One specimen. – **Brazil**, **Estado do São Paulo**, Valle du Rio Pardo, ?-XII-1898, E. Gounelle (MNHM).

***Diagnosis***. – The robust convexity of the pronotum will distinguish the members of this species from congeners.

## *Description*

***Size***. – Length 5.8 mm. – Width 2.0 mm.

***Form***. – As in Fig. 448.

***Color***. – *Forebody*, *pterothorax*, and *abdomen* black. – *Antenna* mostly black, capitular antennomeres partially testaceous. – *Elytra* mostly dark brown, epipleural margin yellow. – *Legs* bicolorous, *prothoracic femur* mostly black, testaceous distally. – *Mesothoracic* and *metathoracic femora* testaceous, *tibiae* and *tarsi* black.

***Head***. – *Funicular antennomeres* subquadrate (Fig. 100), *capitulum* longer than *funicle* and considerably lengthened, 7$^{th}$ antennomere slightly widened. – Capitular antennomeres 8 and 9 long triangular, antennomere 10 digitiform. – *Eye* narrower than width of frons (EW/FW 25/30).

***Thorax***. – *Pronotum* (Fig. 226) robustly convex, transverse (PW/PL 100/90), side margin with well-developed tubercle, disc coarsely punctated. – *Elytra* with 11 punctiferous striae, punctures small. – Striae end at elytral apex (EL/EW 240/70).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap present, anterior phallic plate long, posterior phallic plate very broad (Fig. 326).

***Variations***. – The paratype shows a testaceous marking on the pronotal anterior angle.

***Natural History***. – The holotype was collected in December.

***Distribution*** (Fig. 381). – Known from Brazil.

***Etymology***. – The trivial name, *robusta*, is a Latin adjective that stems from *robustus* (= strong); with regard to the robust development of the pronotum.

### 60. ***Cregya sina*** Opitz **n**. **sp**.

(Fig. 108, 227, 327, 381, 449)

ZooBank : http://zoobank.org/1B0904EE-97C3-47D6-AE66-DEF4EEC12AE4

**Holotype**. ♂. Brazil, Pará, Jacareacanga, ?-X-1969, F. R. Barrosa (FSCA).

***Diagnosis***. – The narrow diagonal lines stemming from each of the elytral anterior margin proximal to the mesoscutellum will distinguish the members of this species from congeners.

## *Description*

***Size***. – Length 4.5 mm – Width 2.2 mm.

***Form***. – As in Fig. 449.

***Color***. – *Cranium* black, except inner margins of *eyes* testaceous. – *Antenna*, *scape*, *antennal fundus* testaceous, funicular antennomeres bicolored, testaceous and black. – *Prothorax*, *mesothorax*, *femora*, *tibiae*, and *abdomen* testaceous. – *Metathorax* and *tarsi* brown. – *Elytra* bicolorous, mostly testaceous with narrowly outlined oval marking.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 108), antennomere 10 obovate. – *Eye* as wide as frons (EW/FW 30/30).

***Thorax***. – *Pronotum* (Fig. 227) quadrate (PW/PL 85/85), side margin with well-developed tubercle, disc shallowly punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4$^{th}$, punctures end near posterior 1/2 of sutural margin (EL/EW 210/65).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate very short, posterior phallic plate very broad (Fig. 327).

***Natural History***. – The holotype was captured during December.

***Distribution*** (Fig. 381). – Known from Brazil.

***Etymology***. – The trivial name, *sina*, is Latin name derived from *sinus* (= bend); with reference to the peculiar marking on the elytral disc.

### 61. ***Cregya tambopata*** Opitz **n**. **sp**.

(Fig. 109, 175, 328, 381, 450)

ZooBank : http://zoobank.org/4B8B2173-D6E9-4A6D-884E-0FD8239627ED

**Holotype**. ♀. PERU, Madre de Dios, Rio Tambopata Res., 30 km (air), sw Pto. Maldonado, 290 m, 12°50'S 069°20'W. A second label reads: Smithsonian Institution Canopy Fogging Project, T. L. Erwin, et al, colls, 10May84 (04/01/016) (USNM). A third label reads: FOGGING 00017574.

**Paratypes**. 2 specimens.

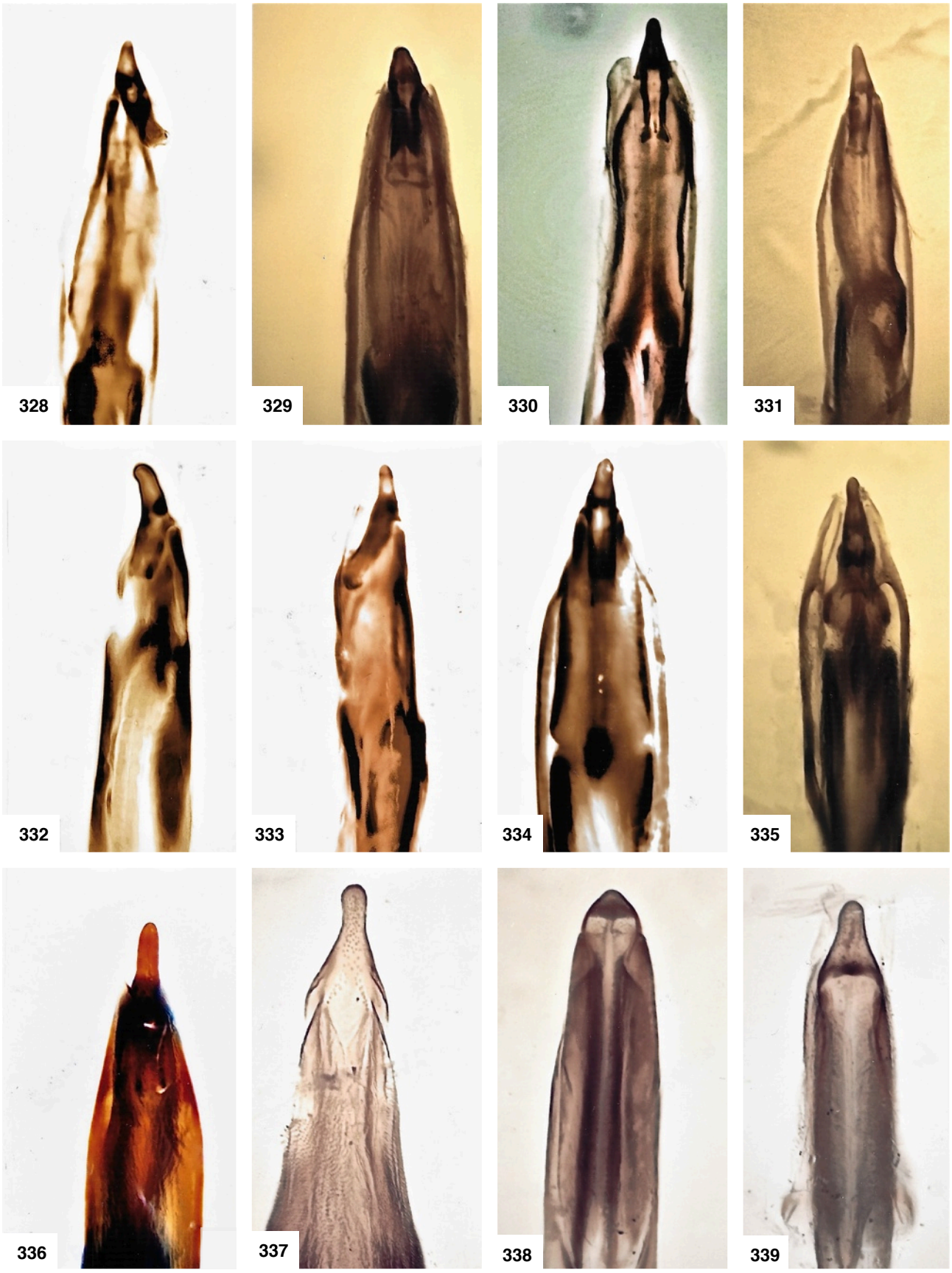



**Fig. 328-339**. - Aedeagi. **(328)** *Cregya tambopata* **n. sp. (329)** *C. turrialba* **n. sp. (330)** *C. urica* **n. sp. (331)** *C. versicula* **n. sp. (332)** *C. vitticeps* (Blanchard, 1844). **(333)** *C. vittipennis* (Schenkling, 1906). **(334)** *C. withlacoochee* Rifkind, 2012. **(335)** *C. yojoa* **n. sp. (336)** *C. zacapa* **n. sp. (337)** *C. castanea* **n. sp. (338)** *C. agnosta* **n. sp. (339)** *C. apanthesa* **n. sp.**

**Peru**

– **Provincia de Tambopata**, Madre de Dios, Rio Tambopata Res., 30 km (air), sw Pto. Maldonado, 290 m, 12°50'S-069°20'W, Smithsonian Institution Canopy Fogging Project, 14-IX-1984, T. L. Erwin (WOPC, 1); – *idem*, 4-IX-1984, T. L. Erwin (USNM, 1).

***Diagnosis***. – Specimens of *C. tambopata* **n**. **sp**. resemble superficially those of *C. aragua* **n**. **sp**., from which they may be conveniently distinguished by showing a black cranium. The cranium is testaceous in specimens of *C. aragua* **n**. **sp**.

## *Description*

***Size***. – Length 3.8 mm. – Width 1.2 mm.

***Form***. – As in Fig. 450.

***Color***. – *Cranium* black, *antenna* bicolorous, mostly dark brown, capitular antennomeres partially or completely yellow. – *Prothorax* and *mesothorax* yellow. – *Metathorax* brown. – *Elytra* bicolorous, mostly yellow, anterior margin and preapical region infuscated. – *Legs* bicolorous, *femora* yellow, *prothoracic tibia* brown, *mesothoracic* and *metathoracic tibiae* yellow, *tarsi* brown.

***Head***. – *Funicular antennomeres* subquadrate, progressively shorter towards capitulum, 4th funicular antennomere slightly expanded, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 109), antennomere 10 obovate. – *Eyes* small, eye narrower than width of frons (EW/FW 17/25).

***Thorax***. – **Pronotum** (Fig. 175) quadrate (PW/PL 60/60), side margin with well-developed tubercle, disc sides shallowly punctate, middle of disc subglabrous. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 3/4th, punctures diminish in posterior region near sutural margin (EL/EW 160/55).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate very long, posterior phallic plate very broad (Fig. 328).

***Variations***. – The available specimens are quite homogeneous.

***Natural History***. – The available specimens were collected by fogging tree-canopy.

***Distribution*** (Fig. 381). – Known from Peru.

***Etymology***. – The trivial name, *tambopata*, is a noun in apposition and refers to the type locality.

### 62. ***Cregya tessara*** Opitz **n**. **sp**.

(Fig. 110, 228, 383, 451)

ZooBank : http://zoobank.org/A51E4F83-F7C6-4DE2-AE1E-1195230FFF2F

**Holotype**. ♀. BOLIVIA, Tarija Dpt. G. Chaco, ca 2 km SW Villamontes, 12-16 December 2011. A second label reads: 21°16'S-63°29'W, Wappes, Bonasco & Morris "Chaco" (MNKM).

***Diagnosis***. – The color characteristics as expressed in Fig. 451 are diagnostic for this species.

## *Description*

***Size***. – Length 4.5 mm. – Width 1.5 mm.

***Form***. – As in Fig. 451.

***Color***. – *Cranium* testaceous. – *Antenna* bicolorous, *scape*, *antennal fundus* yellow, *capitulum* brown. – *Prothorax* mostly testaceous, *pronotum* with 2 black broad stripes. – *Mesothorax*, *pterothorax*, and *abdomen* testaceous. – Each *elytron* with 2 large black maculae that are narrowly outlined in testaceous regions. – *Legs* bicolorous, *femora* mostly testaceous, infuscated distally, *tibia* mostly testaceous, infuscated at extremities, *tarsi* brown.

***Head***. – *Funicular antennomeres* subquadrate, *capitulum* longer than combined length of funicular antennomeres, 7th antennomere conspicuously widened. – Capitular antennomeres 8 and 9 short triangular (Fig. 110), antennomere 10 obovate. – *Eye* slightly wider than frons (EW/FW 22/20).

***Thorax***. – *Pronotum* (Fig. 228) quadrate (PW/PL 63/63), side margin with poorly-developed tubercle, disc coarsely punctated. – *Elytra* with 10 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 190/50).

***Abdomen***. – *Pygidium* scutiform.

***Natural History***. – The holotype was collected during December.

***Distribution*** (Fig. 383). – Known from Bolivia.

***Etymology***. – The trivial name, *tessara*, is a Greek name that stems from *tetra* (= four); with reference to the 4 maculae on the elytral disc.

### 63. ***Cregya turrialba*** Opitz **n**. **sp**.

(Fig. 156, 229, 329, 388, 452)

ZooBank : http://zoobank.org/369E3CB4-02DF-4883-8B5B-134E4B60E0DD

**Holotype**. ♂. COSTA RICA, La Suiza de Turrialba, 1923, Pablo Schild (FSCA).

**Paratypes**. One specimen. – **Panamá**, **Provincia de Chiriquí**, Chiriquí, 11-I-1964, Steve L. Wood (BYUC).

***Diagnosis***. – Elytral disc with large preapical black macula that extends medially into a narrow angular line to the sutural margin (see Fig. 417). This elytral characteristic is found in specimens of *C. abdita* Wolcott, 1927, *C. bilineicolle* (Chevrolat, 1874) **nov**. **stat**., *C. inscripta* (Gorham, 1883), and *C. turrialba* **n**. **sp**. Among this assemblage, *C. turrialba* **n**. **sp**. differs by showing a black pronotum.

## *Description*

***Size***. – Length 4.0 mm. – Width 1.4 mm.

***Form***. – As in Fig. 452.

***Color***. – Testaceous, except *frons* with U-shaped macula, black behind *eyes*, each *elytron* with faint brown spots in basal 1/2, elytral disc with black angular fascia in posterior 2/3rd.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular (Fig. 156), antennomere 10 obovate. – *Eye* narrower than frons (EW/FW 15/34).

***Thorax***. – *Pronotum* (Fig. 229) quadrate (PW/PL 75/75), side margin with well-developed tubercle, disc coarsely punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 200/55).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate long, posterior phallic plate very broad (Fig. 329).

***Natural History***. – The paratype was collected from Panamá during January.

***Distribution*** (Fig. 388) – This species is known from Costa Rica and Panamá.

***Etymology***. – The trivial name, *turrialba*, constitutes a noun in apposition and refers to the type locality.

### 64. ***Cregya urica*** Opitz **n**. **sp**.

(Fig. 111, 230, 330, 383, 453)

ZooBank : http://zoobank.org/F1871877-53EF-4BD0-97EE-5AC10B5D6C2F

**Holotype**. ♂. URICA (Venezuela), m. 200 (Edo. Anzoátegui. A second label reads: 15 VI 1964 Leg. BORDON (FSCA).

***Diagnosis***. – Specimens of this species resemble superficially those of *C. corumba* **n**. **sp**., from which they differ by showing 2 pronotal lines that are connected at the base. The pronotal lines are parallel in specimens of *C. corumba* **n**. **sp**.


**Fig. 340-351**. - Aedeagi. **(340)** *Cregya caraca* **n. sp.** **(341)** *C. chevrolati* Corporaal, 1950. **(342)** *C. variegata* **n. sp.** **(343)** *C. fimbriolata* (Chevrolat, 1843). **(344)** *C. guyanensis* (Chevrolat, 1876). **(345)** *C. hamatilis* **n. sp.** **(346)** *C. kreagris* **n. sp.** **(347)** *C. teretis* **n. sp.** **(348)** *C. ungula* **n. sp.** **(349)** *C. villavera* **n. sp.** **(350)** *C. decima* **n. sp.** **(351)** *C. diffusa* **n. sp.**

### *Description*

***Size***. – Length 4.0 mm. – Width 1.2 mm.

***Form***. – As in Fig. 453.

***Color***. – Testaceous, except *pronotum* slightly infuscated at middle and each *elytron* with brown makings, 3 linear in basal 1/2 and 1 spheroid near *elytral apex*.

***Head***. – *Funicular antennomeres* subquadrate, *capitulum* longer than funicle. – Capitular antennomeres 8 and 9 short triangular (Fig. 111), antennomere 10 obovate. – *Eye* as wide as width of frons (EW/FW 20/20).

***Thorax***. – *Pronotum* (Fig. 230) quadrate (PW/PL 58/58), pronotal sides coarsely punctate, disc sparsely punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5rd (EL/EW 160/50).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate very long, posterior phallic plate very broad (Fig. 330).

***Natural History***. – The holotype was collected during June.

***Distribution*** (Fig. 383). – Known from Venezuela.

***Etymology***. – The trivial name, *urica*, constitutes a noun in apposition and refers to the type locality.

## 65. ***Cregya versicula*** Opitz **n**. **sp**.

(Fig. 162, 231, 331, 382, 454)

ZooBank : http://zoobank.org/14D62324-C0D9-4143-A73E-9A8411BE6C53

**Holotype**. ♂. Quin. Roo, 15-18 km N Tulum (México), X-11,12-1982, J. E. Wappes (FSCA).

**Paratypes**. 17 specimens.

**México**

– **Estado de Veracruz**, Balzapote, near Montepic, 20-V-1983, C. W. & L. O'Brien & G. B. Marshall (JNRC, 1);

– **Estado de Chiapas**, 1 km S Ocasingo, 18-X-1988, J. E. Wappes (ACMT, 1).

***Diagnosis***. – The various markings on the dorsum of these beetles, as depicted in Fig. 454, are diagnostic for this species.

### *Description*

***Size***. – Length 3.7 mm. – Width 1.5 mm.

***Form***. – As in Fig. 454.

***Color***. – *Cranium* black. – *Antenna*, *prothoracic venter*, *pterothorax*, *legs*, and *abdomen* testaceous. – Pronotal anterior 1/2 black, pronotal disc with black spots. – *Elytra* bicolorous, mostly testaceous, anterior 1/2 of disc with 6 small spots, posterior 2/3rd with broad transverse black fasciae.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular (Fig. 162), antennomere 10 obovate. – *Eye* narrower than frons (EW/FW 15/30).

***Thorax***. – Pronotum (Fig. 231) oblong (PW/PL 65/78), side margin with well-developed tubercle, disc uniformly punctate. – Elytra with 9 punctiferous striae, striae end at elytral distal 3/4th (EL/EW 180/50).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate long, posterior phallic plate very broad (Fig. 331).

***Distribution*** (Fig. 382). – This species is known from México.

***Natural History***. – The available specimens were collected throughout the year. Three were taken from branches of a whitemanjack [*Cordia dentata* Poir. (Boraginaceae)]. One was collected in a Malaise trap set in a coffee plantation beneath a grove of a species of *Inga* Mill (Fabaceae).

***Etymology***. – The trivial name, *versicula*, is a Latin noun that relates to *versus* (= line); with reference to the broad black fascia that traverses the elytra near the elytral apex.

## 66. ***Cregya vitticeps*** (Blanchard, 1844)

(Fig. 115, 233, 332, 383, 455)

*Enoplium vitticeps* Blanchard, 1844: 95.

**Lectotype**. Gender not known. Here designated. Rio de Janeiro (Brazil) (MNHN). Corporaal 1950a: 285. Ekis (now Opitz) 1975: 54.

It is not known how many specimens were available when Blanchard made the description of this species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

*Pelonium humerale* Spinola, 1844: 366.

***Diagnosis***. – Specimens of this species resemble superficially those of *C. pannusa* **n**. **sp**., from which they differ by showing a pronotum that is darkly colored. In *C. pannusa* **n**. **sp**. specimens, the pronotum is entirely testaceous.

### *Redescription*

***Size***. – Length 5.0 mm. – Width 1.7 mm.

***Form***. – As in Fig. 455.

***Color***. – Mostly testaceous; cranium black; pronotum, disc dark brown. – Elytra, humeral region broadly black, disc apex broadly black.

***Head***. – Funicle shorter than capitulum (Fig. 115), capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eyes* narrower than frons (EW/FW 20/33).

***Thorax***. – Pronotum (Fig. 233) quadrate (PW/PL 75/75), side margin with well-developed tubercle, disc coarsely punctate, disc with 2 small paralateral umbones; elytra with 10 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 220/60).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad, infuscate in distal region (Fig. 332).

***Variations***. – Size: Length 4.0-5.0 mm; width 1.5-2.0 mm. Except for body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected during April, September, and December.

***Distribution*** (Fig. 383). – In addition to a topotype, I examined 11 specimens:

**Brazil**

– **Estado do Rio de Janeiro**, Rio de Janeiro, collection date and collector not noted;

– **Estado do Santa Catarina**, Salto do Pirahy, Pres Jaragua, ?-?-1915, E. Gounelle;

– **Estado do Paraiba**, River Gauche, ?-IX-1884, P. Germain;

– **Estado do São Paulo**, Itanhaen, 3-IV-1959, Martins-Amante;

– Santos, Guaruja, ?-XI-1955;

– **Estado do Bahia**, Cachimbo, ?-?-1890, Ch. Pujol.

Specimens are deposited in MNHN and WOPC.

## 67. ***Cregya vittipennis*** (Schenkling, 1906)

(Fig. 101, 234, 333, 383, 456)

*Pelonium vittipenne* Schenkling, 1906: 316.

**Lectotype**. ♂. Here designated. Tucuman (Argentina) (MNHN).

**Paralectotype**. One specimen. – **Paraguay** (MNHN). Corporaal 1950a: 285.

Schenkling did not designate a name bearer of this species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.


**Fig. 352-363**. - Aedeagi. **(352)** *Cregya dybasi* **n. sp.** **(353)** *C. furfurosi* **n. sp.** **(354)** *C. gemina* (Schenkling, 1900). **(355)** *C. hexalineata* **n. sp.** **(356)** *C. juxta* **n. sp.** **(357)** *C. mekosa* **n. sp.** **(358)** *C. nebula* **n. sp.** **(359)** *C. nigropunctata* (Chevrolat, 1876). **(360)** *C. stilastichosa* **n. sp.** **(361)** *C. terapoto* **n. sp.** **(362)** *C. tetralineata* **n. sp.** **(363)** *C. jatai* **n. sp.**

***Diagnosis***. – In the key to species, *C. vittipennis* (Schenkling, 1906) is compared to *C. linea* **n**. **sp**., from which *C. vittipennis* (Schenkling, 1906) specimens differ by showing a highly infuscated pronotal disc.

### *Redescription*

***Size***. – Length 5.8 mm. – Width 2.0 mm.

***Form***. – As in Fig. 456.

***Color***. – Mostly ferruginous, *cranium* and *thorax* castaneous. – *Pronotal disc* with two broad black lines. – *Elytral disc* slightly infuscated near mesoscutellum and at middle of disc.

***Head***. – *Funicular antennomeres* subfiliform to subquadrate, *funicle* shorter than length of *capitulum*, capitular antennomeres 8 and 9 triangular (Fig. 101), antennomere 10 obovate. – *Eyes* narrower than width of frons (EW/FW 25/35).

***Thorax***. – *Pronotum* (Fig. 234) quadrate (PW/PL 85/85), side margin with well-developed tubercle, disc coarsely punctate at sides, shallowly punctate at middle. – Elytra with 10 punctiferous striae, punctures end at elytral distal 4/5$^{th}$ (EL/EW 250/60).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate very long, posterior phallic plate very broad, infuscate in distal region (Fig. 333).

***Variations***. – Size: Length 3.8-5.7 mm; width 1.0-1.6 mm. The infuscated markings on the integument vary in intensity.

***Natural History***. – Specimens have been collected throughout the year; one on the water-plantain [*Sagittaria montevidensis* Cham & Schitdl. (Alismataceae)]; one reared from a liana of a species of soapberry Juss. (Sampindaceae), and one reared from dry wood of *Solanum malacoxylon* Sendtn. (Solanaceae).

***Distribution*** (Fig. 383). – In addition to the two types, I examined 32 specimens:

**Bolivia**

– **Departamento de Beni**, 20 km W, Laranjeiras, 3-5-VIII-1964, J. K. Bouseman, J. Lussenhop;

– Rio Itenez, at mouth of Rio Baures, 10-X-1964, J. K. Bouseman.

**Brazil**

– **Estado do Mato Grosso**, Corumba, ?-III-?;

– Mato Grosso, ?-?-1886, P. Germain.

**Paraguay**

– **Departamento Central**, 3 km E Ypacarai, 10-X-1968, C. W. O'Brien;

– **Departamento Caaguazú**, Carumbé, 1-II-8-III-1966, R. Golbach.

**Argentina**

– **Provincia Tucumán**, Tapia, 3-IV-1903, 600 m, G. A. Baer;

– Lacavera, 23-28-XI-1961, M, Aczél;

– **Provincia Formosa**, 22 km SW Formosa, 28-I-1989, on *Sagittaria montevidensis*, C. W. & L. B. O'Brien & G. Wibmer;

– **Provincia Corrientes**, Rio Paraná, Isla Noguera, 30-VIII-1990, emerged from dry liana of Sampindaceae, Di Iorio O;

– **Provincia Buenos Aires**, Villa Rosa, 15-X-1990, emerged from dry wood of *Solanum malacoxylon*, Di Iorio O;

– Isla Martin Garcia, ?-I-1938, M. J. Viana;

– **Provincia Córdoba**, Santa Rosa, 5-X-1905, Lena Schwarlen;

– Alta Gracia, 9-III-1954, Dapuerre.

**Uruguay**

– **Departamento Colonia**, Playa Arenisca, 10-II-1989, C. W. & L. B. O'Brien & G. Wibmer;

– *idem*, 9-I-1979, G. J. & Z. Wibmer.

Specimens are deposited in AMNH, CMNH, IMLA, JNRC, MNHN, USNM, and WOPC.

## 68. ***Cregya withlacoochee*** Rifkind, 2012

(Fig. 102, 235, 334, 375, 457)

*Cregya withlacoochee* Rifkind, 2012: 117.

**Holotype**. ♂. U, S. A., Florida, Dade Co., Everglades Nat. Pk, Long Pine Key, 16-5-1991, R. Morris, halogen lt. (WFBM).

**Paratypes**. 33 specimens deposited in repositories as noted in Rifkind (2012: 118).

***Diagnosis***. – There are 5 species of *Cregya* whose body color is entirely testaceous: *C. andros* **n**. **sp**., *C. inornata* **n**. **sp**., *C. insignata* Pic, 1952, *C. withlocoochee*, and *C. palaga* **n**. **sp**. Male specimens of *C. andros* **n**. **sp**., *C. inornata* **n**. **sp**., and *C. withlocoochee*, are readily distinguished by differences in the aedeagus (compare Figs. 281, 307, 334). *C. withlocoochee*, is known only from Florida, USA. *C. inornata* **n**. **sp**., and *C. palaga* **n**. **sp**. are known from Peru. *C. palaga* **n**. **sp**. specimens may be distinguished from *C. insignata* Pic, 1952 specimens by showing a unicolorous antennal capitulum. The antennal capitulum is bicolorous in specimens of *C. insignata* Pic, 1952.

***Description***. – This species (Figs. 102, 235, 334, 375, 457) was comprehensively described by Rifkind (2012: 117).

***Distribution*** (Fig. 457). – In addition to examination of most of the types, I examined 12 specimens from:

**United States of America**

– **Florida**, Monroe County, Big Pine Key, Key Deer Refuge, Palm Avenue, 29-VI-6-VII-1988, Malaise trap, M. Hennessey;

– Key Largo, collection date and collector not noted;

– Highland County, Lake Placid, Archbold Biological Station, 3-V-1997, Mercury Vapor Light, Vince Golia;

– *idem*, 20-V-1995, burned oak, Skillman & Heffern;

– *idem*, 19-V-1986, M. Deyrup;

– Dade County, Everglade National Park, Royal Palm Hammock, 10-11-V-1990, sawgrass prairie, E. G. Riley;

– Miami, 2-IV-1921, J. N. Knull;

– *idem*, collection date and collector not noted; Indian River County, SR 512, 0.5 miles W I-95, 3-9-IX-1975, Florida Medical Entomology Laboratory;

– Vero Beach, 12-VI-1975, at light, M. C. Thomas;

– Charlotte County, 9-V-1990, J. Huether.

Specimens are deposited in CASC, CMNH, CSCA, FMNH, FSCA, FWSC, JPHC, LACM, JNRC, RHTC, TAMU, WFBM, and WOPC.

## 69. ***Cregya yojoa*** Opitz **n**. **sp**.

(Fig. 112, 232, 335, 389, 458)

ZooBank : http://zoobank.org/19F7F7F9-3AE3-40AC-B8BD-068B842CE12B

**Holotype**. ♂. Honduras, Comayagua, S end Lago de Yojoa, 20-VII-1977, C. W. O'Brien (FSCA).

**Paratypes**. 13 specimens.

**Belize**

– **Distrito de Stann Creek**, mile 13 Southwestern Highway, 19-VIII-1977, C. W. & L. O'Brien & Marshall (WOPC, 1).

**Honduras**

– **Departamento de El Paraiso**, El Zamorano, 25-VII-1977, L. B. & C. W. O'Brien, & G. B. Marshall (WOPC, 1);

– 5 km NW Taulabe, Rio Jaitique, 2-VIII-1977, O'Briens & Marshall (WOPC, 1);

– **Departamento de Atlantida**, Lancetilla Botanical Gardens, 27-V-1993, M. C. Thomas (FSCA, 1);


**Fig**. **364-373**. - Aedeagi. **(364)** *Cregya inscripta* (Gorham, 1883). **(365)** *C. asarota* **n**. **sp**. **(366)** *C. catoma* **n**. **sp**. **(367)** *C. confluens* (Gorham, 1877). **(368)** *C. egeri* **n**. **sp**. **(369)** *C. kraatzi* (Schenkling, 1900). **(370)** *C. morrisi* **n**. **sp**. **(371)** *C. sexnotata* (Klug, 1842). **(372)** *C. trilineata* **n**. **sp**. **(373)** *C. verticula* **n**. **sp**.

– **Departamento de Yoro**, 7 km SW Guaymitas, 15-XI-1987, taken on *Cordia dentata* (Boraginaceae), R. D. Cave (RDCC, 3; WOPC, 2);

– **Departamento de Francisco Morazán**, Escuela de Agricultura Panamericana, El Zamorano, 7-II-1988, R. D. Cave (RDCC, 1; WOPC, 1);

– Zamorano, 13-VI-2003, R. Turnbow (RHTC, 1);

– San Antonio de Oriente, El Zamorano, 15-22-III-1990, Malaise trap in coffee plantation beneath *Inga,* R. Cave (RDCC, 1).

***Diagnosis***. – Specimens of this species resemble superficially those of *C. versicula* **n. sp**., from which they differ by showing much less intensive markings on the pronotum and elytral disc.

### *Description*

***Size***. – Length 4.0 mm. – Width 1.3 mm.

***Form***. – As in Fig. 458.

***Color***. – *Cranium* black. – *Antenna*, *prothoracic venter*, *pterothorax*, *legs*, and *abdomen* testaceous. – Pronotal anterior 1/2 castaneous, pronotal disc with castaneous spots. – *Elytra* bicolorous, mostly testaceous, anterior 1/2 of disc with brown spots, posterior 2/3rd with broad transverse castaneous fascia.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular (Fig. 112), antennomere 10 obovate. – *Eye* narrower than frons (EW/FW 15/30).

***Thorax***. – *Pronotum* (Fig. 232) quadrate (PW/PL 70/70), side margin with well-developed tubercle, disc coarsely punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 170/45).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate short, posterior phallic plate very broad (Fig. 335).

***Distribution*** (Fig. 389). – This species is known from Honduras and Belize.

***Natural History***. – The available specimens were collected throughout the year. Three were taken from branches of a whitemanjack [*Cordia dentata* Poir. (Boraginaceae)]. One was collected in a Malaise trap set in a coffee plantation beneath a grove of a species of *Inga* Mill (Fabaceae).

***Etymology***. – The trivial name, *yojoa*, constitutes a noun in apposition and refers to the type locality.

### 70. ***Cregya zacapa*** Opitz **n. sp.**

(Fig. 113, 236, 336, 389, 459)

ZooBank : http://zoobank.org/F7B40E7A-35C3-4D1E-AB07-F384FF615784

**Holotype**. ♂. Guatemala, Zacapa, Usumatlán, 11-III-1959, at light, J. W. Graber (FSCA).

***Diagnosis***. – The mostly castaneous elytral disc, which shows an angular fascia in elytral posterior 2/3rd, is diagnostic for specimens of this species.

### *Description*

***Size***. – Length 5.0 mm. – Width 1.2 mm.

***Form***. – As in Fig. 459.

***Color***. – *Forebody* and *pterothorax* black. – *Antenna*, *legs*, and *abdomen* testaceous. – *Elytra* bicolorous, slightly infuscated near *mesoscutellum*, posterior 2/3rd with short angular fasciae.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular (Fig. 113), antennomere 10 obovate. – *Eye* narrower than frons (EW/FW 15/35).

***Thorax***. – *Pronotum* (Fig. 236) quadrate (PW/PL 70/70), side margin with well-developed tubercle, disc with 5 punctiform tumescenses. – *Elytra* with 10 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 220/60).

***Abdomen***. – Phallic post-apical flap present, anterior phallic plate long, posterior plate broad (Fig. 336).

***Natural History***. – The holotype was collected in March, at light.

***Distribution***(Fig. 389). – Known from Guatemala.

***Etymology***. – The trivial name, *zacapa*, is a noun in apposition and refers to the type locality.

## The *castanea* species group

The specimens of this monotypic group show oval elytral asetiferous punctures, and the phallic plates are divided. *Cregya castanea* **n. sp.** is known from Ecuador.

### 71. ***Cregya castanea*** Opitz **n. sp.**

(Fig. 144, 238, 337, 383, 460)

ZooBank : http://zoobank.org/4C8F1ACE-C9B0-4470-B37B-D4EA679CA39F

**Holotype**. ♂. Ecuador: Provincia Pichincha, Pichincha, 10-XII-2016, Jim McClarin (QCAZ).

***Diagnosis***. – The oval asetiferous punctures on the disc of the elytra will distinguish the members of this species from congeners.

***Size***. – Length 7.0 mm. – Width 2.5 mm.

***Form***. – As in Fig. 460.

***Color***. – *Castaneous*, except each *elytron* with two black angular fasciae, one fascia in post-humeral region, one fascia behind elytral middle.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum (Fig. 144), *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular, antennomere 10 obovate. – *Eye* considerably narrower than width of frons (EW/FW 26/50).

***Thorax***. – *Pronotum* (Fig. 238) quadrate (PW/PL 115/115), side margin with well-developed tubercle, disc sides coarsely punctate, middle of disc with small tumescences. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 2/3rd (EL/EW 320/85).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic plate divided, phallobasic apodeme short, narrow (Fig. 337).

***Natural History***. – The holotype was captured during December.

***Distribution***(Fig. 383). – Known from Ecuador.

***Etymology***. – The trivial name, *castanea*, is a Latin name with a meaning of "chestnut colored"; in reference to the color of this beetle.

## The *chevrolati* species group

This species group is defined by the keel-like shape of the phallobasic apodeme. The group contains 5 species whose combined geographic distribution extends from México to Brazil.

### 72. ***Cregya agnosta*** Opitz **n. sp.**

(Fig. 116, 237, 338, 383, 461)

ZooBank : http://zoobank.org/5708629D-09E4-42E2-B400-A03D938150C2

**Holotype**. ♂. Venezuela, Aragua, Rancho Grande, 26-V-1968, C. Bordon (FSCA).

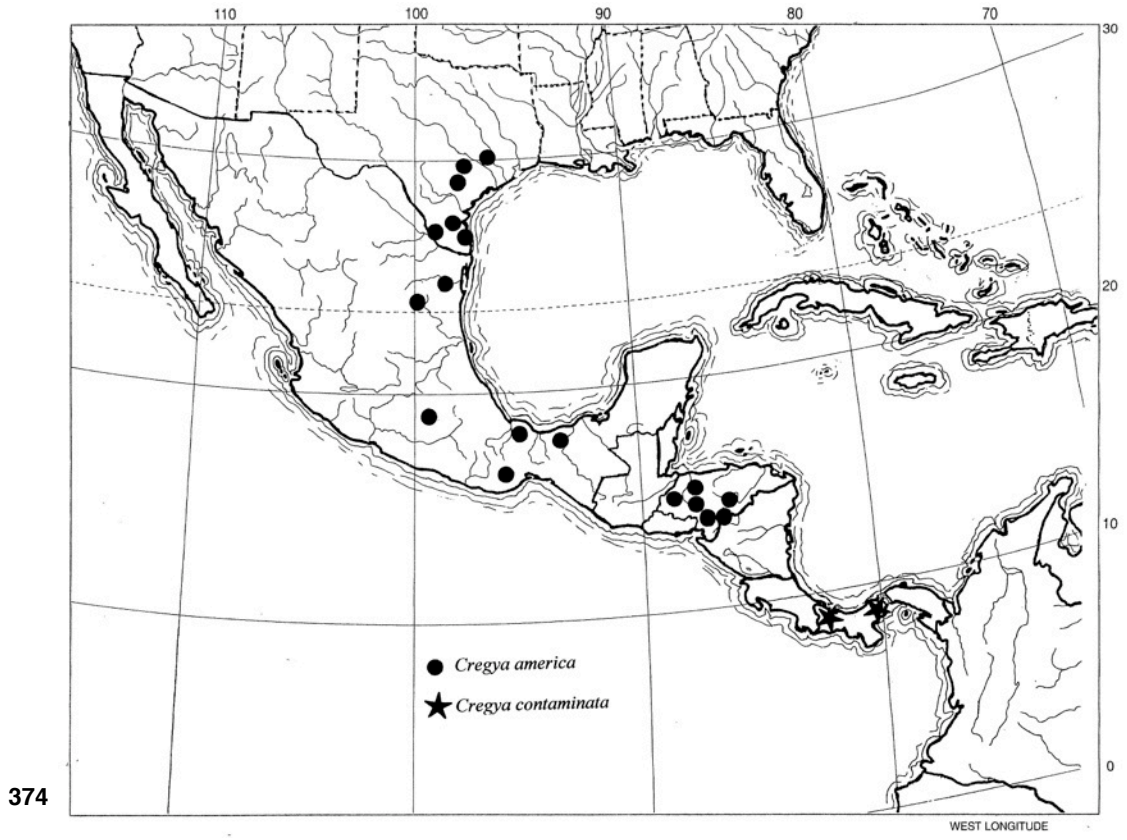
**Paratypes**. 4 specimens.

**Venezuela**

– **Estado de Aragua**, Rancho Grande, 26-V-1968, C. Bordón (WOPC, 2);

– **Estado de Bolivar**, Ptari-Tepui, 30 miles N Kavanayen, 17-19-VIII-1970, 1800 m R. E. Dietz, IV (WOPC, 1);

– "Venezuela" (MNHN, 1).

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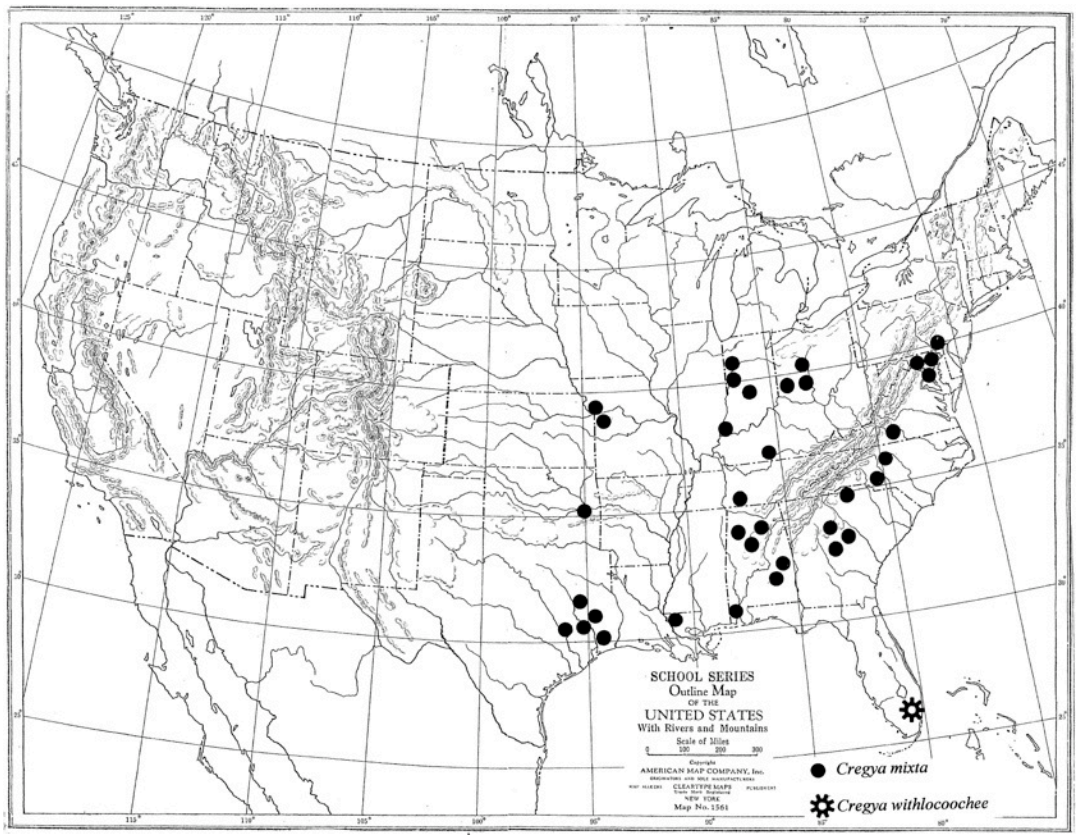



**375**

**Fig**. **374-375**. - Geographic distribution of *Cregya* species as noted.

***Diagnosis***. – *C. agnosta* **n**. **sp**. specimens differ from superficially similar specimens of *C. ferratilis* **n**. **sp**. by showing brown spots on the elytra disc. *C. ferratilis* **n**. **sp**. specimens show an angular black oblique line at the posterior 2/3rd of the elytral disc.

## *Description*

***Size***. – Length 6.0 mm. – Width 2.0 mm.

***Form***. – As in Fig. 461.

***Color***. – Testaceous, except each elytral disc with 3 sets of brown markings, 2 spots along anterior margin, 2 in front of middle, 2 behind middle.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular (Fig. 116), antennomere 10 obovate. – *Eye* narrower than width of frons (EW/FW 20/35).

***Thorax***. – *Pronotum* (Fig. 237) quadrate (PW/PL 80/80), side margin with well-developed tubercle, disc sides coarsely punctate, middle of disc smooth. – *Elytra* with 10 punctiferous striae, punctures small, striae end at elytral distal 2/3rd (EL/EW 225/75).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex broad triangular, phallobasic apodeme keel-shaped (Fig. 338).

***Variations***. – The light brown spots on the elytral disc vary in prominence.

***Natural History***. – Specimens were captured during May and August, one at 1,800 m.

***Distribution*** (Fig. 383). – Known from Venezuela.

***Etymology***. – The trivial name, *agnosta*, is a Greek adjective derived from *agnostus* (= obscure); with reference to the obscure coloration of the elytral disc.

### 73. ***Cregya apanthesa*** Opitz **n**. **sp**.

(Fig. 126, 239, 339, 389, 462)

ZooBank : http://zoobank.org/03AA7D26-02BE-4EFB-8C57-3F9F12E0A8A0

**Holotype**. ♀. MÉXICO, Ver. 250', Los Tuxtlas, Biol Sta., UNAM, 21 May 1983, C. & L. O'Brien & G. Marshall (FSCA).

**Paratypes**. 11 specimens.

**México**

– **Estado de Vera Cruz**, Los Tuxtlas Biological Station, 19-V-1983, C. & L. O'Brien & G. Marshall (JNRC, 1; WFBM, 1);
– *idem*, 20-V-1983, C. & L. O'Brien & G. Marshall (WOPC, 1);
– *idem*, 21-V-1983, C. & L. O'Brien & G. Marshall (WOPC, 1);
– *idem*, 20-30-IV-1991, F. Hovore (JNRC, 1; WFBM, 1);
– *idem*, 27-VII-1990, 250 m, J. Doyen (EMEC, 1);
– *idem*, 30 km NE Catemaco, 19-20-IV-2007, beating in forest, R. L. Wescott (WFBM,1);
– 4 km N Alvarado, 28-IV-1991, F. Hovore (WOPC, 1);
– Veracruz, vicinity Bastinol, 5-V-1994, J. E. Wappes (ACMT, 1);
– Lake Catemaco, 1-2-V-1969, Bright & Campbell (CNCI, 1).

***Diagnosis***. – Specimens of this species resemble superficially those of *C. rifkindi* **n**. **sp**., from which they differ by showing infuscations on the pronotal disc. The pronotum is entirely yellow in *C. rifkindi* **n**. **sp**. specimens.

## *Description*

***Size***. – Length 5.5 mm. – Width 2.0 mm.

***Form***. – As in Fig. 462.

***Color***. – Testaceous, except *cranial* upper frons black. – *Antenna* brown, *pronotum* with black streak on anterior half of side margin and disc broadly black at middle, *pterothorax* black, each *elytral disc* faintly brown in basal region of sutural margin, *prothoracic leg* mostly black.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres (Fig. 126), funicular antennomere 4 explanate, capitular antennomeres 8 and 9 triangular, antennomere 10 long obovate. – *Eye* broader than width of frons (EW/FW 35/25).

***Thorax***. – *Pronotum* (Fig. 239) slightly oblong (PW/PL 83/90), side margin with well-developed tubercle, disc coarsely punctate. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 225/75).

***Abdomen***. – Pygidium scutiform. – Phallic post-apical flap absent, phallic apex triangular, phallobasic apodeme short keel-shaped (Fig. 339).

***Variations***. – Size: Length 4.0-5.0 mm; width 1.5-2.0 mm. Except for body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were captured during April, May, and July, some at altitudes between 76-250 m.

***Distribution*** (Fig. 389). – Known from México.

***Etymology***. – The trivial name, *apanthesa*, is a Greek adjective derived from *apanthesis* (= fading); with reference to the obscure coloration of the elytral disc.

### 74. ***Cregya caraca*** Opitz **n**. **sp**.

(Fig. 117, 240, 340, 383. 463)

ZooBank : http://zoobank.org/AD829EDE-4492-4A2B-ABF1-5B142EDF4C33

**Holotype**. ♂. Caraça (Minas Geraez), Bresil (Minas Gerais, Brazil) E. Gounelle, 12.1885 (MNHN).

***Diagnosis***. – Specimens of this species resemble superficially those of *C. quadrisignata* (Spinola, 1844), from which they differ by showing the basal and preapical brown maculae extend the full width of the elytral disc. In *C. quadrisignata* (Spinola, 1844) specimens these dark areas are abbreviated and do not cross the full length of the elytral disc.

## *Description*

***Size***. – Length 4.5 mm. – Width 1.5 mm.

***Form***. – As in Fig. 463.

***Color***. – Ferruginous, except *frons* and *epicranium* black, *antenna* brown, pronotal collar infuscated, each *elytron* with black patch near anterior margin and posteriorly before the *elytral apex*, *prothoracic tibiae* and *tarsi* brown, *abdomen* brown.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 117), antennomere 10 long obovate. – *Eye* wider than width of frons (EW/FW 25/20).

***Thorax***. – *Pronotum* (Fig. 240) transverse (PW/PL 70/60), side margin with well-developed tubercle, disc coarsely punctate at sides, glabrous at middle. – *Elytra* with 9 punctiferous striae, striae end at elytral distal 4/5th (EL/EW 210/60).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex triangular, phallobasic apodeme keel-shaped (Fig. 340).

***Distribution*** (Fig. 383). – Known from Brazil.

***Etymology***. – The trivial name, *caraca*, constitutes a noun in apposition and refers to the type locality.

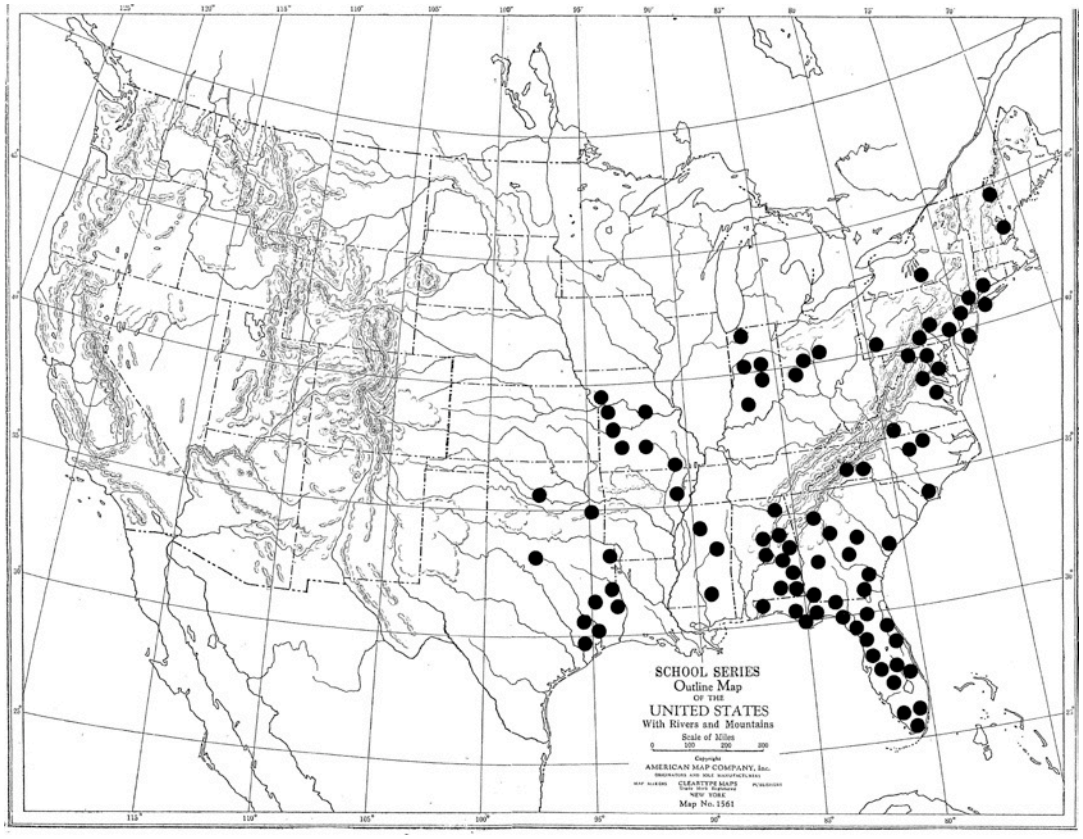
### 75. ***Cregya chevrolati*** Corporaal, 1950b

(Fig. 127, 241, 341, 383, 464)

*Pelonium circumcinctum* Chevrolat (nec Spinola, 1844: 363), 1874: 328.

**Lectotype**. ♂. Brasilia (Brazil), (MNHN). Corporaal 1950a: 279; 1950b: 94.

Chevrolat did not indicate the number of specimens that were before him when he made his description. Therefore, I invoke

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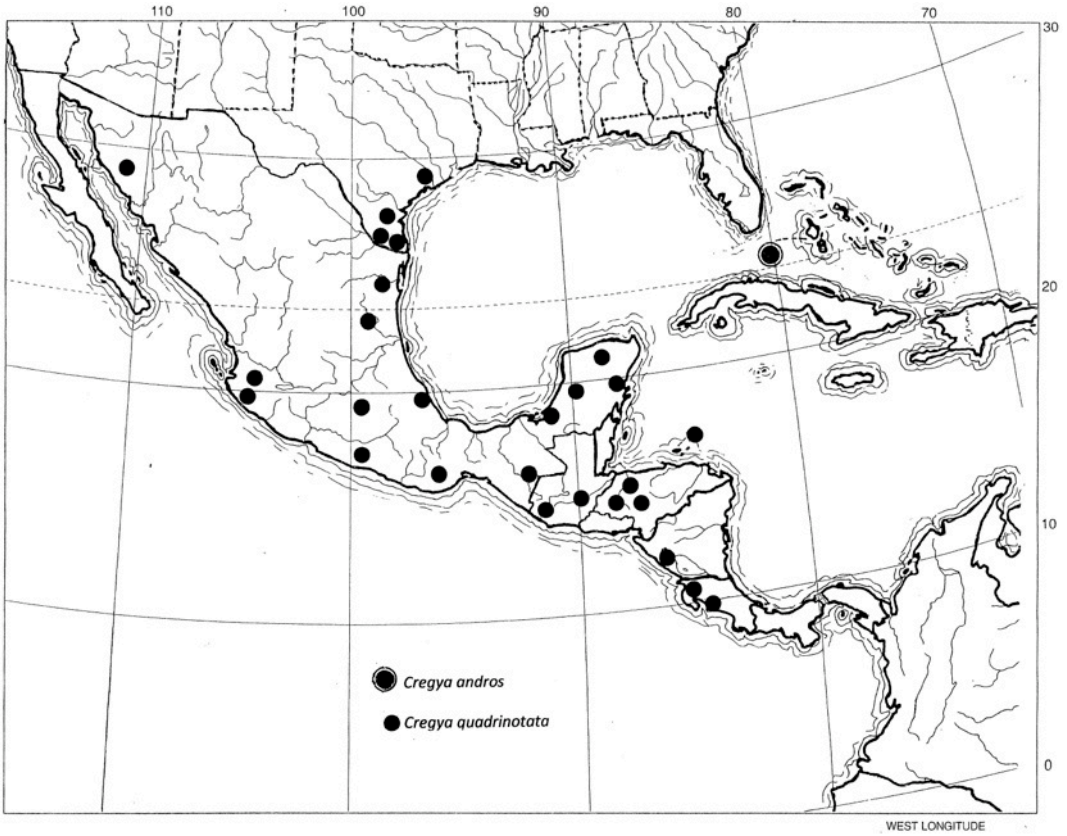


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**Fig**. **376-377**. - Geographic distribution of *Cregya* species as noted.

Recommendation 73F of the ICZN (1999) and designate a lectotype.

*Pelonium conforme* Chevrolat, 1876: 40. **nov**. **syn**.

*Pelonium subapicale* Schenkling, 1900: 403. **nov**. **syn**.

***Diagnosis***. – In the key to species *C. chevrolati* Corporaal, 1950 is aligned with *C. mocagua* **n**. **sp**., from which *C. chevrolati* Corporaal, 1950 specimens differ by showing a much more yellowish pronotal disc.

### *Redescription*

***Size***. – Length 5.5 mm. – Width 1.8 mm.

***Form***. – As in Fig. 464.

***Color***. – Mostly testaceous. – *Cranium*, *frons* and postgenae black. – *Antenna* brown, capitular antennomeres partly yellow. – *Thorax* and *legs* yellow, except anterior margin of *prothoracic tibia* infuscated. – *Elytra* mostly dark brown, epipleural and sutural margins and *elytral apex* yellow.

***Head***. – *Funicle* shorter than length of capitulum (Fig. 127), capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eyes* as wide frons (EW/FW 22/22).

***Thorax***. – *Pronotum* (Fig. 241) quadrate (PW/PL 65/65), side margin with well-developed tubercle, disc shallowly punctate at sides, middle of disc subglabrous. – *Elytra* with 10 punctiferous striae, striae end at elytral distal 2/3rd near sutural and epipleural margins (EL/EW 210/65).

***Abdomen***. – Phallic post-apical flap absent, phallus not divided. – Phallobasic *apodeme* keel-shaped (Fig. 341).

***Variations***. – Size: Length 3.8-5.5 mm; width 1.2-1.8 mm. The infuscations on the anterior margin of the elytral disc varies in extent of presence. The center of the elytral disc may be testaceous or variously dark brown behind the humeral angle.

***Natural History***. – Specimens were collected during November, December, and January.

***Distribution*** (Fig. 383). – In addition to the types, I examined 18 specimens from:

**Brazil**

– **Estado do Mato Grosso**, ?-?-1886, P. Germain;
– **Estado do Rio de Janeiro**, Tejuka, ?-I-1857, H. Clark;
– **Estado do Goiás**, Mineiro, ?-?-1912, H. Donckier;
– **Estado do Bahia**, San Antonio da Barra, 11-XII-1988, Gounelle;
– Itapetinga, ?-XI-1969, M. Alvarenga;
– **Estado do Espirito Santo**, Linhares, ?-IX-1973, M. Alvarenga;
– **Estado do Minas Gerais**, Pedra Azul, ?-XI-1974, M. Alvarenga.

Specimens are deposited in: CMNH, MNHN, and WOPC.

***Notes***. – Corporaal (1950a: 279) lists *Cregya conformis* Chevrolat aberration *centomaculata* Chevrolat and *Cregya conformis* Chevrolat aberration *limbatipessis* Corporaal under *C. conformis* Chevrolat. I did not find specimens that belong to these aberrational names.

#### 76. ***Cregya variegata*** Opitz **n**. **sp**.

(Fig. 151, 242, 342, 383, 465)

ZooBank : http://zoobank.org/2FA03FCD-8496-4893-82DD-C548E88AAA5D

**Holotype**. ♂. Serra de Communaty, Pernambuco (Brazil) E. Gounelle, 12.3.1893 (MNHN).

***Diagnosis***. – The peculiar markings on the notum of these specimens, as noted in Fig. 465, are diagnostic for specimens of this species.

### *Description*

***Size***. – Length 4.3 mm. – Width 1.7 mm.

***Form***. – As in Fig. 465.

***Color***. – Testaceous, except *frons* and *epicranium* with dark brown markings, *antennal capitulum* brown, *pronotal disc* with a wide brown vitta, each *elytron* with brown markings at base, at middle and at posterior 1/3rd.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 151), antennomere 10 obovate – *Eye* wider than width of frons (EW/FW 30/18).

***Thorax***. – *Pronotum* (Fig. 242) slightly transverse (PW/PL 70/65), side margin with well-developed tubercle, disc coarsely punctate at sides, glabrous at middle. – *Elytra* with 10 punctiferous striae, striae end at elytral distal 3/4th (EL/EW 200/60).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex triangular, phallobasic *apodeme* keel-shaped (Fig. 342).

***Distribution*** (Fig. 383). – Known from Brazil.

***Etymology***. – The trivial name, *variegata*, is a Latin adjective that stems from *variegatus* (= different sorts of color); with reference to the color patterns on the elytra of this beetle.

## The *fimbriolata* species group

This species group is characterized by specimens that have the elytral asetiferous punctures concentrated in the humeral region. There are 14 species in this group whose combined geographical distribution extends from Costa Rica to Brazil.

#### 77. ***Cregya ametra*** Opitz **n**. **sp**.

(Fig. 123, 243, 383, 466)

ZooBank : http://zoobank.org/F272D99F-310E-4F5C-9565-06A798B0D431

**Holotype**. ♀. BOLIVIA, S. Cruz Dept. 4 k N Bermejo, 11-17-December, 2012, Wappes & Skillman. A second label reads: Refugio los Volcanes, 1806S 6336W, 1045-1350 m (MNKM).

***Diagnosis***. – Within the *fimbriolata* (Chevrolat, 1843) species group only in specimens of *C. ametra* **n**. **sp**. do we find black spots on the elytral disc. Also, the available specimen of this species represents the largest body size (8 mm) among the known species of *Cregya*.

### *Description*

***Size***. – Length 8.0 mm. – Width 3.0 mm.

***Form***. – As in Fig. 466.

***Color***. – Testaceous, except each *elytron* with 3 small black marks, 2 extending posteriorly from elytral basal margin, one punctiform mark near middle of elytral disc.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular (Fig. 123), antennomere 10 obovate. – *Eye* as wide as width of frons (EW/FW 40/40).

***Thorax***. – *Pronotum* (Fig. 243) slightly oblong (PW/PL 115/122), side margin with well-developed tubercle, disc coarsely punctate at sides, glabrous at middle. – Elytral asetiferous punctures punctulate, punctures concentrated in humeral region (EL/EW 225/75).

***Abdomen***. – Pygidium scutiform.

***Distribution*** (Fig. 383). – Known from Bolivia.

***Etymology***. – The trivial name, *ametra*, is a Greek adjective meaning "large"; with regard to the comparatively large body size of these beetles.

*Faunitaxys*, **7(15)**, 2019: 1 – 126.


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**379**

**Fig. 378-379**. - Geographic distribution of *Cregya* species as noted.

78. ***Cregya assumenta*** Opitz **n. sp.**

(Fig. 118, 244, 384, 467)

ZooBank : http://zoobank.org/7DE1974B-B48D-45A3-A379-30DDE79D85F8

**Holotype**. ♀. Colombia, Bogota (MNHN).

***Diagnosis***. – Integument mostly castaneous and each elytral disc with 2 irregular brown maculae are characteristics that will distinguish the members of this species within the *fimbriolata* (Chevrolat, 1843) species group.

### *Description*

***Size***. – Length 6.5 mm. – Width 2.3 mm.

***Form***. – As in Fig. 467.

***Color***. – Ferruginous, except *pronotum* brown paralaterally and each *elytral disc* with 2 brown marks, one at basal 1/2, one behind middle.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 118), antennomere 10 long obovate. – *Eye* narrower than width of frons (EW/FW 23/35).

***Thorax***. – *Pronotum* (Fig. 244) quadrate (PW/PL 85/85), side margin with well-developed tubercle, disc coarsely punctate at sides, glabrous at middle. – Elytral asetiferous punctures concentrated in humeral region (EL/EW 225/75).

***Abdomen***. – *Pygidium* scutiform.

***Distribution*** (Fig. 384). – Known from Colombia.

***Etymology***. – The trivial name, *assumenta*, is a Latin noun derived from *assumentum* (= patch); with regard to the dark patches on the elytral disc.

79. ***Cregya cariari*** Opitz **n. sp.**

(Fig. 136, 245, 388, 468)

ZooBank : http://zoobank.org/8D07EF03-29D2-4AE2-8B06-F9511F287AB7

**Holotype**. ♀. Sector Cocori, 30 km al N de Cariari, Prov Limón, COSTA RICA, 100 m, Dic 1993, E. Rojas, LN 286000-567500 #2495 (FSCA).

**Paratypes**. 2 specimens.

**Costa Rica**

– **Provincia de Cartago**, Turrialba, 2-VI-1951, O.L. Cartwright (USNM).

**Panamá**

– **Provincia de Bocas del Toro**, 16.5 km W Punta Peña, 22-II-1999, R. Turnbow (RHTC).

***Diagnosis***. – The short transverse dark brown fascia at the middle of the elytral disc will distinguish the members of this species within the *fimbriolata* (Chevrolat, 1843) species group.

### *Description*

***Size***. – Length 5.2 mm. – Width 2.0 mm.

***Form***. – As in Fig. 468.

***Color***. – Testaceous, except *antenna* mostly brown, capitular antennomeres partially yellow, *pronotum* ferruginous, each elytron with 3 black markings, 2 near anterior margin, one transverse at middle, *prothoracic* and *metathoracic tibiae* and *tarsi* brown.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 136), antennomere 10 long obovate. – *Eye* as wide as width of frons (EW/FW 27/27).

***Thorax***. – *Pronotum* (Fig. 245) transverse (PW/PL 80/70), side margin with well-developed tubercle, disc coarsely punctate at sides, glabrous at middle. – Elytral asetiferous punctures concentrated in humeral region (EL/EW 210/70).

***Abdomen***. – *Pygidium* scutiform.

***Distribution*** (Fig. 388). – Known from Costa Rica and Panamá.

***Etymology***. – The trivial name, *cariari*, is a noun in apposition and refers to the type locality.

80. ***Cregya caruaru*** Opitz **n. sp.**

(Fig. 128, 246, 384, 469)

ZooBank : http://zoobank.org/509DF549-0F08-4789-8927-8BA9F8647956

**Holotype**. ♀. Brazil, 900 m, Pernambuco, Caruaru, IV-1972, Moacir Alvarenga (FSCA).

**Paratypes**. One specimen. – **Brazil**, **Estado do Pernambuco**, Caruaru, ?-IV-1972, Moacir Alvarenga (WOPC, 1).

***Diagnosis***. – The members of this species resemble superficially those of *C. nebula* **n. sp.**, from which they are distinguished by color of the antenna. The antenna is testaceous in specimens of *C. caruaru* **n. sp.** and brown in those of *C. nebula* **n. sp.**

### *Description*

***Size***. – Length 4.5 mm. – Width 2.0 mm.

***Form***. – As in Fig. 469.

***Color***. – Testaceous, except each *elytron* with 4 black markings, 2 near anterior margin, 2 behind elytral middle.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 128), antennomere 10 obovate. – *Eye* slightly narrower than width of frons (EW/FW 27/30).

***Thorax***. – *Pronotum* (Fig. 246) transverse (PW/PL 85/75), side margin with well-developed tubercle, disc coarsely punctate at sides, glabrous at middle. – Elytral asetiferous punctures concentrated in humeral region (EL/EW 220/75).

***Abdomen***. – *Pygidium* scutiform.

***Distribution*** (Fig. 384). – Known from Brazil.

***Etymology***. – The trivial name, *caruaru*, constitutes a noun in apposition and refers to the type locality

81. ***Cregya fimbriolata*** (Chevrolat, 1843)

(Fig. 21, 38, 39, 119, 247, 343, 384, 470)

*Enoplium fimbriolatum* Chevrolat, 1843: 35. Brasilia (Brazil), Dom. A. Pomponii.

**Lectotype**. ♀. Here designated (MNHN). Corporaal 1950a: 280.

It is not known how many specimens were available when Chevrolat made the description of this species, therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

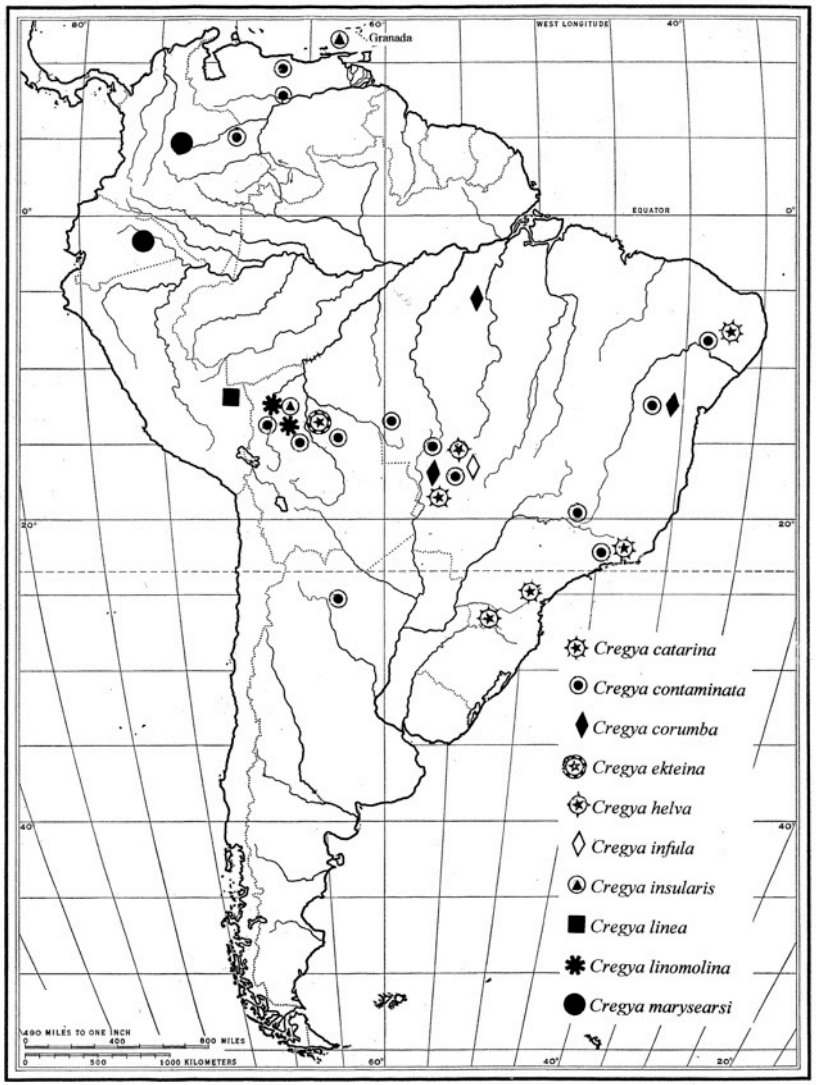
***Diagnosis***. – Each elytron with 2 red-brown maculae encircled in black. This characteristic will distinguish the members of this species from congeners.

### *Redescription*

***Size***. – Length 7.0 mm – Width 2.7 mm.

***Form***. – As in Fig. 470.

***Color***. – Testaceous, except posterior region epicranium and region behind *eyes* dark brown, *pterothorax* and *abdomen* brown, and each *elytron* with 2 large castaneous spots outlined in dark brown.

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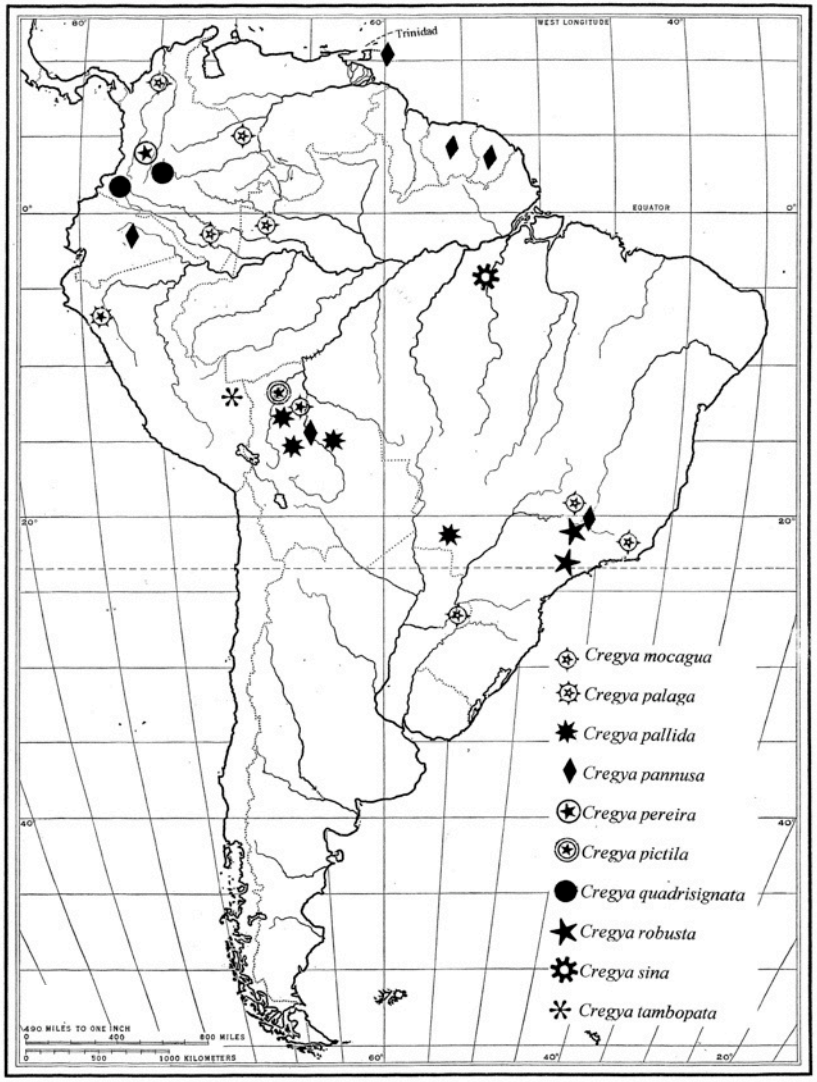


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**Fig. 380-381**. - Geographic distribution of *Cregya* species as noted.

***Head***. – *Funicle* shorter than *capitulum*, capitular antennomeres 8 and 9 triangular (Fig. 119), antennomere 10 obovate. – *Eyes* slightly narrower than width of frons (EW/FW 28/30).

***Thorax***. – *Pronotum* (Fig. 247) quadrate (PW/PL 90/90), side margin with well-developed tubercle, disc coarsely punctate at sides, punctulate at middle. – Elytral asetiferous punctures concentrated in humeral region (EL/EW 290/90).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex triangular. – Phallobasic apodeme narrow (Fig. 343).

***Variations***. – Size: Length 5.8-8.0 mm; width 1.8-3.0 mm. Except for body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected throughout the year.

***Distribution*** (Fig. 384). – In addition to the lectotype, I examined 24 specimens from:

**Brazil**

– **Estado do Minas Gerais**, Caraça, ?-?-1884, P. Germain; Vila Monte Verde, 17-I-1961, J. Halik;
– *idem*, 5-I-1912, J. Halik;
– *idem*, 5-XII-1964, J. Halik;
– *idem*, 15-XI-1965, J. Halik;
– *idem*, 14-IV-1960;
– *idem*, 18-II-1969, J. Halik;
– *idem*, 1-XII-1961, J. Halik;
– **Estado do São Paulo**, Campos Jordão, ?-II-1963, J. Halik;
– *idem*, 17-X-1959, J. Halik;
– *idem*, 5-I-1960, J. Halik;
– San Jose, S. Bocaine, ?-XI-1969, Moacir Alvarenga;
– **Estado do Rio de Janeiro**, Nova Friburgo, ?-II-1884, P. Germain.

Specimens are deposited in MNHN, USNM, WFBM, and WOPC.

***Notes***. – There is a discrepancy in the name of this species as reported in the original description (*fimbriolatum*) and as indicated on the type label (*fimbriatum*). Herein, I follow the name as published in the description. I examined the lectotype during 1974, at which time I chose a homotype, upon which this description is based.

### 82. ***Cregya goias*** Opitz **n**. **sp**.

(Fig. 120, 248, 384, 471)

ZooBank : http://zoobank.org/3608CCC5-23E6-465C-8010-AB821AB1C2E9

**Holotype**. ♀. Jatahy, GOYAZ (Jatai Goias, Brazil) (MNHN).

**Paratypes**. One specimen. – **Brazil**, **Estado do Goiás**, no other information available (WOPC, 1).

***Diagnosis***. – The members of this species resemble superficially those of *C. stelastichosa*, from which they are distinguished by the extent of development of the elytral post-humeral line. This line does not extend to the elytral middle in *C. goias* **n**. **sp**. specimens; it does so in specimens of *C. stilastichosa* **n**. **sp**.

#### *Description*

***Size***. – Length 8.0 mm – Width 2.9 mm.

***Form***. – As in Fig. 471.

***Color***. – Testaceous, except *antennal fundus* black, *capitular antennomeres* infuscated along posterior margin, each *elytron* with 3 black markings, 2 linear extending backwards from elytral anterior margin, one oblique marking behind elytral middle extended to sutural margin.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum (Fig. 120), *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eye* as wide as width of frons (EW/FW 40/40).

***Thorax***. – *Pronotum* (Fig. 248) quadrate (PW/PL 110/110), side margin with well-developed tubercle, disc shallowly punctate at sides, glabrous at middle. – Elytral asetiferous punctures concentrated in humeral region (EL/EW 330/110).

***Abdomen***. – *Pygidium* scutiform.

***Distribution*** (Fig. 384). – Known from Brazil.

***Etymology***. – The trivial name, *goias*, is a noun in apposition and refers to the type locality.

### 83. ***Cregya gutta*** Opitz **n**. **sp**.

(Fig. 129, 249, 384, 472)

ZooBank : http://zoobank.org/49E14560-4242-4877-8D3A-2990BE00A2B4

**Holotype**. ♀. Amazones, Pebas (Brazil) (MNHN).

***Diagnosis***. – The oblong pronotum will distinguish the members of this species from other beetles of the *fimbriolata* (Chevrolat, 1843) group.

#### *Description*

***Size***. – Length 5.0 mm. – Width 2.0 mm.

***Form***. – As in Fig. 472.

***Color***. – Testaceous, except *cranium* and *antennal fundus* brown, each *elytron* with 2 brown markings, one at elytral basal 1/2, other behind elytral middle near sutural margin.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 129), antennomere 10 obovate. – *Eye* much wider than width of frons (EW/FW 25/12).

***Thorax***. – *Pronotum* (Fig. 249) oblong (PW/PL 61/73), side margin with poorly-developed tubercle, disc shallowly punctate at sides, glabrous at middle. – Elytral asetiferous punctures concentrated in humeral region (EL/EW 220/60).

***Abdomen***. – *Pygidium* scutiform.

***Distribution*** (Fig. 384). – Known from Brazil.

***Etymology***. – The trivial name, *gutta*, is a Latin noun that translates as "spot", with reference to the posterior marking on the elytral disc.

### 84. ***Cregya guyanensis*** (Chevrolat, 1876)

(Fig. 121, 250, 344, 384, 473)

*Pelonium guyanense* Chevrolat, 1876: 38. Cayenne (French Guiana).

**Lectotype**. ♂. Here designated (MNHN). Corporaal 1950a: 287 (*Corinthiscus*).

There is indication that Chevrolat based his description on more than one specimen, but he did not single out one to be the name bearer of this species; therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

*Pelonium divisum* Gorham, 1903:169. **nov**. **syn**.

***Diagnosis***. – Among South American *Cregya*, the pronotal disc is totally flavotestaceous and the elytral disc is partially/predominantly black in specimens of C. *guyanensis* (Chevrolat, 1876), *C. seabrai* Peracchi, 1962, and *C. teretis* **n**. **sp**. But, only in specimens of *C. guyanensis* (Chevrolat, 1876) is the distal 2/3rd of the elytral disc completely black.

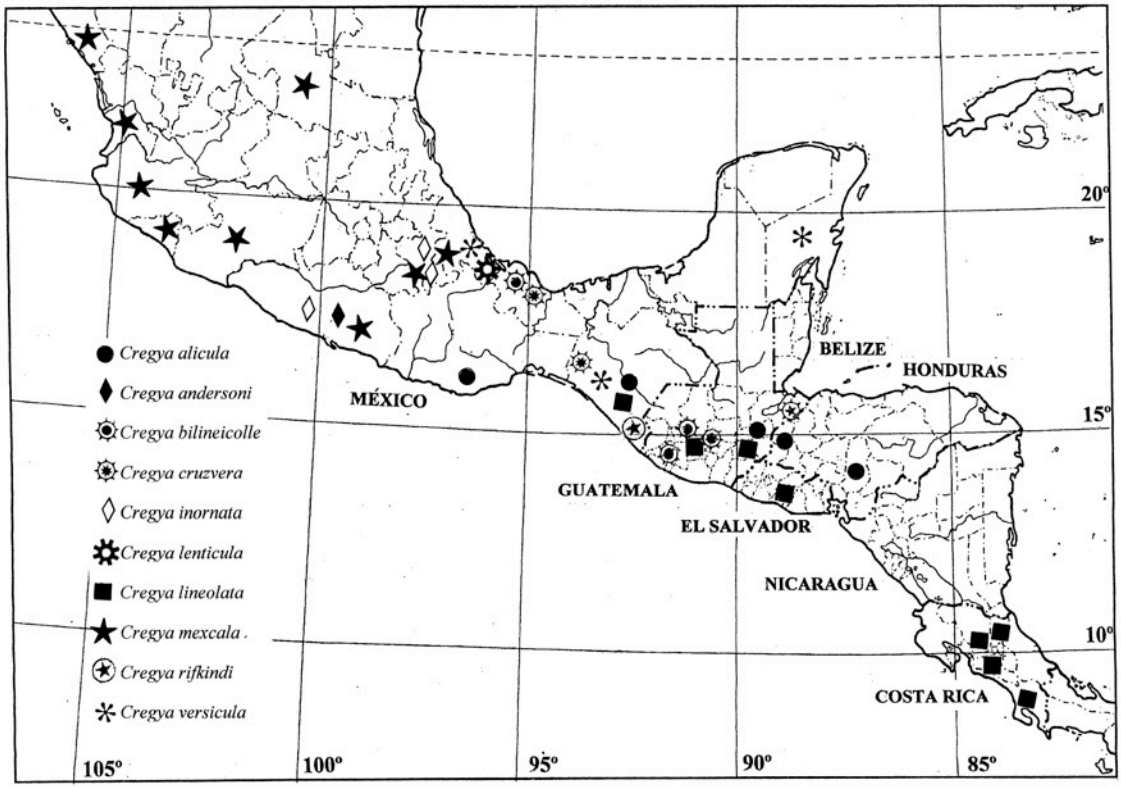
#### *Redescription*

***Size***. – Length 6.0 mm. – Width 2.7 mm.

***Form***. – As in Fig. 473.

***Color***. – Testaceous, except distal 2/3rd of the elytral disc black.

***Head***. – *Funicle* shorter than capitulum (Fig. 121), capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eyes* narrower than width of frons (EW/FW 30/42).

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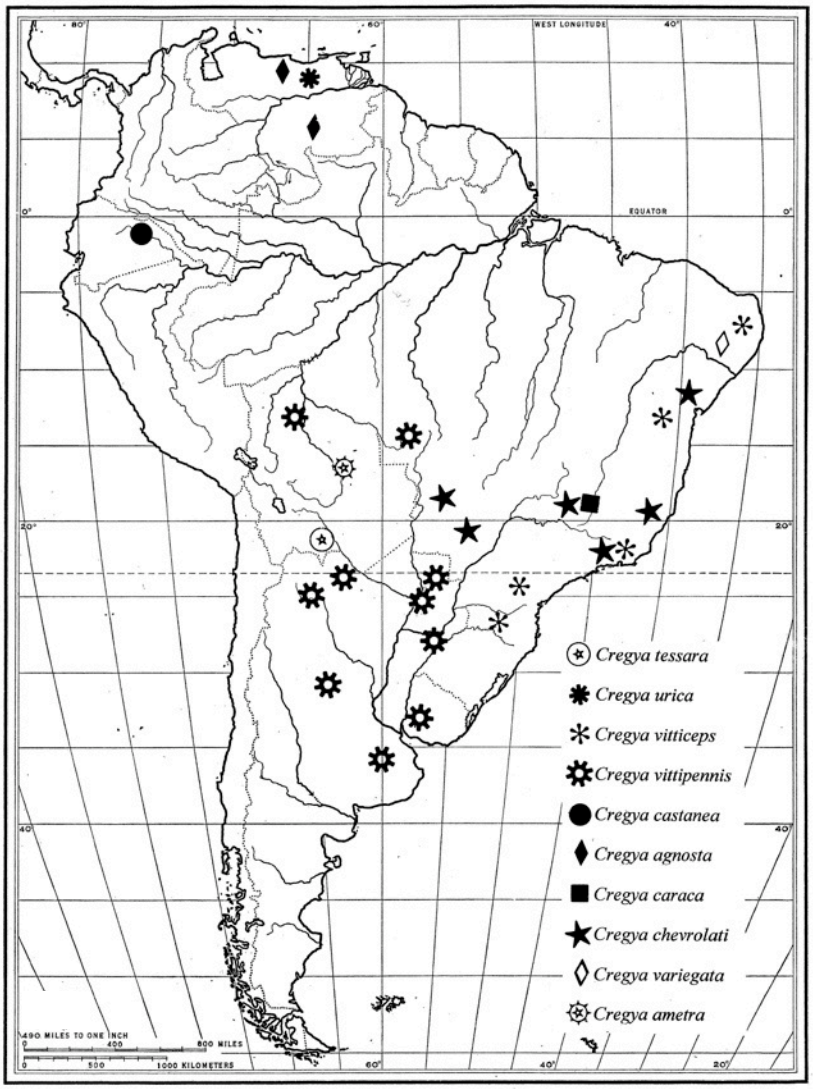


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**Fig**. **382-383**. - Geographic distribution of *Cregya* species as noted.

***Thorax***. – *Pronotum* (Fig. 250) quadrate (PW/PL 100/100), side margin with well-developed tubercle, disc shallowly punctate at sides, subglabrous at middle. – Elytral asetiferous punctures restricted to elytral basal 1/3, punctures arranged in striae (EL/EW 230/80).

***Abdomen***. – *Pygidium* scutiform, posterior margin concave. – Phallic post-apical flap absent, phallic apex triangular. – Phallobasic *apodeme* narrow (Fig. 344).

***Variations***. – Size: Length 5.0-7.0 mm; width 1.7-2.6 mm. Except for body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected throughout the year.

***Distribution*** (Fig. 384). – In addition to the lectotype, I examined 19 specimens from:

**French Guiana**

– **Subdivision Saint-Laurent-du-Maroni**, Massif du Mitaraka, 2°14'N-54°27'W, 25-II-26-III-2015, MNHN Expedition;

– **Subdivision Kourou**, Plate Soumourou, 13-18-XI-2001, D. Faure.

**Peru**

– **Provincia de Tambopata**, Madre de Dios, Rio Tambopata, 12°50'S-69°20'W, 28-II-1984, canopy fogging, T. L. Erwin;

– **Provincia Huamanga**, Chambireyacú, pres Yurumaguas, ?-VI-VII-1885, M. de Mathan.

**Ecuador**

– **Provincia Orellana**, 1 km S Okone Gare Camp, Reserva Etnica Waorani, 6-X-1994, 220-250 m, T. L. Erwin;

– **Provincia Sucumbios**, Sacha Lodge, 0.5°S 76°5'W, 10-21-XI-1994, 260 m, M. T. P. Hibbs.

**Bolivia**

– **Departamento Beni**, Rio Itenez, at mouth of Rio Baures, 10-X-1964, J. K. Bouseman.

**Brazil**

– **Estado do Rondônia**, 62 km SE Ariquemes, 7-18-IX-1995, W. J. Hansen;

– **Estado do Goías**.

Specimens are deposited in EMUS, JNRC, MNHN, USNM, WFBM, and WOPC.

### 85. ***Cregya hamatilis*** Opitz **n**. **sp**.

(Fig. 12, 130, 251, 345, 384, 474)

ZooBank : http://zoobank.org/97E4E64E-BBD9-4E52-9AE1-0A066B82BEF5

**Holotype**. ♀. Peru, Satipo, XI. 1942, Paprzycki (MNHN).

**Paratypes**. 2 specimens.

**Peru**

– **Provincia de Tambopata**, Madre de Dios, Rio Tambopata Reserve, 30 km SW Puerto Maldonado, 12°50'S 69°20'W, 10-XI-1983, 290 m, fogging canopy, T. L. Erwin (USNM).

**Bolivia**

– **Departamento de Santa Cruz**, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 17°29.949'S 63°33.152'W, 5-15-XI-2001, tropical transition forest, M. C. Thomas & B. K. Dozier (FSCA).

***Diagnosis***. – The members of this species resemble superficially those of *C. egeri* **n**. **sp**., from which they are distinguished by the shape of the line-marking on the elytral disc proximal to the sutural margin. This line is J-shaped in specimens of *C. hamatilis* **n**. **sp**., and linear in those of *C. egeri* **n**. **sp**.

#### *Description*

***Size***. – Length 4.3 mm. – Width 1.8 mm.

***Form***. – As in Fig. 474.

***Color***. – Testaceous, except *antenna* mostly brown, but *last antennomere* mostly yellow, *pronotal disc* with 2 broad dark brown paralateral lines, *pterothorax* and *abdomen* brown, each *elytron* with 3 brown maculae, one at humeral angle and along epipleural margin, one extending posteriorly from elytral anterior margin, this macula with a short distal curvature, one posterior to elytral middle, this macula constricted at middle.

***Head***. – *Funicular antennomere*s subfiliform, progressively shorter towards capitulum, capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular (Fig. 130), antennomere 10 obovate. – *Eye* as wide as width of frons (EW/FW 28/28).

***Thorax***. – *Pronotum* (Fig. 251) slightly oblong (PW/PL 60/65), side margin with well-developed tubercle, disc shallowly punctate at sides, glabrous at middle. – Elytral asetiferous punctures concentrated in humeral region (EL/EW 180/60).

***Abdomen***. – *Pygidium* scutiform, phallic post-apical flap absent, phallic apex triangular; phallobasic apodeme narrow (Fig. 345).

***Variations***. – Size: Length 4.3-4.8 mm; width 1.8-2.0 mm. Except for body size, the available specimens are quite homogeneous.

***Distribution*** (Fig. 384). – Known from Peru and Bolivia.

***Etymology***. – The trivial name, *hamatilis*, is a Latin noun that stems from *hamus* (= hook); with reference to the posterior recurvature of the otherwise linear marking extending from the anterior margin of the elytra.

### 86. ***Cregya kreagris*** Opitz **n**. **sp**.

(Fig. 131, 252, 346, 384, 475)

ZooBank : http://zoobank.org/DE85FF77-DFB7-4537-BF18-DB7D28B1418E

**Holotype**. ♀. Teffé (Ega), Amazones, M. de Mathan, 2e Trimestre, 1879 (MNHN).

**Paratypes**. 16 specimens.

**Ecuador**

– **Provincia de Orellana**, 1 km S Okone Gare Camp, Reserva Etnica Waorani, 7-X-1995, 220-250 m, T. L. Erwin (USNM, 1);

– *idem*, 4-X-1995, 220-250 m, T. L. Erwin (USNM, 1).

**Brazil**

– **Estado do Amazonas**, Teffé (Ega), M. de Mathan, 2e Trimestre, 1879 (WOPC 1); Fonte Boa, Dr Hahnel (WOPC, 1);

– **Estado do Ceará**, Serra de Baturité, ?-I-1895, Gounelle (MNHN, 7; WOPC, 4);

– **Estado do Bahia**, Tierra Nova,?-V-1885, E. Gounelle (MNHN, 1).

***Diagnosis***. – In the key to species *C. kreagris* **n**. **sp**. is affiliated with *C. villavera* **n**. **sp**. Specimens of these two species differ in antennal color. In *C. kreagris* **n**. **sp**. beetles the last antennomere is yellow, whereas in those of *C. villavera* **n**. **sp**. it is black.

#### *Description*

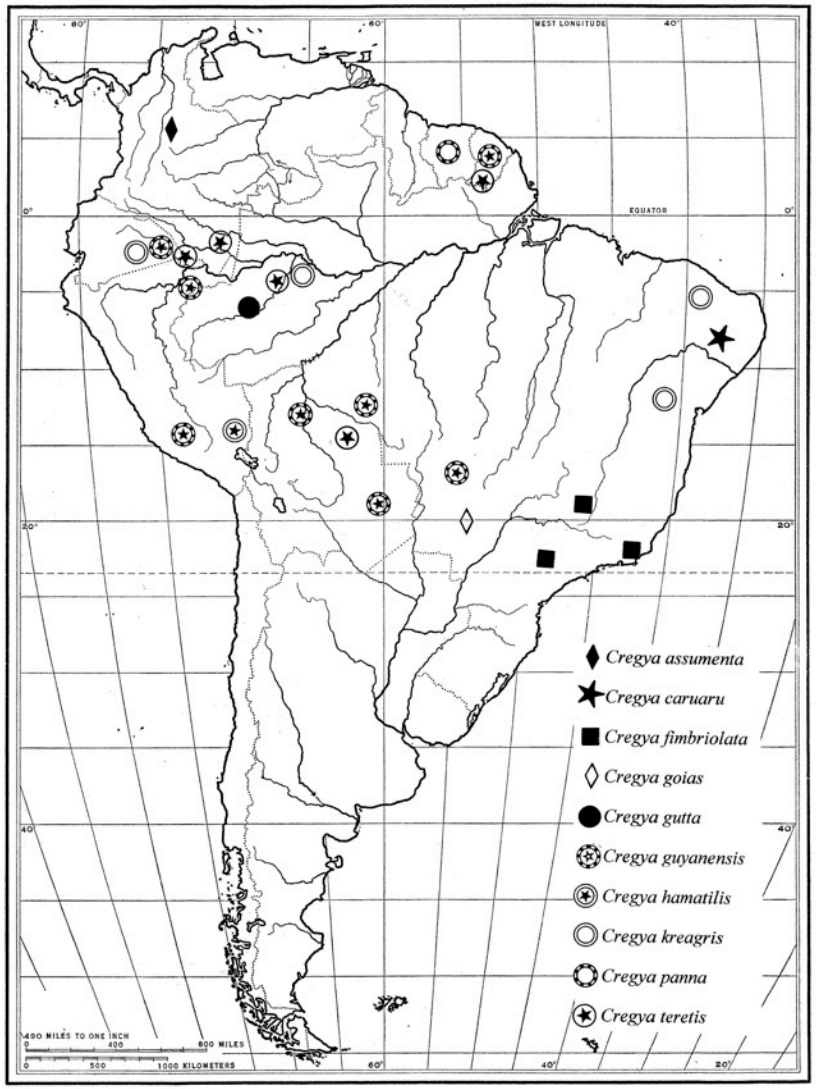
***Size***. – Length 5.2 mm. – Width 2.1 mm.

***Form***. – As in Fig. 475.

***Color***. – Testaceous, except *antenna* mostly brown, last *antennomere* yellow, each *elytron* with 4 brown markings, one J-shaped extending posteriorly from the elytral basal margin, one short line extending backwards from humeral angle proximal to the epipleural margin, 2 discal markings at elytral middle.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 large triangular (Fig. 131), antennomere 10 obovate, *eye* wider than width of frons (EW/FW 35/20).

***Thorax***. – *Pronotum* (Fig. 252) quadrate (PW/PL 80/80), side margin with well-developed tubercle, disc coarsely punctate at sides, glabrous at middle. – Elytral asetiferous punctures concentrated in humeral region (EL/EW 220/75).

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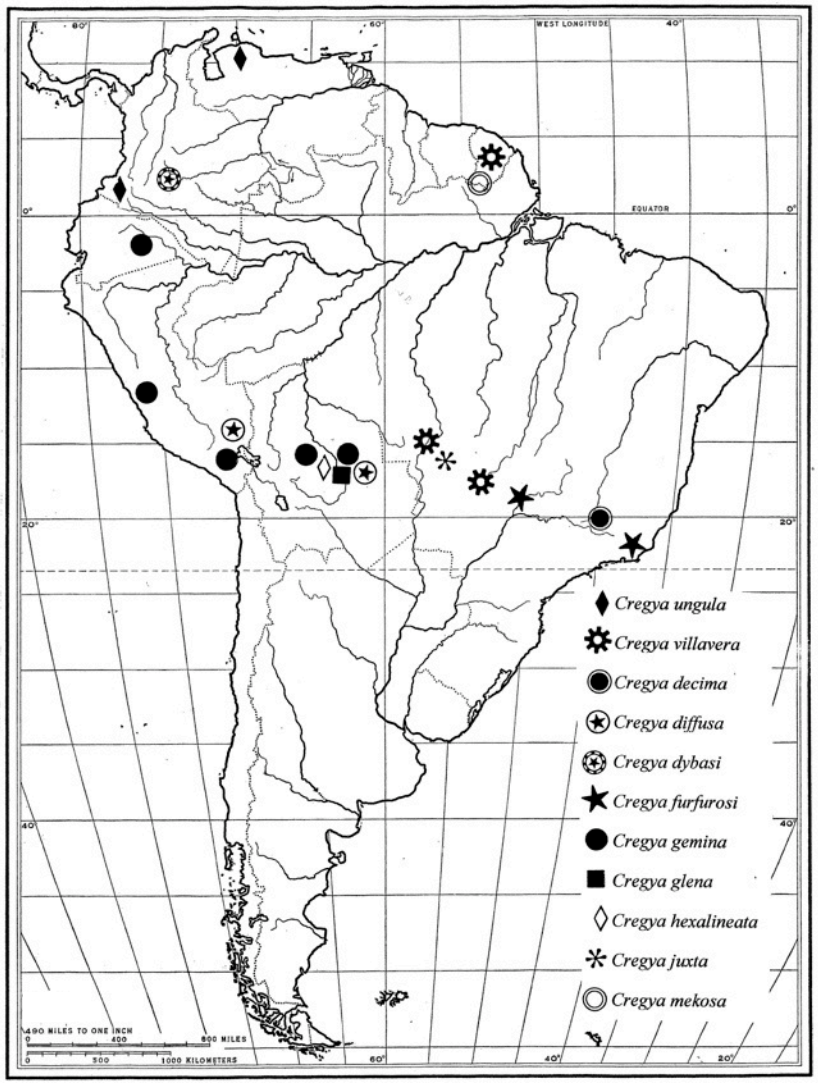


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**Fig. 384-385**. - Geographic distribution of *Cregya* species as noted.

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex triangular. – Phallobasic apodeme narrow (Fig. 346).

***Variations***. – Size: Length 3.5-6.0 mm; width 1.2-2.5 mm. There may be a disconnect between the two brown streaks on the pronotal disc, and the elytra J-shaped marking may be bipartite. Also, the elytral disc may be mostly brown, with individual markings practically obliterated.

***Natural History***. – Specimens have been collected during January, May, and October, some at an altitude between 220 and 250 m. One specimen was collected by fogging tree canopy.

***Distribution*** (Fig. 384). – Known from Ecuador and Brazil.

***Etymology***. – The trivial name, *kreagris*, is a Greek noun with a meaning of "meat hook"; with reference to the J-shaped marking at the base of the elytra.

### 87. ***Cregya panna*** Opitz **n**. **sp**.

(Fig. 137, 253, 384, 476)

ZooBank : http://zoobank.org/482B5D17-0AE8-4FE5-9E7D-1438A5130CBD

**Holotype**. ♀. SURINAME, Saramacca Sidredjo, N 5.81775 W 55.59064, 6 m, malaise trap, 10/17 APRIL 2006 Alies van Sauer-Muller (FSCA).

**Paratypes**. 2 specimens. – **Suriname**, **Distrito de Saramacca**, Sidredjo, N5°.81775'-W55°.59064', 10-17-IV-2006, 6 m, Malise trap, Alies van Sauer-Muller (WOPC).

***Diagnosis***. – In the key to species *C. panna* **n**. **sp**. is affiliated with *C. jatai* **n**. **sp**. Specimens of these two species differ in elytral color. In *C. panna* **n**. **sp**. beetles the posterior 1/2 of the elytral disk is devoid of markings, which is not the case in specimens of *C. jatai* **n**. **sp**.

#### *Description*

***Size***. – Length 6.7 mm. – Width 2.0 mm.

***Form***. – As in Fig. 476.

***Color***. – Testaceous, except antennal fundus brown, each *elytron* with black macula at basal 1/4th.

***Head***. – *Funicular antennomere*s subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular (Fig. 137), antennomere 10 obovate. – *Eye* much wider than width of frons (EW/FW 31/12).

***Thorax***. – *Pronotum* (Fig. 253) quadrate (PW/PL 77/77), side margin with slightly-developed tubercle, disc coarsely punctate at sides, glabrous at middle. – Elytral asetiferous punctures concentrated in humeral region (EL/EW 230/55).

***Abdomen***. – *Pygidium* scutiform.

***Natural History***. – The available specimens were collected during April, in a Malaise trap set at 2 m.

***Distribution*** (Fig. 384). – Known from Suriname.

***Etymology***. – The trivial name, *panna*, is a Latin meaning "patch"; about the marking on the basal 1/4th of the elytra.

### 88. ***Cregya teretis*** Opitz **n**. **sp**.

(Fig. 122, 254, 347, 384, 477)

ZooBank : http://zoobank.org/104CAFEE-00D2-42CE-B9BB-917748BE3037

**Holotype**. ♂. COLOMBIA, Amazonas, PNN Amacayacu, Matamata, 341S 7015W, 150 m, Red 23.x.2000, A. Parente Leg. M. 3552 (FSCA).

**Paratypes**. 10 specimens.

**French Guiana**

– **Subdivision Régina**, Kaw Mountain, PK 40 + 1.6, 19-VII-2004, Malaise trap, J. A. Cerda (WOPC, 1).

**Ecuador**

– **Provincia de Orellana**, 1 km S Okone Gare Camp, Reserva Etnica Waorami, 4-X-1994, 220-250 m, T. L. Erwin (USNM, 1);

– *idem*, 9-X-1994, 220-250 m, T. L. Erwin (USNM, 1);

– **Provincia de Sucumbios**, Sacha Lodge, 0.5 S 76.5W, 25-VII-3-VIII-1994, MT, P. Hibbs (SEMC, 1);

– *idem*, 20-30-IX-1994, Malaise, P. Hibbs (SEMC, 1);

– *idem*, 21-31-X-1994, Malaise, P. Hibbs (WOPC, 1);

– **Provincia de Napo**, Limoncocha, 15-28-VI-1976, 250 m, S. J. Peck (CMNC, 1).

**Bolivia**

– **Departamento de Santa Cruz**, Quatro Ojos, ?-XI-1913, Steinbach (CMNH, 1).

**Peru**

– **Provincia de Tambopata**, Madre de Dios, Rio Tambopata, 30 km SW Puerto Maldonado, 12°50'S 69°20'W, 20-II-1984, T. L. Erwin (USNM, 1).

**Brazil**

– **Estado do Amazonas**, Teffé (Ega), ?-IX-X-1879, M. de Mathan (MNHN, 1).

***Diagnosis***. – Among South American *Cregya*, the pronotal disc is totally flavotestaceous and the elytral disc is partially/predominantly black in specimens of *C. teretis* **n**. **sp**., *C. seabrai* Peracchi, 1962, and C. *guyanensis* (Chevrolat, 1876). But, only in specimens of *C. teretis* **n**. **sp**. is the epipleural margin flavotestaceous; the remainder of the elytral disc is black.

#### *Description*

***Size***. – Length 5.8 mm. – Width 2.0 mm.

***Form***. – As in Fig. 477.

***Color***. – Testaceous, except elytral disc black, epipleural margin and elytral apex light yellow.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular (Fig. 122), antennomere 10 obovate. – *Eye* narrower than width of frons (EW/FW 25/42).

***Thorax***. – *Pronotum* (Fig. 254) slightly oblong (PW/PL 95/100), side margin with well-developed tubercle, disc shallowly punctate at sides, glabrous at middle. – Elytral asetiferous punctures concentrated in humeral region (EL/EW 240/80).

***Abdomen***. – *Pygidium* scutiform, phallic post-apical flap absent, phallic apex narrow triangular. – Phallobasic *apodeme* narrow (Fig. 347).

***Variations***. – Size: Length 4.5-5.8 mm; width 1.8-2.0 mm. Except for body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected during February, July, and October, one at an altitude between 220-250 m and one by fogging tree canopy.

***Distribution*** (Fig. 384). – Known from Colombia, French Guiana, Ecuador, Peru, Bolivia, and Brazil.

***Etymology***. – The trivial name, *teretis*, is a Latin adjective with a meaning of "rounded"; with reference to the suboval hind body of these beetles.

### 89. ***Cregya ungula*** Opitz **n**. **sp**.

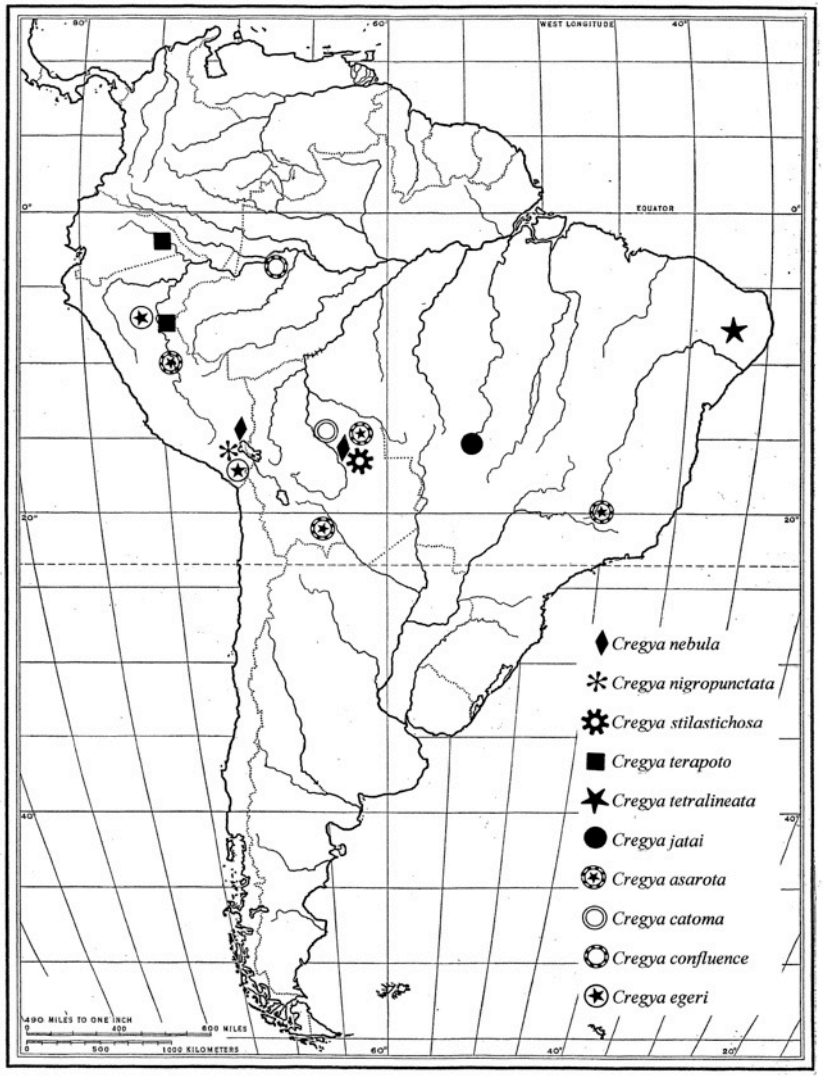
(Fig. 132, 255, 348, 385, 478)

ZooBank : http://zoobank.org/84689544-8734-46A2-A2F8-FA9E2F23939D

**Holotype**. ♂. COLOMBIA, Buga, Lago Colima, 15-VI-1974, G. Ekis, 700 m (FSCA).

**Paratypes**. One specimen. **Venezuela**, **Estado de Falcón**, 4 K W Kurimagua, 16-VIII-1975, M. Murtaugh (WOPC, 1).

***Diagnosis***. – The inverted U-marking in the humeral region of the elytral disc will distinguish these beetles from congeners.

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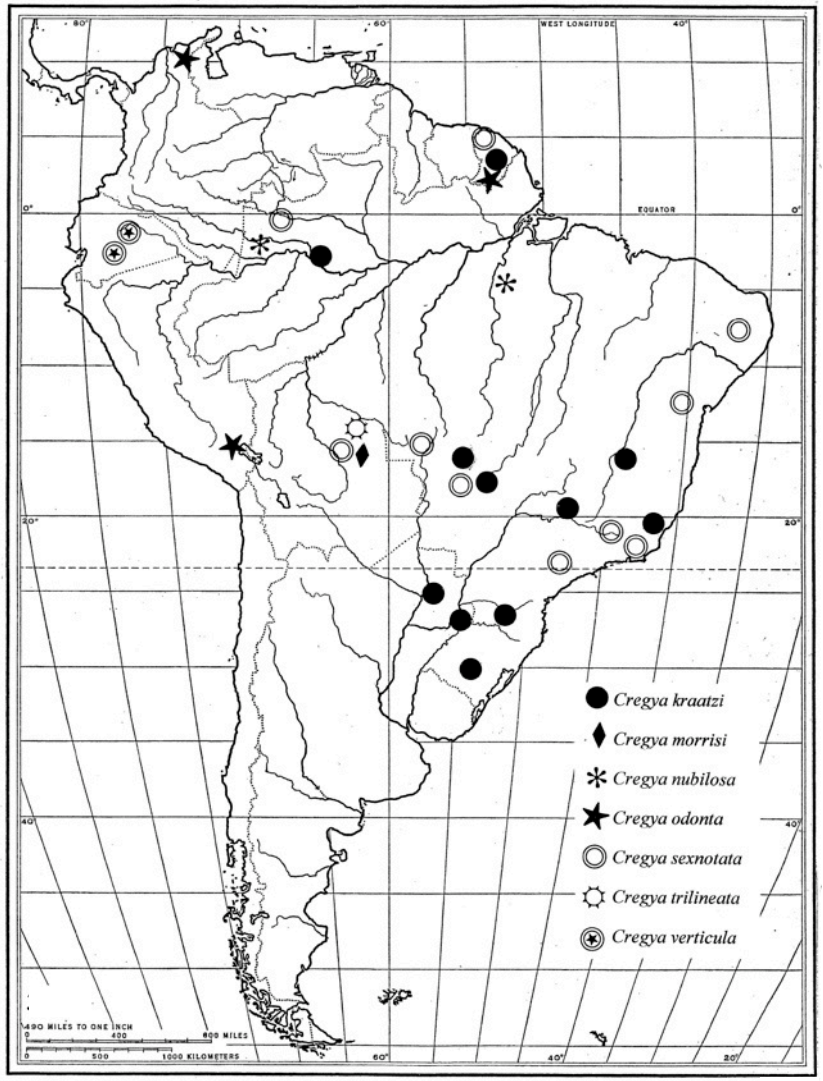


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**Fig. 386-387**. - Geographic distribution of *Cregya* species as noted.

### *Description*

***Size***. – Length 4.5 mm. – Width 2.0 mm.

***Form***. – As in Fig. 478.

***Color***. – Testaceous, except each *elytron* with inverted U-shaped mark in humeral angle region and an angular fascia at distal limit of elytral posterior 2/3rd.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 132), antennomere 10 obovate. – *Eye* as wide as width of frons (EW/FW 25/25).

***Thorax***. – *Pronotum* (Fig. 255) slightly oblong (PW/PL 75/85), side margin with well-developed tubercle, disc shallowly punctate at sides, glabrous at middle. – Elytral asetiferous punctures concentrated in humeral region (EL/EW 190/60).

***Abdomen***. – *Pygidium* scutiform, phallic post-apical flap absent, phallic apex triangular. – Phallobasic apodeme narrow (Fig. 348).

***Variations***. – The available specimens are quite homogeneous.

***Natural History***. – Specimens were collected in June and August.

***Distribution*** (Fig. 385). – Known from Colombia and Venezuela.

***Etymology***. – The trivial name, *ungula*, is a Latin adjective with a meaning of "ring"; with regard the marking around the humeral angle.

90. ***Cregya villavera*** Opitz **n**. **sp**.

(Fig. 153, 256, 349, 385, 479)

ZooBank : http://zoobank.org/31DFE13C-E0CD-48A2-963C-36213F4AA8EC

**Holotype**. ♂. Brazil, Mato Grosso, Villa Vera, ?-X-1973, Moacir Alvarenga (FSCA).

**Paratypes**. 6 specimens.

**French Guiana**

– **Subdivision of Kourou**, Kourou Pk., 4 degrad Saramaca, ?-XI-XII-2005, Malaise trap, Denis Faure (WOPC, 1);

**Brazil**

– **Estado do Mato Grosso**, Mato Grosso, ?-?-1886, P. Germain (MNHN, 2; WOPC, 2);

– **Estado do Goiás**, Susuapara, collection date not noted, Ch Pujol (MNHN, 1).

***Diagnosis***. – In the key to species *C. villavera* **n**. **sp**. is affiliated with *C. kreagris* **n**. **sp**. Specimens of these two species differ in antennal color. In *C. villavera* **n**. **sp**. beetles the last antennomere is black, whereas in those of *C. kreagris* **n**. **sp**. it is yellow.

### *Description*

***Size***. – Length 5.5 mm. – Width 2.2 mm.

***Form***. – As in Fig. 479.

***Color***. – Testaceous, except *antennae* and *tarsi* dark brown, each *elytron* with 4 black marks, 2 linear in elytral anterior region and 2 punctiform marks at about elytral middle.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular (Fig. 153), antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 40/20).

***Thorax***. – *Pronotum* (Fig. 256) slightly transverse (PW/PL 98/90), side margin with well-developed tubercle, disc shallowly punctate at sides, glabrous at middle. – Elytral asetiferous punctures concentrated in humeral region (EL/EW 270/80).

***Abdomen***. – *Pygidium* scutiform, phallic post-apical flap absent, phallic apex narrow triangular. – Phallobasic apodeme short (Fig. 349).

***Variations***. – Size: Length 5.0-5-5 mm; width 1.5-2.2 mm. Except for body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected in December.

***Distribution*** (Fig. 385). – Known from French Guiana and Brazil.

***Etymology***. – The trivial name, *villavera*, constitutes a noun in apposition and refers to the type locality.

## The *gemin* species group

The species in this group are characterized by structure of the elytral disc and the male genitalia. The elytral asetiferous punctures are punctulate and the phallobasic apodeme is extraordinarily long. There are 15 species in this group whose combined geographical distribution extends from Colombia to Brazil.

91. ***Cregya decima*** Opitz **n**. **sp**.

(Fig. 154, 257, 350, 385, 480)

ZooBank : http://zoobank.org/659B5EFB-0C27-46C3-99AB-3BDFC05E74B4

**Holotype**. ♂. BRÉSIL (Minas) Sertão de Diamantina, FAZ. DAS MALENCIAS, E. GOUNELLE, 10-11 1902 Brazil, Minas Gerais) (MNHN).

***Diagnosis***. – The 10 punctiform maculae on the notum of these beetles will distinguish them from congeners.

### *Description*

***Size***. – Length 5.0 mm. – Width 5.8 mm.

***Form***. – As in Fig. 480.

***Color***. – Testaceous, except *pronotal disc* with 2 black paralateral oblong spots and each *elytron* with 4 black marks, one extends posteriorly from elytral anterior margin, 2 at about elytral middle, and one punctiform behind elytral middle.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular (Fig. 154), antennomere 10 long obovate. – *Eye* wider than width of frons (EW/FW 30/20).

***Thorax***. – *Pronotum* (Fig. 257) quadrate (PW/PL 75/75), disc coarsely punctate. – Elytral asetiferous punctures arranged in 10 striae, punctural striae end at elytral posterior 3/4th (EL/EW 210/60).

***Abdomen***. – *Pygidium* scutiform, posterior margin deeply concave. – Phallic post-apical flap absent, phallic apex minute, triangular. – Phallobasic *apodeme* very long (Fig. 350).

***Natural History***. – The holotype was collected in November.

***Distribution*** (Fig. 385). – Known from Brazil.

***Etymology***. – The trivial name, *decima*, is a Latin name that stems from *decem* (= ten); to emphasize the 10 spots on the dorsum of these beetles.

92. ***Cregya diffusa*** Opitz **n**. **sp**.

(Fig. 145, 258, 351, 385, 481)

ZooBank : http://zoobank.org/9DCC5C03-DE28-445B-80C9-C6E9676DC32E

**Holotype**. ♂. BOLIVIA: Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 405 m, 5-15-XI-2001, 17°29.949'S 63°33.152'W, tropical transition forest, black light, M. C. Thomas & B. K. Dozier (MNKM).

**Paratypes**. 5 specimens.

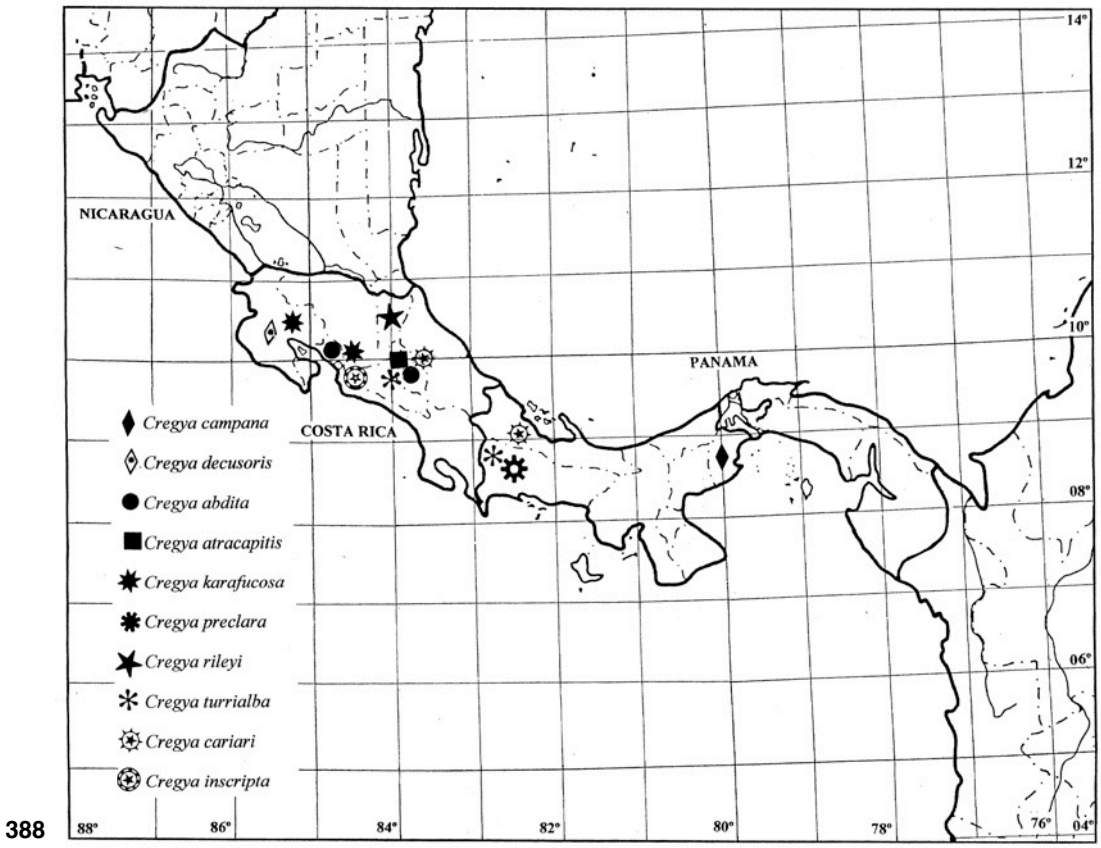
**Bolivia**

– **Departamento de Santa Cruz**, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 17°29.949'S 63°33.152'W, 5-15-XI-2001, 405 m, tropical transition forest, black light, M. C. Thomas & B. K. Dozier (FSCA, 1);

– *idem*, 7-10-X-2004, Morris & Wappes (RFMC, 1);

– *idem*, 27-29-X-2000, Wappes & Morris (ACMT, 1);

– 10-22-X-2004, J. E. Eger (WOPC, 1).

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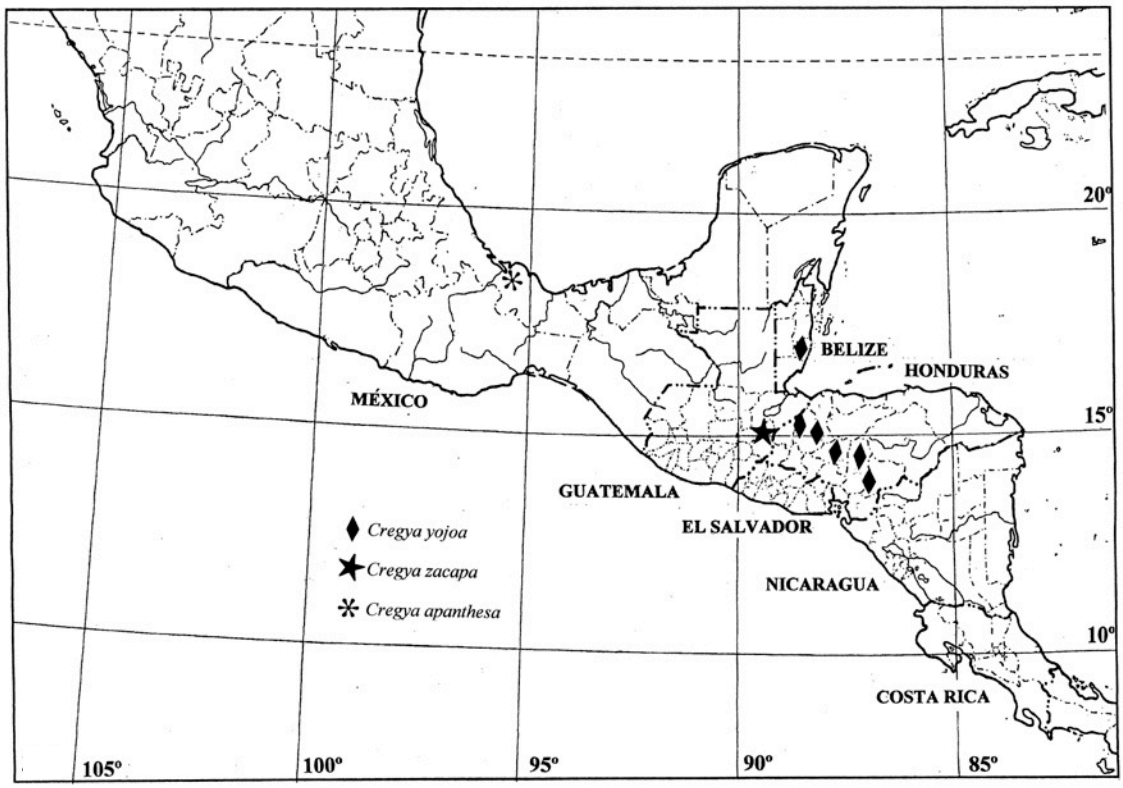


389

**Fig**. **388-389**. - Geographic distribution of *Cregya* species as noted.

**Peru**

– **Provincia de Tambopata**, Madre de Dios, Rio Tambopata, 30 km SW Puerto Maldonado, 12°50'S 69°20'W, 8-IX-1984, T. L. Erwin (USNM, 1).

***Diagnosis***. – In the members of this species, the black marking near the anterior margin of each elytron extends posteriorly to form 3 black streaks. Also, the middle of the elytral disc shows a narrow black streak. This combination of characteristics will distinguish the members of this species from others in the *gemina* group.

## *Description*

***Size***. – Length 7.0 mm – Width 3.0 mm.

***Form***. – As in Fig. 481.

***Color***. – Mostly yellow. – Antennal *fundus* testaceous, antennal *capitulum* yellow. – Each *elytron* with 2 long black streaks extend backwards from elytral anterior margin, latter broadly black. – *Tibiae* and *tarsi* testaceous.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 145), antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 43/30).

***Thorax***. – *Pronotum* (Fig. 258) slightly oblong (PW/PL 105/115), side margin with well-developed tubercle, disc punctulate. – Elytral disc punctulate, small punctures substriate to elytral posterior 2/3rd (EL/EW 330/105.

***Abdomen***. – *Pygidium* scutiform, posterior margin concave. – Phallic post-apical flap absent, phallic apex small, triangular, phallobasic apodeme long (Fig. 351).

***Variations***. – Size: Length 6.0-7.0 mm; width 2.8-3.0 mm. The specimen from Peru has the elytral black lines less defined.

***Natural History***. – Specimens were collected during September, October, and November, some at an altitude that ranges from 405-440. Some of these beetles were collected with a black light set in a tropical transition forest.

***Distribution*** (Fig. 385). – Known from Bolivia and Peru.

***Etymology***. – The trivial name, *diffusa*, is a Latin adjective with a meaning of "spread out"; with reference to the posterior thinning of the black marking at the base of the elytron.

### 93. ***Cregya dybasi*** Opitz **n**. **sp**.

(Fig. 133, 259, 352, 385, 482)

ZooBank : http://zoobank.org/C81DFB3D-D1B2-4090-AEE9-4BDE0A1505FA

**Holotype**. ♀. P'to Salgar, Cund. Colomb. (Cundinamarca, Colombia), VII: 31: 88. A second label reads; Col. & pres. By H. Dybas (FMNH).

**Paratypes**. 3 specimens. – **Colombia**, **Departamento de Cundinamaca**, Puerto Salgar, 31-VII-1988, Henry Dybas (FMNH, 2: WOPC, 1).

***Diagnosis***. – The elytral markings, as expressed in Fig. 482, will distinguish these beetles from congeners.

## *Description*

***Size***. – Length 6.5 mm. – Width 2.5 mm.

***Form***. – As in Fig. 482.

***Color***. – Testaceous, except each *elytron* with 2 black marks, one linear extends posteriorly from elytral anterior margin and reaching to about elytral basal 1/4th, one discal, oval marking just behind elytral middle.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular (Fig. 133), antennomere 10 obovate – *Eye* slightly narrower than width of frons (EW/FW 35/40).

***Thorax***. – *Pronotum* (Fig. 259) slightly oblong (PW/PL 105/115), disc punctulate. – Elytral asetiferous punctures arranged in 9 striae, punctural striae end at elytral posterior 3/4th (EL/EW 280/90).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex minute, triangular. – Phallobasic apodeme very long (Fig. 352).

***Variations***. – Size: Length 5.5-6-5 mm; width 2.0-2.5 mm. Except for body size, the available specimens are quite homogeneous.

***Natural History***. – The available specimens were collected during July.

***Distribution*** (Fig. 385). – Known from Colombia.

***Etymology***. – The trivial name, *dybasi*, is a patronym that honors Henry Dybas, the former outstanding curator of the Field Museum of Natural History.

### 94. ***Cregya furfurosi*** Opitz **n**. **sp**.

(Fig. 157, 261, 353, 385, 483)

ZooBank : http://zoobank.org/B5D1186C-FA5F-454B-9665-9CCC8A4DB3DF

**Holotype**. ♂. Rio de Janeiro (Brazil) (MNHN).

**Paratypes**. 1 specimen. – **Brazil**, **Estado do Distrito Federal**, 7 km NE Brazilia, 9-XII-1969, J. M. & B. A. Campbell (WOPC).

***Diagnosis***. – These beetles show each elytral disc marked by 2 large red-brown maculae. This characteristic is present in *C. furfurosi* **n**. **sp**., *C. fimbriolata* (Chevrolat, 1843), and *C. gemina* (Schenkling, 1900). In specimens of *C. furfurosi* **n**. **sp**. and *C. fimbriolata* (Chevrolat, 1843) the anterior macula of the elytral disk traverses the elytral anterior margin, but in *C. furfurosi* **n**. **sp**. specimens the said macula is not encircled in black as is the case in *C. furfurosi* **n**. **sp**. specimens. The anterior elytral macula does not traverse the elytral anterior margin in *C. gemina* (Schenkling, 1900) specimens.

## *Description*

***Size***. – Length 6.0 mm – Width 2.5 mm.

***Form***. – As in Fig. 483.

***Color***. – Mostly testaceous, antennal *capitulum* yellow. – Each elytron with 2 large red-brown maculae, one occupying the basal third of the elytral disc, other macula behind elytral middle adjacent to sutural margin.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 157), antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 30/26).

***Thorax***. – *Pronotum* (Fig. 261) slightly oblong (PW/PL 87/87), side margin with well-developed tubercle, disc punctulate. – Elytral disc punctulate, small punctures substriate to elytral posterior 2/3rd (EL/EW 260/75).

***Abdomen***. – *Pygidium* scutiform, posterior margin concave. – Phallic post-apical flap absent, phallic apex small, triangular, phallobasic apodeme long (Fig. 353).

***Variations***. – Size: Length 6.0-7.0 mm; width 2.5- 2.4 mm. Other than body size, the two available specimens are quite homogeneous.

***Distribution***(Fig. 385). – Known from Brazil.

***Etymology***. – The trivial name, *furfurosi*, is a Latin adjective with a meaning of "brownish"; with regard to the brownish marks on the elytron.

### 95. ***Cregya gemina*** (Schenkling, 1900)

(Fig. 124, 262, 354, 385, 484)

*Pelonium geminum* Schenkling, 1900: 409.

**Lectotype**. ♂. Here designated. Peru, Callanga, (SDEI). Corporaal, 1950a: 281.

**Paralectotype**. One specimen. Peru, **Provincia de Lima**, Callanga (SDEI).

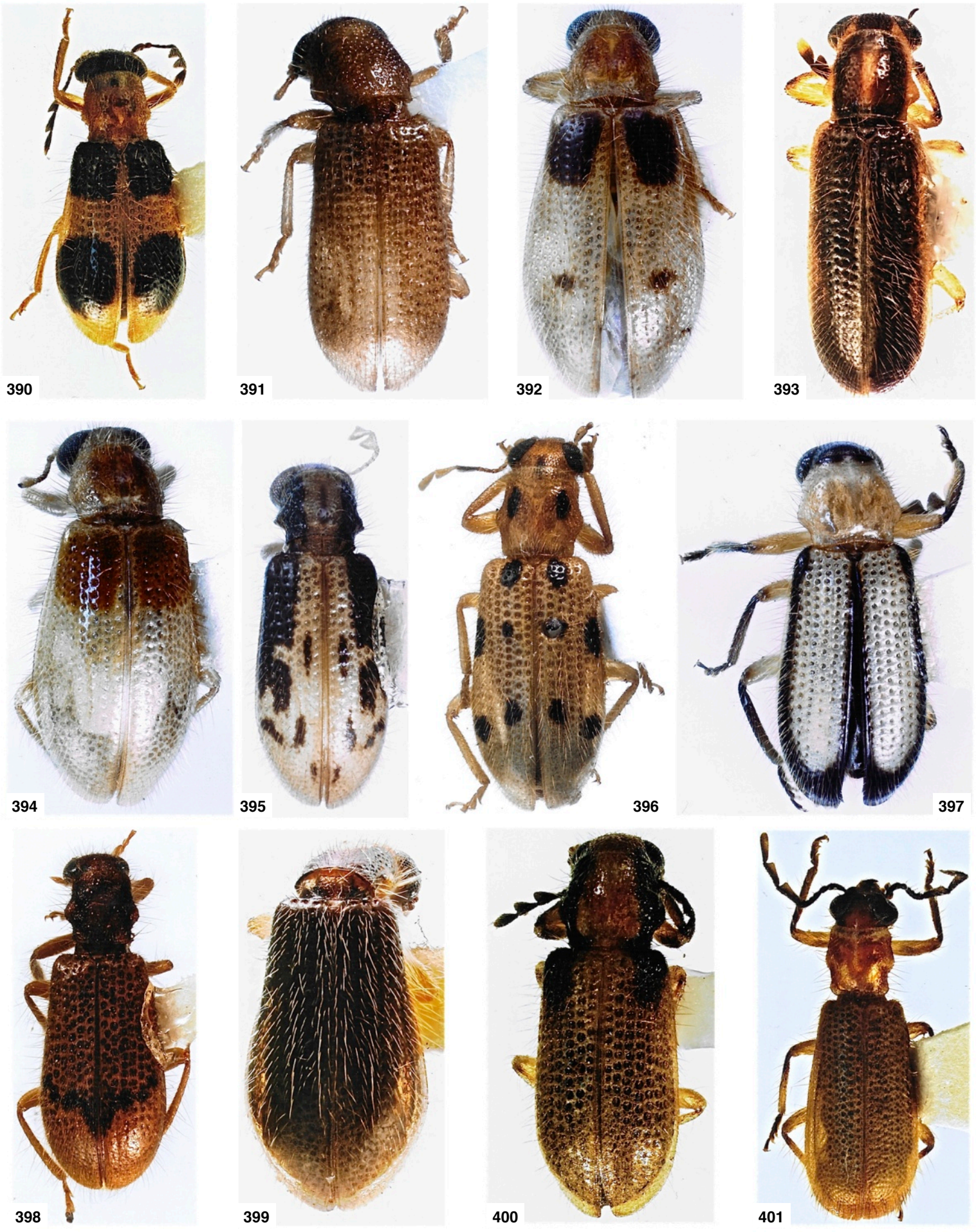


**Fig. 390-401**. - Habitus of *Cregya* species. **(390)** *C. abacula* **n. sp. (391)** *C. andros* **n. sp. (392)** *C. bipunctipennis* **n. sp. (393)** *C. campana* **n. sp. (394)** *C. cerina* **n. sp. (395)** *C. decusoris* **n. sp. (396)** *C. duodecimpunctata* (Klug, 1842). **(397)** *C. elegantula* **n. sp. (398)** *C. ferratilis* **n. sp. (399)** *C. guttula* **n. sp. (400)** *C. hedra* **n. sp. (401)** *C. insignata* Pic, 1952.

Two specimens were available to Schenkling when he made his description of this species, but he did not tag one of these to be the name bearer. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

***Diagnosis***. – In these beetles each elytral disc is marked by 2 large red-brown maculae. This characteristic is present in *C. furfurosi* **n. sp.**, *C. fimbriolata* (Chevrolat, 1843), and *C. gemina* (Schenkling, 1900). In specimens of *C. gemina* (Schenkling, 1900), the posterior elytral macula is obliquely positioned, which is not the case in specimens of the other 2 aforementioned species.

## *Redescription*

***Size***. – Length 8.0 mm. – Width 4.0 mm.

***Form***. – As in Fig. 484.

***Color***. – Predominantly yellow. – Funicular antennomeres and cranium brown. – Elytral disc with 2 oblong reddish-brown maculae, one extends from elytral anterior margin and one obliquely positioned behind elytral middle.

***Head***. – **Funicular antennomeres** increasingly shorter and wider as they approach capitulum (Fig. 124), capitular antennomeres 8 and 9 oblong triangular, antennomere 10 obovate. – *Eyes* wider than width of frons (EW/FW 35/30).

***Thorax***. – *Pronotum* (Fig. 262) oblong (PW/PL 90/110), side margin with well-developed tubercle, disc punctulate. – Elytral asetiferous punctulate, punctation somewhat striate at sides, punctations become smaller as they approach elytral apex, punctures diminutive near sutural margin (EL/EW 320/95).

***Abdomen***. – *Pygidium* subquadrate, posterior margin concave, with 2 hooks on distal angles. – *Aedeagus* (Fig. 354), phallic post-apical flap absent, phallic apex minute, triangular/curvate. – Phallobasic *apodeme* very long (Fig. 354).

***Variations***. – Size: Length 5.0-8.6 mm; width 1.8-3.0 mm. Other than body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were collected in September and October, at altitudes between 250 and 579 m.

***Distribution*** (Fig. 385). – In addition to the two types, I examined 13 specimens from:

**Peru**

– **Provincia de Lima**, Callanga, collection date and collector not noted;

– **Provincia de Tambopata**, Madre de Dios, Rio Tambopata Reserve, 30 km SW Puerto Maldonado, 12°50'S-69°20'W, 14-IX-1984, 290 m, T. L. Erwin.

**Bolivia**

– **Estado de Santa Cruz**, 4-6 SSE Buena Vista, F & F Hotel, 14-16-Oct. 2000, Wappes & Morris;

– **Departamento de Cochabamba**, Cochabamba, collection date not noted, Germain.

**Ecuador**

– **Provincia de Napo**, vicinity Puerto Missahuale, 1°2'4.2"S-77°39'49.2" W, 6-19-IX-1998, Mercury & Ultraviolet lights, 6-19-IX-1998, 1,650-1,900 feet, J. E. Eger.

Specimens are deposited in ACMT, MNHN, RFMC, SDEI, USNM, and WOPC.

### 96. *Cregya glena* Opitz **n. sp.**

(Fig. 143, 385, 485)

ZooBank : http://zoobank.org/29B58C8A-72D8-44A7-B4A5-BDCE054E029A

**Holotype**. ♂. BOLIVIA, Santa Cruz, 4 km N Bermejo Ref. los Volcanes, 1350 m, 8-11 December 2011. A second label reads: 18°06'S-63°36'W, Wappes, Lingafelter, Morris & Woodley (MNKM).

***Diagnosis***. – Within the *gemina* group, only specimens of *C. glena* **n. sp.** show a black punctiform mark on the posterior 1/2 of the elytral disc.

## *Description*

***Size***. – Length 7.0 mm. – Width 2.8 mm.

***Form***. – As in Fig. 485.

***Color***. – Testaceous, except each *elytron* with 3 black marks, one on humeral angle, one near *mesoscutellum*, one behind middle of elytron near sutural margin.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 143), antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 40/30).

***Thorax***. – *Pronotum* quadrate (PW/PL 105/105), side margin with well-developed tubercle, disc punctulate. – Elytral disc punctulate, small punctures substriate to elytral posterior 2/3rd (EL/EW 295/100).

***Abdomen***. – *Pygidium* scutiform.

***Distribution*** (Fig. 385). – Known from Bolivia.

***Etymology***. – The trivial name, *glena*, is a Greek noun that stems from *glene* (= eyeball); with reference to the spots on the hind portion of the elytral disc.

### 97. *Cregya hexalineata* Opitz **n. sp.**

(Fig. 125, 263, 355, 385, 486)

ZooBank : http://zoobank.org/64F3A39C-0A7D-4592-BF91-7811BECFD780

**Holotype**. ♂. BOLIVIA, Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 15-22-XI-2001, 430 m, tropical transition forest, black light trap (MNKM).

**Paratypes**. 11 specimens.

**Bolivia**

– **Departamento de Santa Cruz**, 4.6 km SSE Buena Vista, Hotel Flora & Fauna, 14-16-X-2000, Wappes & Morris (ACMT, 1);

– *idem*, 27-29-X-2000, Wappes & Morris (ACMT, 1);

– *idem*, 22-31-X-2002, Wappes & Morris (ACMT, 2);

– *idem*, 27-31-X-2002, Morris/Wappes (RFMC, 1; WOPC, 1);

– 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 17°29.949'S-63°33.152'W, 5-15-XI-2001, 430 m, tropical transition forest, black light trap, M. C. Thomas (WOPC, 1);

– *idem*, 14-19-X-2000, 430 m, tropical transition forest, black light trap, M. C. Thomas (FSCA, 1);

– *idem*, 15-XI-2001, 430 m, tropical transition forest, black light trap, M. C. Thomas & B. K. Dozier (FSCA, 1);

– *idem*, 15-22-XI-2001, tropical transition forest, black light trap, B. K. Dozier (FSCA, 1);

– 4 km SSE Buena Vista, Hotel Flora & Fauna, 20-X-2011, 300-400 m, Skillman & Wappes (FWSC, 1).

***Diagnosis***. – On each elytron there are 3 black lines that extend backwards from the elytral anterior margin. This characteristic is diagnostic within the *gemina* group.

## *Description*

***Size***. – Length 6.0 mm. – Width 2.0 mm.

***Form***. – As in Fig. 486.

***Color***. – Testaceous, except *cranium* black behind *eyes*, lower *frons* black, each *elytron* with 3 black stripes extend backwards from elytral anterior margin, lines are conjoined at base, outer lines long, inner line short.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular (Fig. 125), antennomere 10 obovate. – *Eye* slightly narrower than width of frons (EW/FW 35/20).

***Thorax***. – *Pronotum* (Fig. 263) slightly oblong (PW/PL 95/100), disc punctulate; elytral asetiferous punctulate, punctural striae end at elytral posterior 3/4th (EL/EW 260/85).

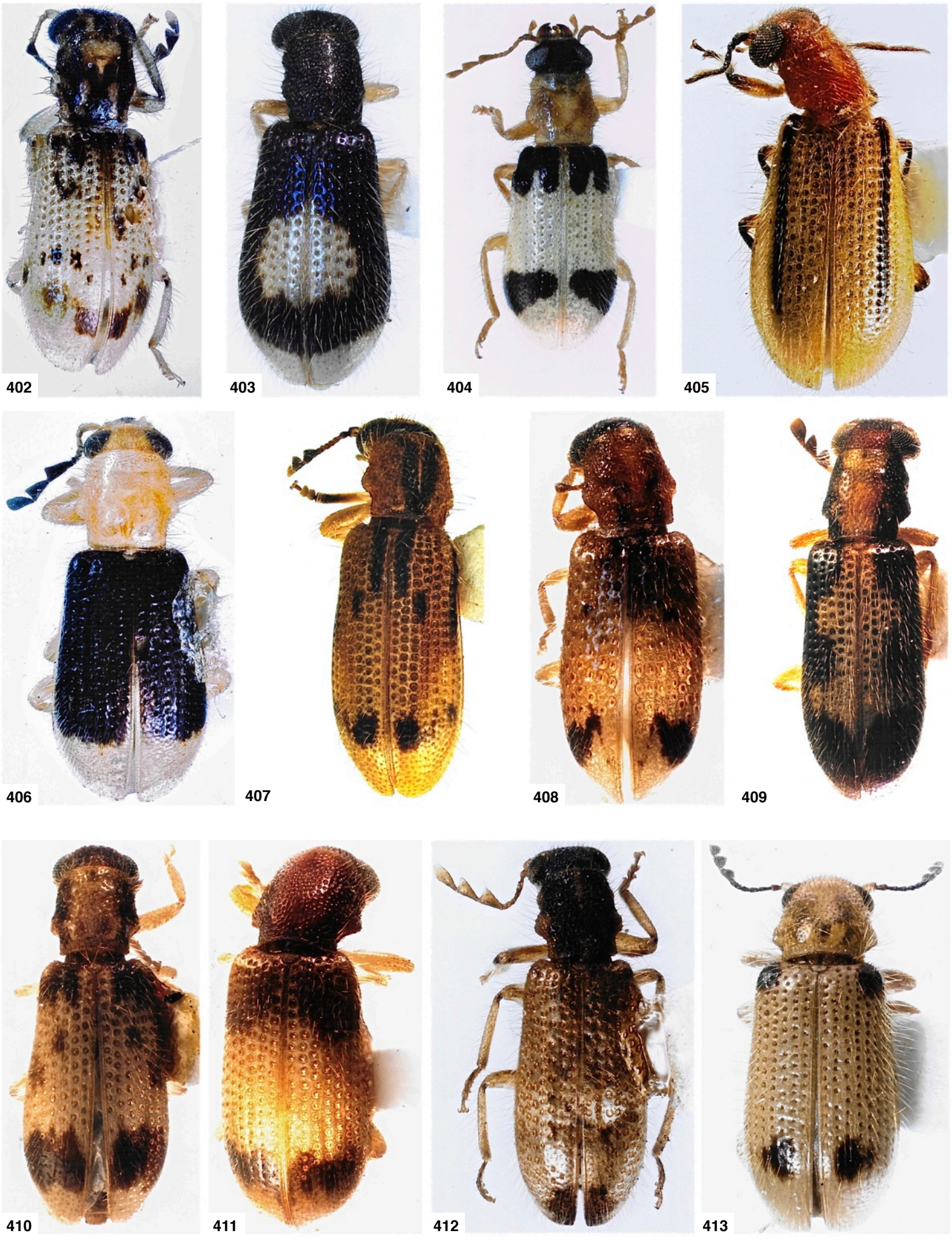


**Fig**. **402-413**. - Habitus of *Cregya* species. **(402)** *C. lita* **n**. **sp**. **(403)** *C. lunulata* (Pic, 1940). **(404)** Hybrid, *C. kraatzi/C. sexnotata*. **(405)** *C. paragramma* **n**. **sp**. **(406)** *C. seabrai* Peracchi, 1962. **(407)** *C. stricta* **n**. **sp**. **(408)** *C. abdita* Wolcott, 1927. **(409)** *C. alicula* **n**. **sp**. **(410)** *C. america* **n**. **sp**. **(411)** *C. andersoni* **n**. **sp**. **(412)** *C. apicula* **n**. **sp**. **(413)** *C. aragua* **n**. **sp**.

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex minute, triangular. – Phallobasic apodeme very long (Fig. 355).

***Variations***. – Size: Length 5.0-7.8 mm; width 2.0-3.0 mm. The cranium ranges from entirely black to entirely testaceous. The inner black line of the elytral disc varies in length. In one specimen this line is disconnected from the elytral basal margin. Also, there may be a thin 4th line extending from the elytral anterior margin.

***Natural History***. – The available specimens were collected during October and November, some at 430 m.

***Distribution*** (Fig. 385). – Known from Bolivia.

***Etymology***. – The trivial name, *hexalineata*, is a compound name that stems from the Greek *hex* (= 6) and the Latin *linea* (= line); in reference to the 6 lines on the elytra.

98. ***Cregya jatai*** Opitz **n**. **sp**.

(Fig. 48, 165, 363, 386, 494)

ZooBank : http://zoobank.org/45B84EC0-5BB7-49C1-932D-8C38C5FC42B3

**Holotype**. ♂. Jatahy Goyas (Jatai Goias, Brazil) (SDEI).

***Diagnosis***. – In the key to species *C. jatai* **n**. **sp**. is affiliated with *C. panna* **n**. **sp**. Specimens of these two species differ in elytral color. In *C. jatai* **n**. **sp**. beetles the posterior 1/2 of the elytral disk has a black obliquely positioned fascia. This region of the elytral disc is devoid of makings in specimens of *C. panna* **n**. **sp**.

## *Description*

***Size***. – Length 4.7 mm. – Width 2.0 mm.

***Form***. – As in Fig. 494.

***Color***. – Testaceous, except antennal *fundus* black, each *elytron* with 3 black markings, 2 basically connected short lines that extend posteriorly from elytral anterior margin, one oblique line on elytral posterior 1/3rd near sutural margin.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 48), antennomere 10 obovate. – *Eye* slightly wider than width of frons (EW/FW 28/22).

***Thorax***. – *Pronotum* (Fig. 165) slightly oblong (PW/PL 70/80), side margin with well-developed tubercle, disc punctulate; elytral disc punctulate, punctures substriate to elytral posterior 2/3rd (EL/EW 210/70).

***Abdomen***. – *Pygidium* scutiform, posterior margin slightly concave. – Phallic post-apical flap absent, phallic apex small, acuminate, phallobasic apodeme long, narrow (Fig. 363).

***Distribution*** (Fig. 386). – Known from Brazil.

***Etymology***. – The trivial name, *jatai*, constitutes a noun in apposition and refers to the type locality.

***Notes***. – The holotype formed part of the syntypic series of *Pelonium kraatzi* Schenkling, 1900.

99. ***Cregya juxta*** Opitz **n**. **sp**.

(Fig. 134, 260, 356, 385, 487)

ZooBank : http://zoobank.org/5AB51D67-6D8E-4A0C-B7D5-5D90716B7FDF

**Holotype**. ♂. Corumba, Mato Grosso (Brazil) (MNHN).

***Diagnosis***. – The substantially lengthened antennal capitulum (Fig. 134) will distinguish the members of this species from congeners.

## *Description*

***Size***. – Length 4.5 mm. – Width 2.0 mm.

***Form***. – As in Fig. 487.

***Color***. – Testaceous, except *cranium* black, *antenna* brown, each *elytron* with 3 black markings, 2 basically connected lines from elytral anterior margin, one punctiform mark on elytral posterior 1/3rd near epipleural margin.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular (Fig. 134), antennomere 10 long obovate. – *Eye* wider than width of frons (EW/FW 27/13).

***Thorax***. – *Pronotum* (Fig. 260) quadrate (PW/PL 60/60), side margin with well-developed tubercle, disc punctulate. – Elytral disc punctulate, punctures substriate, punctures end at elytral distal 2/3rd (EL/EW 220/60).

***Abdomen***. – Pygidium scutiform, distal margin deeply concave. – Phallic post-apical flap absent, phallic apex minute, triangular, phallobasic apodeme long (Fig. 356).

***Distribution*** (Fig. 385). – Known from Brazil.

***Etymology***. – The trivial name, *juxta*, is a Latin adjective with a meaning of "close"; with reference to the proximate black lines at the elytral basal margin.

100. ***Cregya mekosa*** Opitz **n**. **sp**.

(Fig. 26, 135, 264, 357, 385, 488)

ZooBank : http://zoobank.org/E145A07C-4DBE-457E-AA4A-67B12D7CAC23

**Holotype**. ♂. GUYANE (French Guiana) (Régina), Montagne de Kaw, PK 36, 31-VIII-2005, J. A. Cerda. A second label reads: Piège malaise (FSCA).

***Diagnosis***. – A long black line extends posteriorly from the elytral humeral angle. This characteristic will distinguish the members of this species from other beetles of the *gemina* group.

## *Description*

***Size***. – Length 6.2 mm. – Width 2.2 mm.

***Form***. – As in Fig. 488.

***Color***. – Testaceous, except *antennal* fundus black, capitular antennomeres bicolored, posterior margin black, discs yellow, pterothorax black, each elytron with a long black line extends from humeral angle, sutural margin black at base.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular (Fig. 135), antennomere 10 long obovate. – *Eye* much wider than width of frons (EW/FW 42/15).

***Thorax***. – *Pronotum* (Fig. 264) slightly transverse (PW/PL 95/90), side margin with well-developed tubercle, disc punctulate. – Elytral disc punctulate, punctures substriate near humeral region (EL/EW 280/85).

***Abdomen***. – *Pygidium* scutiform, distal margin concave. – Phallic post-apical flap absent, phallic apex minute, triangular, phallobasic apodeme long (Fig. 357).

***Distribution*** (Fig. 385). – Known from French Guiana.

***Etymology***. – The trivial name, *mekosa*, is a Greek name with a meaning of "length"; with reference to the long black line that extends posteriorly from the humeral angle.

101. ***Cregya nebula*** Opitz **n**. **sp**.

(Fig. 45, 358, 386, 489)

ZooBank : http://zoobank.org/18C2DB8D-A291-4496-8556-C970C67D7DCC

**Holotype**. ♂. PERU, Madre de Dios, Rio Tambopata, Reserva Maldonado, 290 m, 12°50'S-69°20'W. A second label reads: Smithsonian Institution Canopy Fogging Project, T. L. Erwin, et al, colls, 06Sept84, 05/01/029. A third label reads: FOGGING 9933631 (USNM).

**Paratypes**. 3 specimens. – **Bolivia**, **Departamento de Santa Cruz**, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 17°29.949'S-63°33.152'W, 5-15-XI-2001, tropical transition forest, black light, M. C. Thomas (FSCA, 2; WOPC, 1).

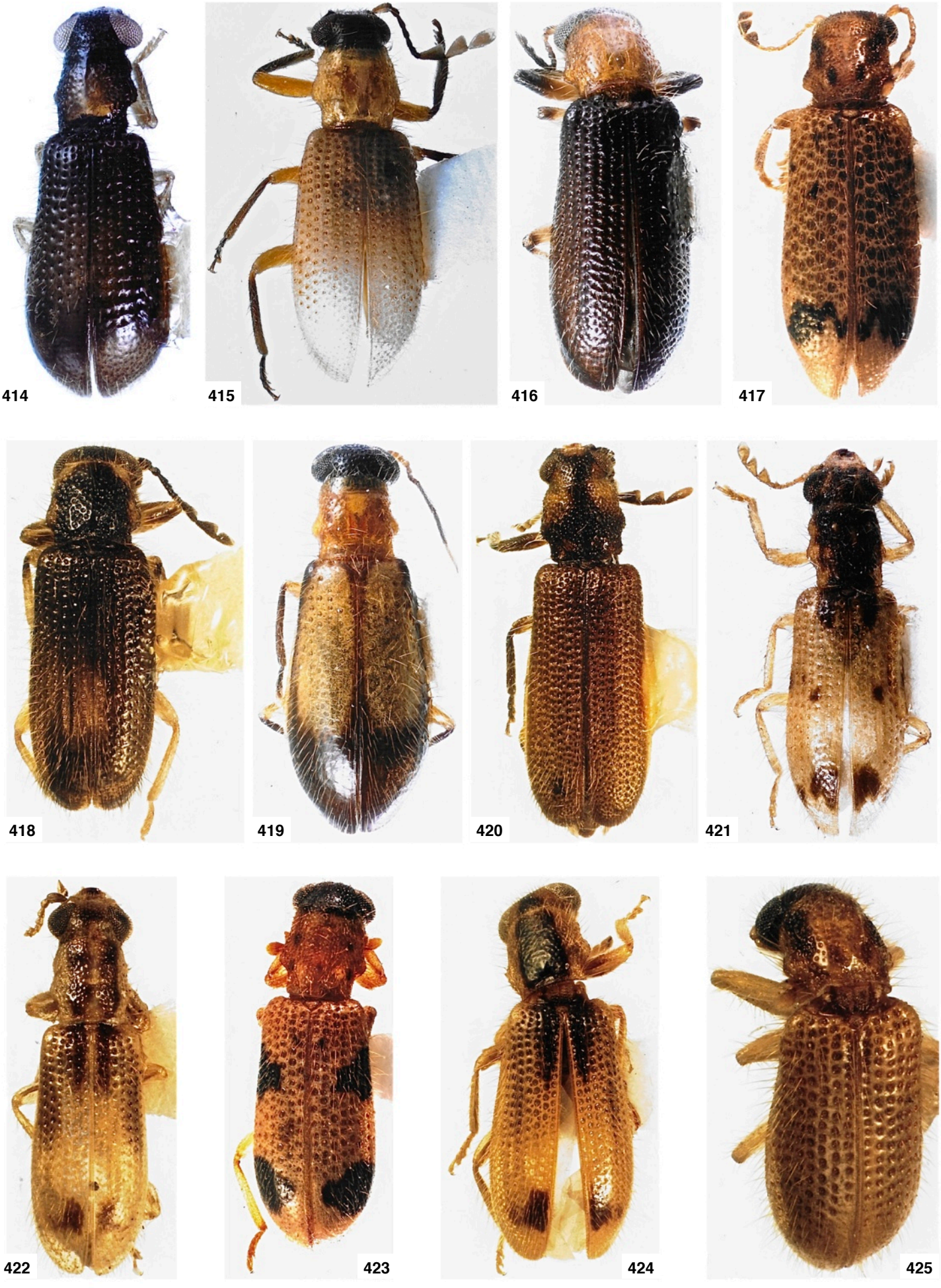


**Fig. 414-425**. - Habitus of *Cregya* species. **(414)** *C. ardis* **n. sp.** **(415)** *C. atracapitis* **n. sp.** **(416)** *C. bicolor* (Laporte, 1836). **(417)** *C. bilineicolle* (Chevrolat, 1874) **nov. stat.** **(418)** *C. casselorum* (Opitz, 2014). **(419)** *C. casusa* **n. sp.** **(420)** *C. catarina* (Opitz, 2014). **(421)** *C. contaminata* (Klug, 1842). **(422)** *C. corumba* **n. sp.** **(423)** *C. cruzvera* **n. sp.** **(424)** *C. ekteina* **n. sp.** **(425)** *C. helva* **n. sp.**

***Diagnosis***. – The markings on the elytral disc as depicted in Fig. 489 are diagnostic for these beetles within the *gemina* group.

### *Description*

***Size***. – Length 5.5 mm. – Width 2.5 mm.

***Form***. – As in Fig. 489.

***Color***. – Testaceous, except *antenna* brown, each *elytron* with 3 markings, 2 short black lines extend posteriorly from elytral anterior margin, one globose brown mark in elytral distal 2/3rd.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 45), antennomere 10 long obovate. – *Eye* slightly wider than width of frons (EW/FW 37/30).

***Thorax***. – *Pronotum* slightly transverse (PW/PL 95/90), side margin with well-developed tubercle, disc punctulate. – *Elytral* disc punctulate, punctures substriate to elytral posterior 2/3rd (EL/EW 290/80).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex minute, triangular, phallobasic *apodeme* long (Fig. 358).

***Variations***. – Size: Length 4.0-5.5 mm; width 1.7-2.5 mm. The rotund brown mark on the elytral disc varies in its presence. In one specimen, the posterior round mark is almost completely obliterated, in another it is bipartite.

***Distribution*** (Fig. 386)). – Known from Peru and Bolivia.

***Etymology***. – The trivial name, *nebula*, is a Latin noun with a meaning of "fog"; about the collecting technique (fogging) used to capture these beetles.

## 102. ***Cregya nigropunctata*** (Chevrolat, 1876)

(Fig. 46, 266, 359, 386, 490)

*Pelonium nigropunctum* Chevrolat, 1876: 38.

**Lectotype**. ♂. Here designated. Brasilia (Brazil), Petropolis, D. J. Sahlberg (MNHN). Corporaal, 1950a: 282.

We do not know how many specimens were available to Chevrolat when he made his description; therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

***Diagnosis***. – There are 5 black spots on each elytral disc. This characteristic is diagnostic for these beetles within the *gemina* group.

### *Redescription*

***Size***. – Length 7.0 mm. – Width 2.8 mm.

***Form***. – As in Fig. 490.

***Color***. – Predominantly testaceous, each *elytron* with 5 black markings, 2 short streaks near anterior margin, one at elytral middle, 2 at elytral posterior 2/3rd.

***Head***. – *Funicular antennomeres* increasingly shorter and wider as they approach capitulum, capitular antennomeres 8 and 9 oblong triangular (Fig. 46), antennomere 10 obovate. – *Eyes* slightly wider than width of frons (EW/FW 35/30).

***Thorax***. – *Pronotum* (Fig. 266) oblong (PW/PL 95/105), side margin with well-developed tubercle, disc punctulate. – Elytral asetiferous punctulate, punctation end at about elytral 1/2 (EL/EW 275/80).

***Abdomen***. – *Pygidium* subquadrate, posterior margin concave. – *Aedeagus*, phallic post-apical flap absent, phallic apex minute, triangular. – Phallobasic apodeme very long (Fig. 359).

***Distribution*** (Fig. 386). – Known from Brazil.

## 103. ***Cregya stilastichosa*** Opitz **n**. **sp**.

(Fig. 47, 267, 360, 386, 491)

ZooBank : http://zoobank.org/59D60D22-9BEF-48F9-B163-171B7A395891

**Holotype**. ♂. BOLIVIA: Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 405 m, 5-15-XI-2001, 17°29.949'S-63°33.152'W, tropical transition forest, black light, M. C. Thomas & B. K. Dozier (MNKM).

***Diagnosis***. – The members of this species resemble superficially those of *C. goias* **n**. **sp**., from which they are distinguished by the extent of development of the elytral post-humeral line. This line extends to the elytral middle in *C. stilastichosa* **n**. **sp**. specimens; it does not extend to the elytral middle in specimens of *C. goias* **n**. **sp**.

### *Description*

***Size***. – Length 7.0 mm. – Width 2.3 mm.

***Form***. – As in Fig. 491.

***Color***. – Testaceous, except antennal *fundus* black, each elytron with 3 markings, 2 black lines extend posteriorly from elytral basal margin, one short slightly oblique line in elytral distal 2/3rd near sutural margin.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 47), antennomere 10 long obovate. – *Eye* slightly wider than width of frons (EW/FW 40/35).

***Thorax***. – *Pronotum* (Fig. 267) slightly transverse (PW/PL 105/115), side margin with well-developed tubercle, disc punctulate. – *Elytral* disc punctulate, punctures substriate to elytral posterior 2/3rd (EL/EW 300/90).

***Abdomen***. – *Pygidium* scutiform, posterior margin concave. – Phallic post-apical flap absent, phallic apex small, acuminate, phallobasic apodeme long, narrow (Fig. 360).

***Natural History***. – The holotype was collected during November.

***Distribution*** (Fig. 386). – Known from Bolivia.

***Etymology***. – The trivial name, *stilastichosa*, is a compound name that stems from the Greek *stichos* (= line) and Latin *stilus* (= pen); I refer to the black pencil lines on the elytral disc.

## 104. ***Cregya terapoto*** Opitz **n**. **sp**.

(Fig. 142, 163, 361, 386, 492)

ZooBank : http://zoobank.org/5029CCA9-874A-4EEE-ACD6-0678B0B5FC70

**Holotype**. ♀. Pérou (Peru), Terapoto, Mai a Aout, M. de Mathan (MNHN).

**Paratypes**. One specimen. – **Ecuador**, Orellana, 1 km S Okone Gare Camp, Reserva Etnica Waorani, 4-X-1994, 220-250 m, T. L. Erwin (USNM).

***Diagnosis***. – The basal 1/4th of the sutural margin is black. This feature distinguishes these beetles from others in the *gemina* group.

### *Description*

***Size***. – Length 8.0 mm. – Width 3.8 mm.

***Form***. – As in Fig. 492.

***Color***. – Testaceous, except *cranium* black, upper frons with oval testaceous mark, *antennae* bicolorous, posterior margin brown, testaceous in remainder, each *elytron* has 3 black markings, one narrow streak at base of sutural margin, one long line extended backwards from *humeral angle*, one oblong mark near *elytral apex*.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 long triangular (Fig. 142), antennomere 10 obovate. – *Eye* much wider than width of frons (EW/FW 50/25).

***Thorax***. – Pronotum (Fig. 163) slightly transverse (PW/PL 125/115), side margin with well-developed tubercle, disc shallowly punctate at sides, glabrous at middle. – Elytral asetiferous punctures minute (EL/EW 340/120).

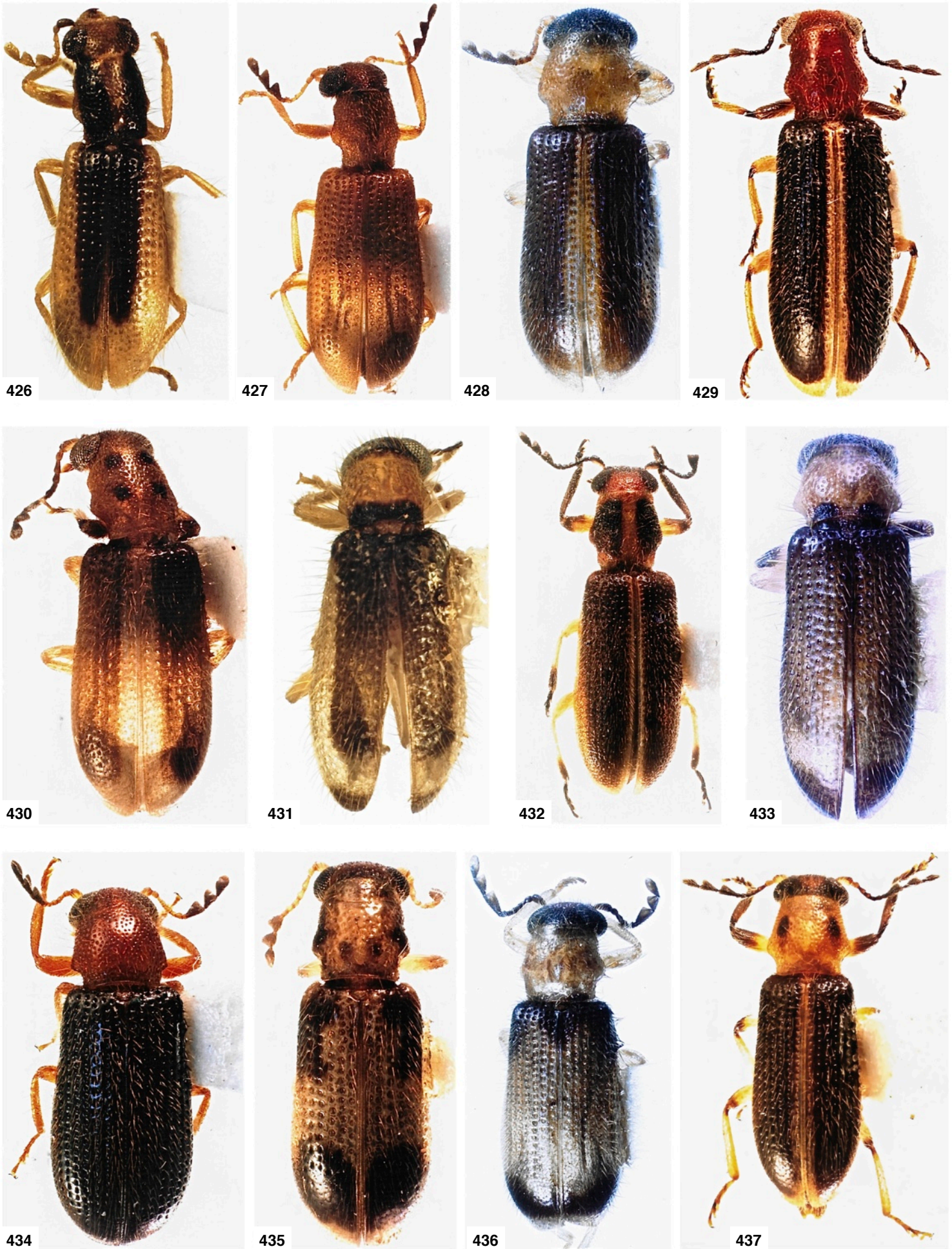


**Fig. 426-437**. - Habitus of *Cregya* species. **(426)** *C. infula* **n. sp.** **(427)** *C. inornata* **n. sp.** **(428)** *C. insularis* (Gorham, 1898). **(429)** *C. karafucosa* **n. sp.** **(430)** *C. lenticula* **n. sp.** **(431)** *C. linea* **n. sp.** **(432)** *C. lineolata* (Gorham, 1883). **(433)** *C. linomolina* **n. sp.** **(434)** *C. mexcala* **n. sp.** **(435)** *C. mixta* LeConte, 1865. **(436)** *C. mocagua* **n. sp.** **(437)** *C. oculata* (Say, 1835).

***Abdomen***. – *Pygidium* scutiform, phallic post-apical flap absent, phallic apex triangular. – Phallobasic apodeme long (Fig. 361).

***Variations***. – The available specimens are quite homogeneous.

***Natural History***. – Specimens were collected in October, at an elevation between 220-250 m.

***Distribution***(Fig. 386). – Known from Peru and Ecuador.

***Etymology***. – The trivial name, *terapoto*, constitutes a noun in apposition and refers to the type locality.

105. ***Cregya tetralineata*** Opitz **n**. **sp**.

(Fig. 56, 164, 362, 386, 493)

ZooBank : http://zoobank.org/6EC2BC2B-CF21-43E2-9361-8FEE924525D0

**Holotype**. ♂. Brazil, Pernambuco, Caruaru, IV-1972, Moacir Alvarenga. (FSCA).

***Diagnosis***. – In the key to species *C. tetralineata* **n**. **sp**. is affiliated with *C. terapoto* **n**. **sp**. Specimens of these two species differ in the color of the basal portion of the sutural margin. In *C. tetralineata* **n**. **sp**. beetles the basal 1/4 of the elytral stutural margin is testaceous; in specimens of *C. panna* **n**. **sp**. this portion of the sutural margin is black.

### *Description*

***Size***. – Length 5.5 mm. – Width 1.8 mm.

***Form***. – As in Fig. 493.

***Color***. – Testaceous, except *cranium* black, *frons* narrowly testaceous, antennal *fundus* brown, each *elytron* with 2 black markings extend posteriorly from elytral anterior margin.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum, *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular (Fig. 56), antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 30/20).

***Thorax***. – *Pronotum* (Fig. 164) quadrate (PW/PL 75/75), side margin with well-developed tubercle, disc punctulate. – Elytral disc punctulate, punctures extend to elytral 1/2 (EL/EW 220/60).

***Abdomen***. – *Pygidium* scutiform, posterior margin slightly concave. – Phallic post-apical flap absent, phallic apex small, digitiform, phallobasic apodeme long, narrow (Fig. 362).

***Distribution*** (Fig. 386). – Known from Brazil.

***Etymology***. – The trivial name, *tetralineata*, is a compound name that stems from the Greek *tetra* (= four) and the Latin *linea* (= line); about the 4 lines at the base of the elytra.

## The *inscripta* species group

This monotypic species group is characterized by the rough sculpture on the pronotal and elytral discs. The elytral asetiferous punctures are not organized into striae. Also, the phallus, although with a post-apical flap, is not divided into anterior and posterior plates. The species is found in Costa Rica and Panamá.

106. ***Cregya inscripta*** (Gorham, 1883)

(Fig. 53, 166, 364, 388, 495)

*Pelonium inscriptum* Gorham, 1883: 191.

**Lectotype**. ♂. Bugaba (Panamá), 800-1500 ft., Champion (BMNH).

**Paralectotypes**. 2 specimens. – **Panamá**, **Provincia de Chiriquí**, Bugaba, 800-1,500 ft (BMNH, MNHN). Corporaal 1950a: 281.
Gorham did not tag a specimen to be the name bearer, therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

***Diagnosis***. – The subcarinose condition of the elytral disc distinguishes these beetles from congeners.

### *Redescription*

***Size***. – Length 5.0 mm. – Width 1.5 mm.

***Form***. – As in Fig. 495.

***Color***. – Mostly light yellow. – *Frons* and *epicranium* infuscated. – *Antenna* bicolorous, antennal *fundus* yellow, *capitulum* brown. – *Pronotum* bicolorous, ferruginous, and mottled with black. – *Mesothorax* ferruginous, *metathorax* dark brown. – *Prothoracic legs* bicolorous, *tibia* infuscated basally, *femur* infuscated distally, *mesothoracic* and *metathoracic legs* yellow. – *Elytra* bicolorous, mostly light yellow, with brown markings near *mesoscutellum*, in front of middle, and with large brown macula behind elytral middle.

***Head***. – *Cranium* coarsely punctate. – Antennal *funicle* about as long as length of *capitulum* (Fig. 53), capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eyes* narrower than width of frons (EW/FW 20/30).

***Thorax***. – **Pronotum** (Fig. 166) quadrate (PW/PL 70/70), side margin with well-developed tubercle, disc with shallow punctures. – *Elytra* roughly sculptured with large asetiferous punctures, punctures not organized into striae, punctures end at elytral 2/3rd, elytral disc subcarinose (EL/EW 190/60).

***Abdomen***. – Phallic post-apical flap present, phallic plate not divided, phallic apex slightly uncinate, posterior phallic plate very broad (Fig. 364).

***Variations***. – Size: Length 4.0-5.0 mm; width 1.2-1.8 mm. The pronotum may be partially or completely black.

***Natural History***. – The non-type specimen was collected during March, at 1,500 m. The type specimens were captured at an altitude between 244 to 457 m.

***Distribution*** (Fig. 388). – In addition to the holotype, I examined one specimen:

**Costa Rica**

– **Provincia de Puntarenas**, San Vito, Estación Biologica Las Alturas, 8°57'N-82°50'W, ?-III-1992, P. Hanson.

Specimens are deposited in BMNH, MNHN, and WOPC.

## The *kraatzi* species group

The members of this species group are characterized by having eyes that are wider than the width of the frons, the phallic plates are undivided, the phallic apex is more triangular than digitiform, the pygidium is broadly concave distally, and the phallobasic apodeme is short and broad. There are 11 species in this group whose combined geographic range extends from Ecuador to Brazil.

107. ***Cregya asarota*** Opitz **n**. **sp**.

(Fig. 61, 268, 365, 386, 496)

ZooBank : http://zoobank.org/50699AD0-DE64-4CF7-BF66-CA740F51B593

**Holotype**. ♀. Brazil, Minas Gerais, Pirapora, ?-XI-1975, M. Alvarenga (FSCA).

**Paratypes**. 128 specimens.

**Bolivia**

– **Departamento de Santa Cruz**, Buena Vista, vicinity Flora & Fauna Hotel, 27-31-X-2002, Morris & Wappes (RFMC, 25; WOPC, 11);

– *idem*, 17-20-X-2000, R. Morris (RFMC, 1);

– *idem*, 17°29.949'S-63°33.152' W, 5-15-XI-2001, 430 m, tropical transition forest, M. C. Thomas & B. K. Dozier (FSCA, 18; WOPC, 10);

– *idem*, 17°29.949'S-63°33.152'W, 5-15-XI-2001, 430 m, tropical transition forest, M. C. Thomas (WOPC, 1);

– *idem*, 14-19-X-2000, M. C. Thomas (FSCA, 2; WOPC, 5);

– 5 km SSE Buena Vista, Flora & Fauna Hotel, W63°39.128'-S17°29.925', 10-22-X-2004, J. E. Eger (FSCA, 1; WOPC, 1);

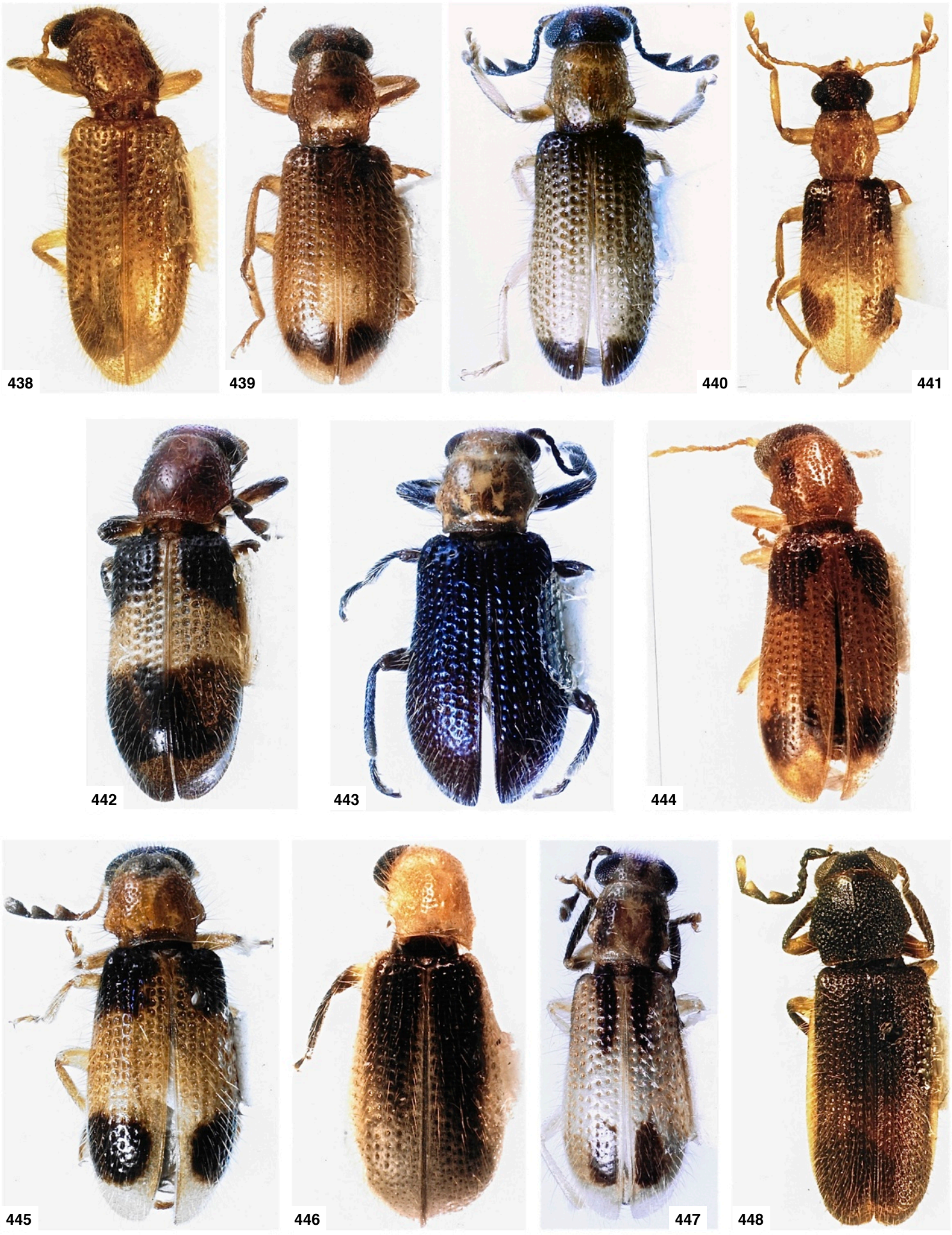


**Fig**. **438-448**. - Habitus of *Cregya* species. **(438)** *C. palaga* **n**. **sp**. **(439)** *C. pallida* **n**. **sp**. **(440)** *C. pannusa* **n**. **sp**. **(441)** *C. pereira* **n**. **sp**. **(442)** *C. pictila* **n**. **sp**. **(443)** *C. preclara* **n**. **sp**. **(444)** *C. quadrinotata* (Chevrolat, 1874) **nov**. **stat**. **(445)** *C. quadrisignata* (Spinola, 1844). **(446)** *C. rifkindi* **n**. **sp**. **(447)** *C. rileyi* **n**. **sp**. **(448)** *C. robusta* **n**. **sp**.

– 3.7 km SSE Buena Vista, Flora & Fauna Hotel, 10-29-XI-2003, black light trap, B. K. Dozier (FSCA, 1; WOPC, 1);
– *idem*, 15-22-XI-2001, 430 m, B. K. Dozier (FSCA, 2; WOPC, 2);
– *idem*, 14-28-X-2000, 430 m, B. K. Dozier (FSCA, 1);
– Buena Vista, 3-5-X-1992, E. Giesbert (WOPC, 1);
– *idem*, 18-25-X-1992, E. Giesbert (WOPC, 1);
– 4.6 km SSE Buena Vista, Flora & Fauna Hotel, 22-31-X-2002, Wappes & Morris (ACMT, 16; WOPC, 3);
– *idem*, 13-16-XI-2003, Wappes, Morris & Nearns (ACMT, 2);
– *idem*, 21-24-XI-2003, Wappes, Morris & Nearns (WOPC, 1);
– *idem*, 14-16-X-2000, Wappes & Morris (ACMT, 1; WOPC, 1);
– *idem*, 1-8-XI-2004, Wappes & Morris (ACMT, 7);
– *idem*, 3-8-X-2004, Wappes & Morris (ACMT, 2);
– *idem*, 19-22-X-2004, Wappes & Morris (ACMT, 1);
– *idem*, 19-22-X-2004, Wappes & Skillman (ACMT, 1);
– 4 km SSE Buena Vista, W63°39.128'-S17°29.925', 23-XI-2013, 300-400 m, Skillman & Wappes (FWSC, 1; WOPC, 1);
– Reserva Privada Potrerillos de Guenda, 17°40.26'S-63°27.44'W, 29-XI-44, blacklight, B. K. Dozier (WOPC, 3);
– *idem*, 17-22-X-2007, MV/BL, J. & F. Romero (WOPC, 2);
– **Departamento de Tarija**, 30 km N Villamontes, 8-10-XII-2012, Wappes, Bonaso, Skillman (ACMT, 1; WOPC, 1).

**Peru**

– **Provincia de Huallaga**, Rio Mixiollo, 7-VIII-1900, G. A. Baer (MNHN, 1).

***Diagnosis***. – These beetles resemble superficially those of *C. marysearsi* **n**. **sp**., from which they differ in cranial color. The cranium in *C. asarota* **n**. **sp**. specimens is testaceous, whereas in *C. marysearsi* **n**. **sp**. specimens it is black.

## *Description*

***Size***. – Length 6.5 mm. – Width 2.2 mm.

***Form***. – As in Fig. 496.

***Color***. – Mostly testaceous. – *Cranium*, *frons* infuscated, antennal *capitulum* brown. – *Pronotum* with two broad black paralateral stripes, distal extremity of femora and proximal extremity of tibiae black. – Each *elytron* with 2 oblong black maculae.

***Head***. – *Funicular antennomeres* subquadrate (Fig. 61), *capitulum* longer than *funicle*. – Capitular antennomeres 8 and 9 short triangular, antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 40/30).

***Thorax***. – *Pronotum* (Fig. 268) slightly transverse (PW/PL 95/90), pronotal tubercle slightly developed, pronotal sides coarsely punctate, disc sparsely punctate. – Elytra with 11 punctiferous striae, striae end at elytral distal 4/5$^{th}$ (EL/EW 160/50).

***Abdomen***. – *Pygidium* scutiform, concave distally, phallic post-apical flap absent, phallic apex triangular, phallobasic *apodeme* short and broad (Fig. 365).

***Variations***. – Size: Length 4.5-8.0 mm; width 1.4-3.0 mm. The *pronotum* and *cranium* may be entirely testaceous.

***Natural History***. – Specimens were collected during August, October through December, some at altitudes between 300 and 400 m.

***Distribution*** (Fig. 386). – Known from Peru, Bolivia, and Brazil.

***Etymology***. – The trivial name, *asarota*, is a Latin name that means "mosaic". I refer to the color characteristics of these beetles.

### 108. ***Cregya catoma*** Opitz **n**. **sp**.

(Fig. 62, 269, 366, 386, 497)

ZooBank : http://zoobank.org/07AAD629-4EA5-4C1B-B586-1F4877BFA9C9

**Holotype**. ♀. BOLIVIA, Santa Cruz, Potrerillo del Guenda, 14-16 October, 2011, Wappes & Skillman. A second label reads: Snake Farm, 17°40'S-63°27'W, 370-400 m (MNKM).

**Paratypes**. 3 specimens.

**Bolivia**

– **Departamento de Santa Cruz**, Potrerillo del Guenda, Snake Farm, 17°40'S-63°27'W, 14-16-X-2011, 370-400 m, Wappes & Skillman (ACMT, 1);
– *idem*, Preserva Natural, aka Snake Farm, 17°40'S-63°27'W, 13-17-X-2014, Wappes & Morris (WOPC, 1);
– 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 10-29-XI-2003, 430 m, black light trap, B. K. Dozier (FSCA, 1).

***Diagnosis***. – The basally broad, distally streaky, black marking near the elytral humeral angle will distinguish the members of this species from congeners.

## *Description*

***Size***. – Length 6.8 mm. – Width 2.8 mm.

***Form***. – As in Fig. 497.

***Color***. – Yellow, except *cranium* black and elytral humeral region project backwards a black triangular marking, marking acuminate distally.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum (Fig. 62), capitulum longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 35/20).

***Thorax***. – *Pronotum* (Fig. 269) oblong (PW/PL 89/100), side margin with shallow tubercle, disc sides punctulate, middle of disc smooth. – Elytral asetiferous punctation shallow, restricted mostly to small region near humeral angle, a few asetiferous punctures extend posteriorly at middle of disc, not clearly striate, punctures obsolete near elytral apex. (EL/EW 300/85).

***Abdomen***. – *Pygidium* scutiform, deeply concave distally; distal margin of 5th visible tergite concave distally. – Phallic post-apical flap absent, phallic apex triangular, phallobasic *apodeme* short and broad (Fig. 366).

***Variations***. – Size: Length 5.0-6.8 mm; width 1.5-2.8 mm. Except for body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were captured during October and November, at an altitude between 370 and 400 m.

***Distribution*** (Fig. 386). – Known from Bolivia.

***Etymology***. – The trivial name, *catoma*, is a Latin name derived from *catomus* (= on the shoulder); with regard to the black marking on the elytral humeral region.

### 109. ***Cregya confluens*** (Gorham, 1877)

(Fig. 54, 270, 367, 386, 498)

*Pelonium confluens* Gorham, 1877: 423.

**Lectotype**. ♀. Amazon (Brazil), Bates (MNHN).

**Paralectotypes**. 5 specimens. – **Brazil**, **Estado do Amazonas**, Amazonas, Bates (BMNH, 3; MNHN, 1). Corporaal 1950a: 279.

Gorham's description is based on 5 specimens. He did not single out a specimen that is to be the name bearer of the species, therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

***Diagnosis***. – In the key to species *C. confluens* (Gorham, 1877) is aligned with *C. odonta* **n**. **sp**. Specimens of these two species differ in the color of the distal portion of the elytra. In *C. confluens* (Gorham, 1877) beetles the distal 1/2 of the elytral disc is marked by streak-like markings. These markings are more broadened in specimens of *C. odonta* **n**. **sp**.

## *Redescription*

***Size***. – Length 7.0 mm. – Width 3.0 mm.

***Form***. – As in Fig. 498.

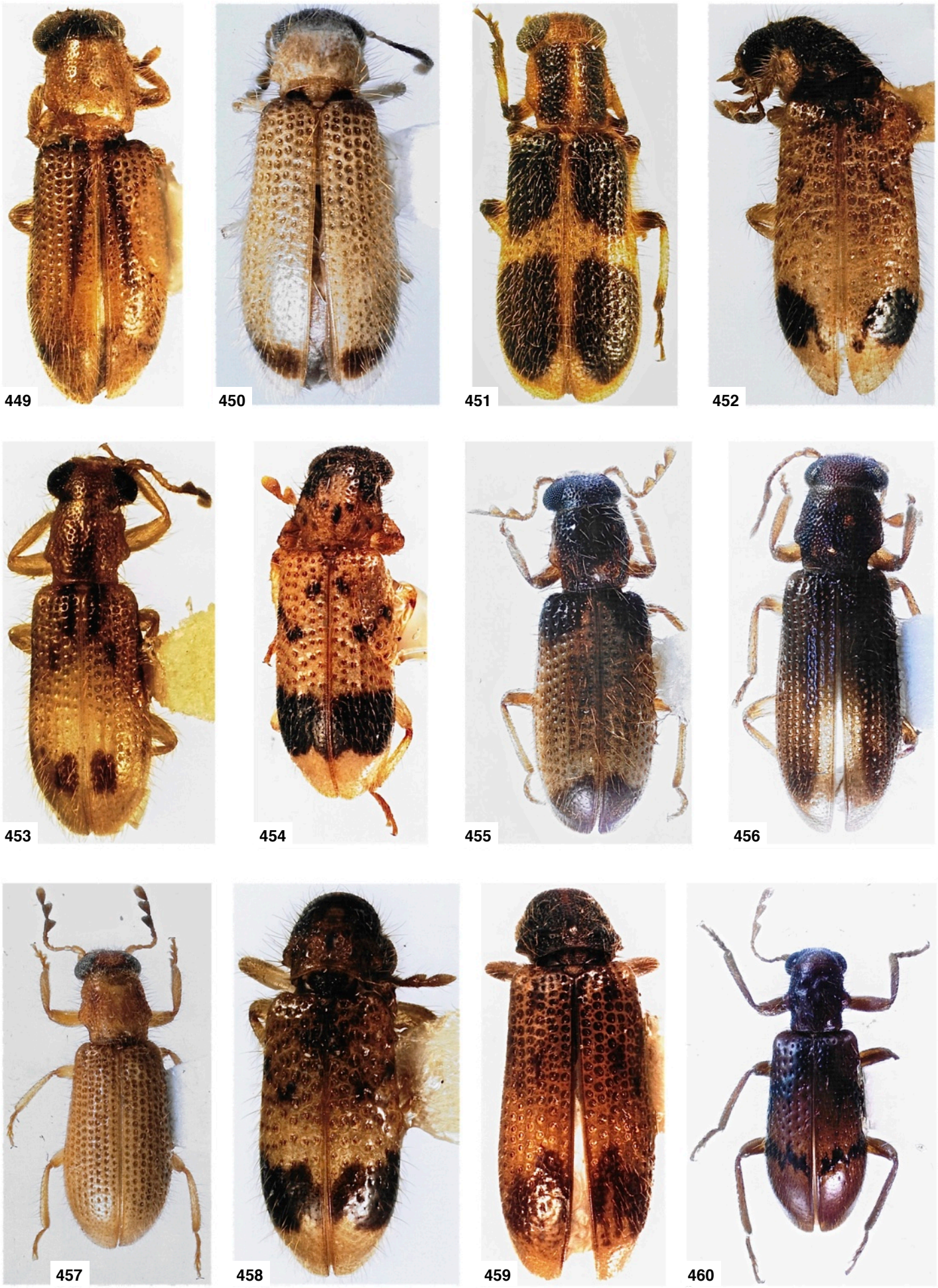


**Fig. 449-460**. - Habitus of *Cregya* species. **(449)** *C. sina* **n. sp. (450)** *C. tambopata* **n. sp. (451)** *C. tessara* **n. sp. (452)** *C. turrialba* **n. sp. (453)** *C. urica* **n. sp. (454)** *C. versicula* **n. sp. (455)** *C. vitticeps* (Blanchard, 1844). **(456)** *C. vittipennis* (Schenkling, 1906). **(457)** *C. withlacoochee* Rifkind, 2012. **(458)** *C. yojoa* **n. sp. (459)** *C. zacapa* **n. sp. (460)** *C. castanea* **n. sp.**

***Color***. – Yellow, except *cranium* mostly black, *scape*, *pedicel*, and posterior margin of capitular antennomeres brown, and elytral anterior margin broadly black, each elytral post-medial region of disc with 3 black streaks.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum (Fig. 54), *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 45/30).

***Thorax***. – Pronotum (Fig. 270) quadrate (PW/PL 120/120), each side margin with well-developed tubercle, disc sides punctulate, middle of disc smooth; elytral asetiferous punctation shallow, not clearly striate, punctures obsolete near elytral apex. (EL/EW 340/110).

***Abdomen***. – *Pygidium* scutiform, deeply concave distally. – Phallic post-apical flap absent, phallic apex triangular. – Phallic plates denticulate near apex. – Phallobasic apodeme lengthened and broad (Fig. 367).

***Variations***. – Size: Length 6.0-8.0 mm; width 1.5-3.8 mm. The black marking along the elytral anterior margin may be fractured into a humeral marking and a marking near the mesoscutellum. Also, when the anterior black marking is fractured, the fractured portions may extend posteriorly into acuminate streaks. The appearance of elytral postmedial black streaks varies, sometimes the streaks are dimly visible.

***Natural History***. – Specimens were captured during July-August, and October.

***Distribution*** (Fig. 386). – In addition to the syntypic series, I examined 9 specimens from:

**Peru**

– **Provincia de San Martín**, Terapoto, ?-V-X-1886, M. de Mathan.

**Brazil**

– **Estado do Mato Grosso**, Sinop, ?-X-1975, M. Alvarenga;

– **Estado do Amazonas**, Tefé, ?-VII-VIII-1878, M. de Mathan;

– **Estado do Pará**, Faro, Hahnel; Ituitiba, Hahnel.

Specimens are deposited in BMNH, MNHN, and WOPC.

### 110. *Cregya egeri* Opitz **n**. **sp**.

(Fig. 63, 271, 368, 386, 499)

ZooBank : http://zoobank.org/631968E9-8C4F-42DD-B761-525513E2B737

**Holotype**. ♂. ECUADOR, Prov Napo, vic. Puerto Misahuali, 1650-1900 ft., 6-19-IX-1998, J. E. Eger coll. A second label reads: 1°2'4".2S-77°39'49".2W (FSCA).

**Paratypes**. 5 specimens.

**Peru**

– **Provincia de Tambopata**, Madre de Dios, Rio Tambopata Reserve, 30 km SW Puerto Maldonado, 12°50'S 69°20'W, 9-III-1984, 290 m, T. L. Erwin (USNM, 1);

– *idem*, 9-XI-1983, 290 m, T. L. Erwin (USNM, 1); 10-V-1984, 290 m, T. L. Erwin (MNHN, 1);

– *idem*, 9-XI-1983, 290 m, T. L. Erwin (USNM, 1);

– **Provincia San Martin**, Terapoto, ?-VI-X-1886, M.de Mathan (WOPC, 1).

***Diagnosis***. – The members of this species resemble superficially those of *C. hamatilis* **n**. **sp**., from which they are distinguished by the shape of the line marking on the elytral disc proximal to the base of the sutural margin. This line is linear in specimens of *C. egeri* **n**. **sp**. and J-shaped in specimens of *C. hamatilis* **n**. **sp**.

#### *Description*

***Size***. – Length 4.5 mm. – Width 1.8 mm.

***Form***. – As in Fig. 499.

***Color***. – Yellow, except *epicranium* testaceous and slightly infuscated, pronotal arch with 2 black spots, pronotal disc with 2 black lines, each *elytron* with black line extend posteriorly from elytral anterior margin near sutural margin, disc also with oblique black line extending posteriorly from humeral region, *elytral disc* with faintly defined infuscation behind elytral middle, *femora* infuscated distally, tibiae black distally.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum (Fig. 63), *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 short triangular, antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 22/15).

***Thorax***. – *Pronotum* (Fig. 271) quadrate (PW/PL 60/60), side margin with shallow tubercle, disc sides shallowly punctate, middle of disc smooth. – Elytral asetiferous punctation scarcely impressed, few striae extend posteriorly to elytral 2/3rd (EL/EW 215/60).

***Abdomen***. – *Pygidium* scutiform. – Phallic post-apical flap absent, phallic apex triangular, phallobasic apodeme short and broad (Fig. 368).

***Variations***. – The available specimens are quite homogeneous.

***Natural History***. – Specimens were captured during March, May, September, and November, at altitudes that range from 290 to 579 m.

***Distribution*** (Fig. 386). – Known from Ecuador and Peru.

***Etymology***. – The trivial name, *egeri*, is a patronym. It honors Joe E. Eger for his many contributions to insect Taxonomy.

### 111. *Cregya kraatzi* (Schenkling, 1900)

(Fig. 2, 20, 27, 40, 41, 138, 272, 369, 387, 500)

*Pelonium kraatzi* Schenkling, 1900: 408.

**Lectotype**. ♂. Here designated. Goyas, Brasilia (Jatai Goias, Brazil) (SDEI). Corporaal 1950a: 281.

**Paralectotypes**. 7 specimens.

**Brazil**

– **Estado do Goiás**, Jatai (FMNH, 1; MNHN, 1; SDEI, 5).

Seven specimens were available to Schenkling when he made his description of this species, but he did not tag one of these to be the name bearer; therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

*Cregya kraatzi* Schenkling, var. *ohausi* Schenkling, 1906: 315. **nov**. **syn**.

*Cregya kraatzi* Schenkling var. nov. *teutonia* Pic, 1952: 4. **nov**. **syn**.

***Diagnosis***. – In the key to species *C. kraatzi* (Schenkling, 1900) is aligned with *C. ungula* **n**. **sp**. Specimens of these two species differ in the shape of the 8th and 9th antennomeres. In *C. kraazi* beetles antennomeres 8 and 9 are long triangular, whereas in *C. ungula* **n**. **sp**. they are short triangular.

#### *Redescription*

***Size***. – Length 12.0 mm. – Width 3.2 mm.

***Form***. – As in Fig. 500.

***Color***. – Predominantly yellow. – Funicular *antennomeres* and posterior margin of *capitulum* black, *cranium* mostly black, sides of frons and center of *epicranium* yellow. – *Elytron* black at basal 1/3rd, disc with slightly oblique black macula slightly behind middle, remainder of disc yellow.

***Head***. – *Funicular antennomeres* become increasingly shorter and wider as they approach capitulum (Fig. 138), capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eyes* wider than width of frons (EW/FW 50/30).

***Thorax***. – *Pronotum* (Fig. 272) oblong (PW/PL 100/125), side margin with well-developed tubercle, disc shallowly punctate at sides, widely subglabrous at middle; elytral asetiferous punctation subseriate, at sides they become smaller as they approach elytral apex, punctures diminutive near sutural margin (EL/EW 32 0/95). – Epipleural fold ends at apical 4/5th.

***Abdomen***. – *Pygidium* subquadrate, incised distally, male 6th visible sternite incised distally. – *Aedeagus* (Fig. 369), phallus with a highly sclerotized plate at sides, apex oblong triangular, curvate.

***Variations***. – Size: Length 5.5-12.0 mm; width 1.8-3.2 mm. The cranium may be yellow or black. The black transverse band at the

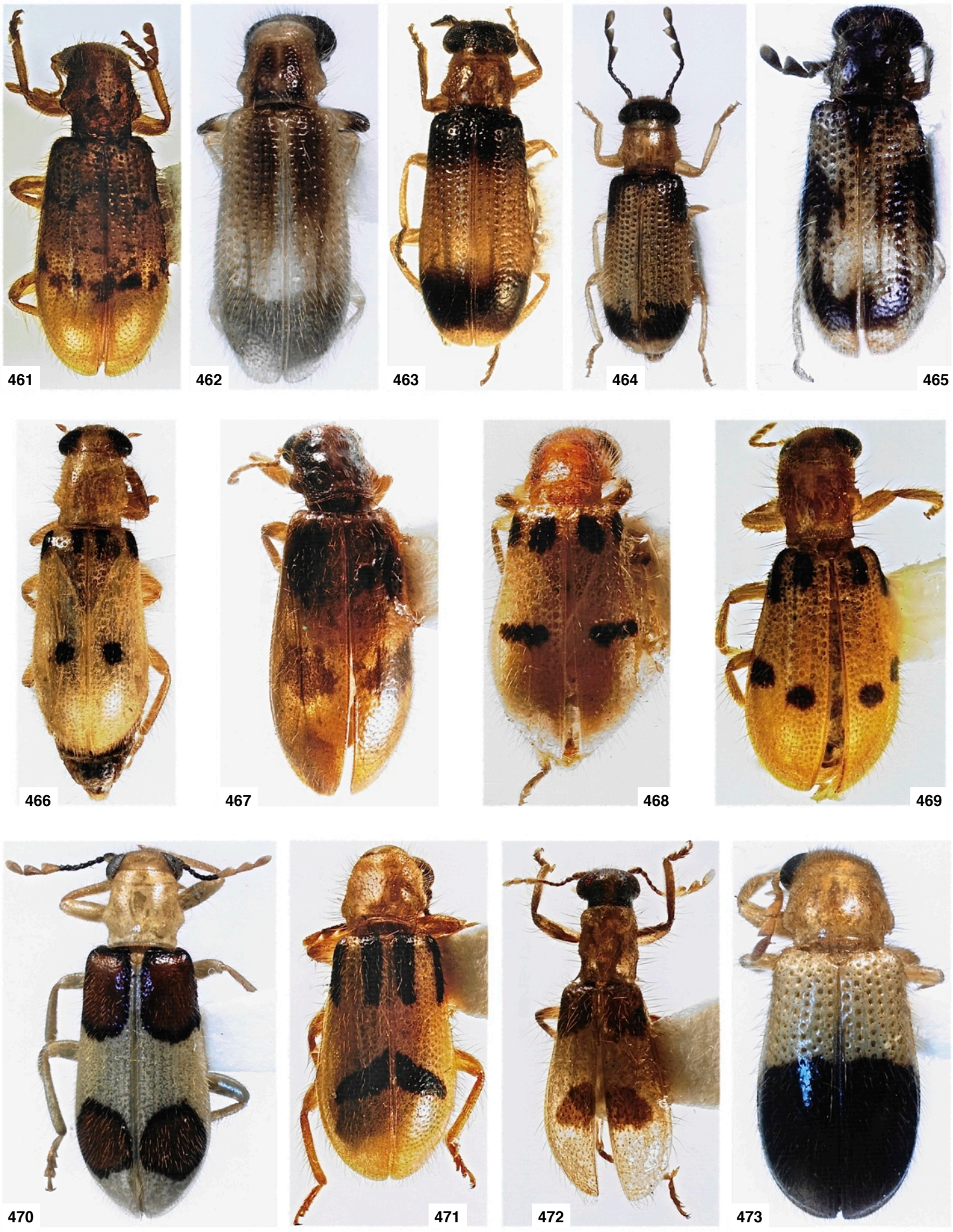


**Fig. 461-473**. - Habitus of *Cregya* species. **(461)** *C. agnosta* **n. sp.** **(462)** *C. apanthesa* **n. sp.** **(463)** *C. caraca* **n. sp.** **(464)** *C. chevrolati* Corporaal, 1950. **(465)** *C. variegata* **n. sp.** **(466)** *C. ametra* **n. sp.** **(467)** *C. assumenta* **n. sp.** **(468)** *C. cariari* **n. sp.** **(469)** *C. caruaru* **n. sp.** **(470)** *C. fimbriolata* (Chevrolat, 1843). **(471)** *C. goias* **n. sp.** **(472)** *C. gutta* **n. sp.** **(473)** *C. guyanensis* (Chevrolat, 1876).

elytral base may not reach the epipleural margin. The black macula on the posterior region of the elytral disc varies in size.

***Natural History***. – Specimens were collected from November through February, in southern Brazil they were taken at altitudes ranging from 300 to 500 m.

***Distribution*** (Fig. 387). – In addition to the syntypic series, I examined 97 specimens from:

**French Guiana**

– **Subdivision Cayenne**, Cayenne, collection date or collector not noted.

**Brazil**

– **Estado do Amazonas**, Tefé, IX-X-1879, M. de Mathan;
– **Estado do São Paulo**, Serra da Cantareira,?-XII-1952, G. H. Nick;
– **Estado do Minas Gerais,** Minas Gerais, ?-XII-1885, E. Gounelle;
– Pedra Azul, ?-XI-1971, Seabra & Oliveira; Caraça, ?-XII-1985;
– **Estado do Bahia**, Sertão de Diamantina, faz. Das Melancias, E. Gounelle, 10-XI-1902;
– Chapada, ?-X-?, collector not noted;
– **Estado do Goiás**, Trindade, ?-?-1895, Pujol; *idem*, Rio Verde, ?-?-19, G. A. Baer, 08;
– *idem*, ?-X-1972, F. M. Oliveira; Jatai, ?-XI-1879, collector not noted;
– **Estado do Ceará**, Serra de Baturite, ?-I-1895, Gounelle;
– **Estado do Espirito Santo**, collection date or collector not noted;
– **Estado do Rio Grande do Sul**, Rio Pardo, ?-XII-1998, E. Gounelle;
– **Estado do Paraná**, Paraná; **Astado do Santa Catarina**, Rio Negrinho, G. Schauer;
– Nova Teutonia, 27°11'S-52°23'W, ?-XII-1996, 300-500 m F. Plaumann.

**Argentina**

– **Provincia Misiones**, Parque Nacional, Iguazu, Cantera, 8-XII-1990-6-I-1991, forest edge Malaise trap, S. & J. Peck.

**Paraguay**

– **Departamento Central**, Lugue, ?-II-1956, collector not noted.

Specimens are deposited in AMNH, CMNH, CMNC, MNHN, RGCM, SDEI, USNM, WFBM, and WOPC.

***Notes***. – *Cregya kraatzi* (Schenkling, 1900) is the sibling species of *Cregya sexnotata* (Klug, 1842). The two species are differentiated by the configuration of the black transverse band on the base of the elytra. In *C. kraatzi* (Schenkling, 1900) this band is entire whereas in *C. sexnotata* (Klug, 1842) the band is divided into 4 streaks. The two species show identical male genitalia. I have seen a specimen from Paraguay (Fig. 404) in which the complete black transverse band is partially incised. I posit that this specimen represents a hybrid of the two-aforementioned species.

### 112. ***Cregya morrisi*** Opitz **n**. **sp**.

(Fig. 147, 273, 370, 387, 501)

ZooBank : http://zoobank.org/EB687A34-34E7-495C-9B21-E013AFF44728

**Holotype**. ♀. BOLIVIA, Santa Cruz, Buena Vista vic., Flora & Fauna Hotel, 27-31/X/02, Morris/Wappes (MNKM).

**Paratypes**. 71 specimens.

**Bolivia**

– **Departamento de Santa Cruz**, Santa Cruz, Buena Vista, Flora & Fauna Hotel, 27-31-X-2002, Morris & Wappes (RFMC, 11; WOPC, 6);
– *idem*, 17-20-X-2000, R. Morris (RFMC, 1);
– *idem*, 22-26-X-2002, R. Morris (RFMC, 1);
– idem, 23-25-X-2000, R. Morris (RFMC, 3; WOPC, 1);
– *idem*, 23-26-X-2000, J. E. Wappes (ACMT, 15; WOPC, 2);
– *idem*, 14-16-X-2000, R. Morris (RFMC, 1; WOPC, 1);
– 4.6 km SSE. Buena Vista, Flora & Fauna Hotel, 23-26-X-2000, Wappes & Morris (ACMT, 2);
– *idem*, 14-16-X-2000, Wappes & Morris (ACMT, 2);
– *idem*, 3-8-X-2004, Wappes & Morris (ACMT, 1);
– *idem*, 16-22-X-2006, Wappes, Nearns & Eya (ACMT, 1);
– *idem*, 22-31-X-2002, Wappes & Morris (ACMT, 1);
– *idem*, 20-23-X-2011, Skillman & Wappes (FWSC, 1);
– 3.7 km SSE Buena Vista, Flora & Fauna Hotel, 17°29.949'S-63°33.152'W, 5-15-XI-200, black light trap, tropical transition forest, M. C. Thomas (FSCA, 2; WOPC, 2);
– *idem*, 5-15-XI-200, black light trap, tropical transition forest, M. C. Thomas & B. K. Dozier (FSCA, 8; WOPC, 2);
– *idem*, 14-19-X-2000, M. C. Thomas (FSCA, 1);
– 23-26-X-2000, M. C. Thomas (WOPC, 1);
– Potrerillos del Guenda, 16-22-X-2006, Wappes, Nearns & Eya (ACMT, 1);
– *idem*, 1740S 6327W, 17-22-X-2007, black light/mercury vapor light, J. Romero (WOPC, 2);
– Estación Experimental General Saavedra, ?-X-1973, L. Stange & C. Porter (IMLA, 2).

***Diagnosis***. – In the key to species *C. morrisi* **n**. **sp**. is aligned with *C. glena* **n**. **sp**. Specimens of these two species differ in the shape of anterior brown making of the elytral disc. In *C. morrisi* **n**. **sp**. beetles this marking is in the form of a large macula, whereas in *C. glena* **n**. **sp**. it is in the form of two small spots.

#### *Description*

***Size***. – Length 5.5 mm. – Width 1.8 mm.

***Form***. – As in Fig. 501.

***Color***. – Yellow, except *antenna* brown, pronotal disc with ferruginous macula, and each *elytron* with 2 black maculae, one subquadrate in humeral region, the other spheroid and located behind elytral middle.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum (Fig. 147), *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 30/13).

***Thorax***. – *Pronotum* (Fig. 273) quadrate (PW/PL 65/65), side margin with slightly-developed tubercle, disc sides punctulate, middle of disc smooth. – Elytral asetiferous punctures punctulate, 9 punctiferous striae, punctures obsolete in elytral posterior 1/3rd (EL/EW 200/60).

***Abdomen***. – *Pygidium* scutiform, concave distally; phallic post-apical flap absent, phallic apex triangular, phallobasic apodeme short and broad (Fig. 370).

***Variations***. – Size: Length 6.0-8.0 mm; width 2.3-3.2 mm. Except for body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were captured during October and November, the holotype at 405 m.

***Distribution*** (Fig. 387). – Known from Bolivia.

***Etymology***. – The trivial name, *morrisi*, is a dedicative patronym; dedicated to Roy Morris for his many contributions to field insect Taxonomy.

### 113. ***Cregya nubilosa*** Opitz **n**. **sp**.

(Fig. 139, 265, 387, 502)

ZooBank : http://zoobank.org/2608B2F5-EE6B-413F-8349-51B7696A9CA3

**Holotype**. ♀. Brasil, Para (MNHN).

**Paratypes**. One specimen. **Brazil**, **Estado do Amazonas**, São Paulo de Olivença, collection date not noted, M. de Mathan (WOPC).

***Diagnosis***. – In the key to species *C. nubilosa* **n**. **sp**. is aligned with *C. trilineata* **n**. **sp**. Specimens of these two species differ in the color patterns of the elytral disc. In *C. nubilosa* **n**. **sp**. beetles the base of the elytra project backwards several short black streaks, whereas in *C. trilineata* **n**. **sp**. the elytral base projects 2 long streaks.

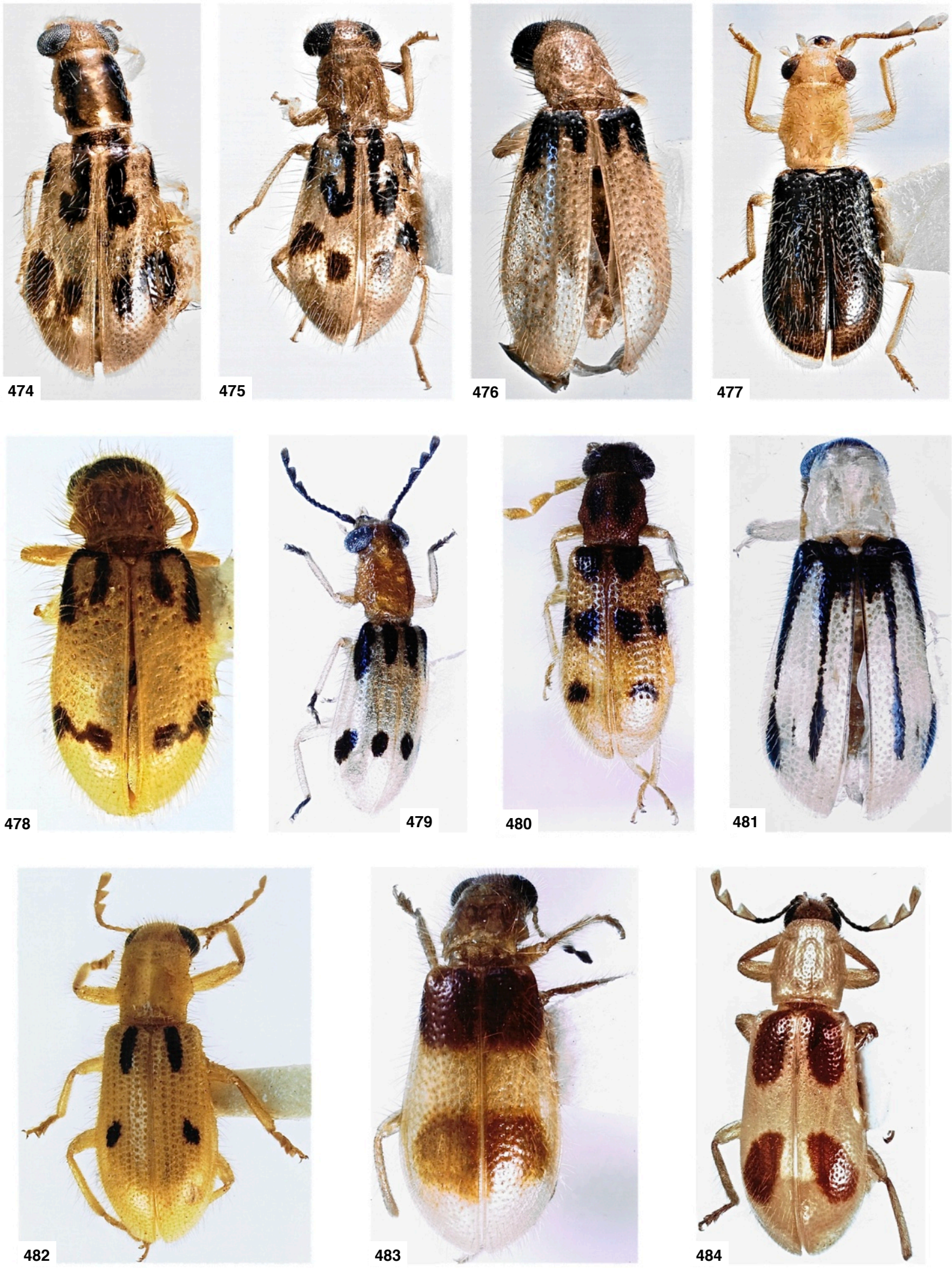


**Fig. 474-484**. - Habitus of *Cregya* species. **(474)** *C. hamatilis* **n. sp.** **(475)** *C. kreagris* **n. sp.** **(476)** *C. panna* **n. sp.** **(477)** *C. teretis* **n. sp.** **(478)** *C. ungula* **n. sp.** **(479)** *C. villavera* **n. sp.** **(480)** *C. decima* **n. sp.** **(481)** *C. diffusa* **n. sp.** **(482)** *C. dybasi* **n. sp.** **(483)** *C. furfurosi* **n. sp.** **(484)** *C. gemina* (Schenkling, 1900).

### *Description*

***Size***. – Length 6.8 mm. – Width 2.8 mm.

***Form***. – As in Fig. 502.

***Color***. – Yellow, except *epicranium* mostly castaneous, pronotal collar infuscated paralaterally, and elytral disc with several black markings, latter angular near elytral anterior margin, black markings near elytral apex smudged, asetiferous punctures black.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum (Fig. 139), *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular, antennomere 10 oblong, apex subacuminate. – *Eye* wider than width of frons (EW/FW 40/20).

***Thorax***. – *Pronotum* (Fig. 265) quadrate (PW/PL 100/100), side margin with well-developed tubercle, disc sides punctulate, middle of disc smooth. – Elytral asetiferous punctation punctulate, a few striae extend posteriorly to middle of disc, punctures obsolete in elytral distal 1/4th (EL/EW 270/75).

***Abdomen***. – *Pygidium* scutiform, deeply concave distally. – Distal margin of 5th visible tergite concave distally. – Phallic post-apical flap absent, phallic apex triangular, phallobasic apodeme short and broad.

***Variations***. – Size: Length 6.8-9.0 mm; width 2.8-3.4 mm. Except for body size, the available specimens are quite homogeneous.

***Distribution*** (Fig. 387). – Known from Brazil.

***Etymology***. – The trivial name, *nubilosa*, is a Latin adjective derived from *nubilosus* (= cloudy); about the peculiar "dim" marking on the elytral disc.

### 114. ***Cregya odonta*** Opitz **n. sp.**

(Fig. 148, 274, 387, 503)

ZooBank : http://zoobank.org/1AEDF1B0-EB57-4545-BDD1-C29561D2CC15

**Holotype**. ♀. Guyane (French Guiana) (Régina), Montagne de Kaw, PK 37.5, 24-IX-2000, J. A. CERDA. A second label reads: piège malaise (FSCA).

**Paratypes**. 2 specimens.

**Colombia**

– **Departamento de Magdalena**, PNN Tayrona Pueblito, 1120N 742W, 19-30-IX-2000, 226 m, R. Henriquez (WOPC).

**Peru**

– **Provincia de Tambopata**, Madre de Dios, Rio Tambopata Reserve, 30 km SW Puerto Maldonado, 12°50'S-69°20'W, 8-IX-1983, 290 m, T. L. Erwin (USNM, 1).

***Diagnosis***. – The configuration of the black marking (teeth-like) on the base of the elytral disc, as expressed in Fig. 503, distinguished these beetles from congeners.

### *Description*

***Size***. – Length 7.5 mm. – Width 3.5 mm.

***Form***. – As in Fig. 503.

***Color***. – Yellow, except base of *elytra* with black tooth-like markings, posterior region of elytral disc with two black approximate maculae.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum (Fig. 148), *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular, antennomere 10 oblong. – *Eye* wider than width of frons (EW/FW 48/20).

***Thorax***. – *Pronotum* (Fig. 274) transverse (PW/PL 120/110), side margin with well-developed tubercle, disc sides punctulate, middle of disc smooth. – Elytral asetiferous punctation punctulate (EL/EW 350/120).

***Abdomen***. – Pygidium scutiform.

***Variations***. – The elytral black posterior markings are widely separated in the paratype.

***Natural History***. – Specimens were collected during November, at altitudes that range from 226 to 250 m. The specimen from Peru was collected by fogging tree canopy.

***Distribution*** (Fig. 387). – Known from French Guiana, Colombia, and Peru.

***Etymology***. – The trivial name, *odonta*, is a Greek name derived from *odous* (= tooth); with reference to the peculiar "tooth-like" markings at the base of the elytra.

### 115. ***Cregya sexnotata*** (Klug, 1842)

(Fig. 55, 275, 371, 387, 504)

*Enoplium sexnotatum* Klug, 1842: 368.

**Holotype**. Gender not known. Brazil (SDEI). Corporaal 1950a: 284.

***Diagnosis***. – Specimens of this species resemble superficially those of *C. kraatzi* (Schenkling, 1900), from which they differ in configuration of the basal coloration of the elytral disc. In *C. sexnotata* (Klug, 1842) specimens the basal coloration involves short lines, whereas in *C. kraazi* beetles it involves a complete black macula.

### *Redescription*

***Size***. – Length 6.5 mm. – Width 2.5 mm.

***Form***. – As in Fig. 504.

***Color***. – Yellow-testaceous, except each *elytron* with 3 brown markings, 2 short stripes extending backwards from elytral anterior margin, one oval macula behind elytral middle.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum (Fig. 55), *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular, antennomere 10 oblong, apex subacuminate. – *Eyes* coarsely facetted, eye wider than width of frons (EW/FW 35/30).

***Thorax***. – *Pronotum* (Fig. 275) quadrate (PW/PL 100/100), side margin with well-developed tubercle, disc sides punctulate, middle of disc smooth. – *Elytral* asetiferous punctation punctulate, a few striae extend posteriorly to middle of disc, punctures obsolete in elytral distal 1/4th (EL/EW 290/80).

***Abdomen***. – *Pygidium* scutiform, concave distally. – Phallic post-apical flap absent, phallic apex triangular, phallobasic apodeme short and broad (Fig. 371).

***Variations***. – Size: Length 4.5-10.0 mm; width 1.3-3.8 mm. There is variation in the shape of the black macula behind the elytral middle.

***Natural History***. – Specimens were collected during February, March, and October through December.

***Distribution*** (Fig. 387). – In addition to the type, I examined 126 specimens from:

**French Guiana**

– **Subdivision Kourou**, Les Roches de Kourou, ?-?-1906, E. Le Moult. Bolivia:

– **Departamento de Santa Cruz**, El Refugio Los Volcanes, 18-24-X-2014, 3363 feet, Morris & Wappes;

– 4 km N Bermejo, 11-17-XII-2012, Wappes & Skillman.

**Brazil**

– **Estado do Amazonas,** Amazonas; Fonteboa, collection date not noted, Dr. Hannel;

– **Estado do Mato Grosso**, ?-?-1886, P. Germain;

– **Estado do São Paulo**, Quelutz, collection date not noted, P. Germain;

– Teodoro Sampaio, ?-XI-1985, F. M. Oliveira;

– Parque do Estado, ?-XII-1946, Geruin; Rio Pardo, ?-XII-1898, E. Gounelle;

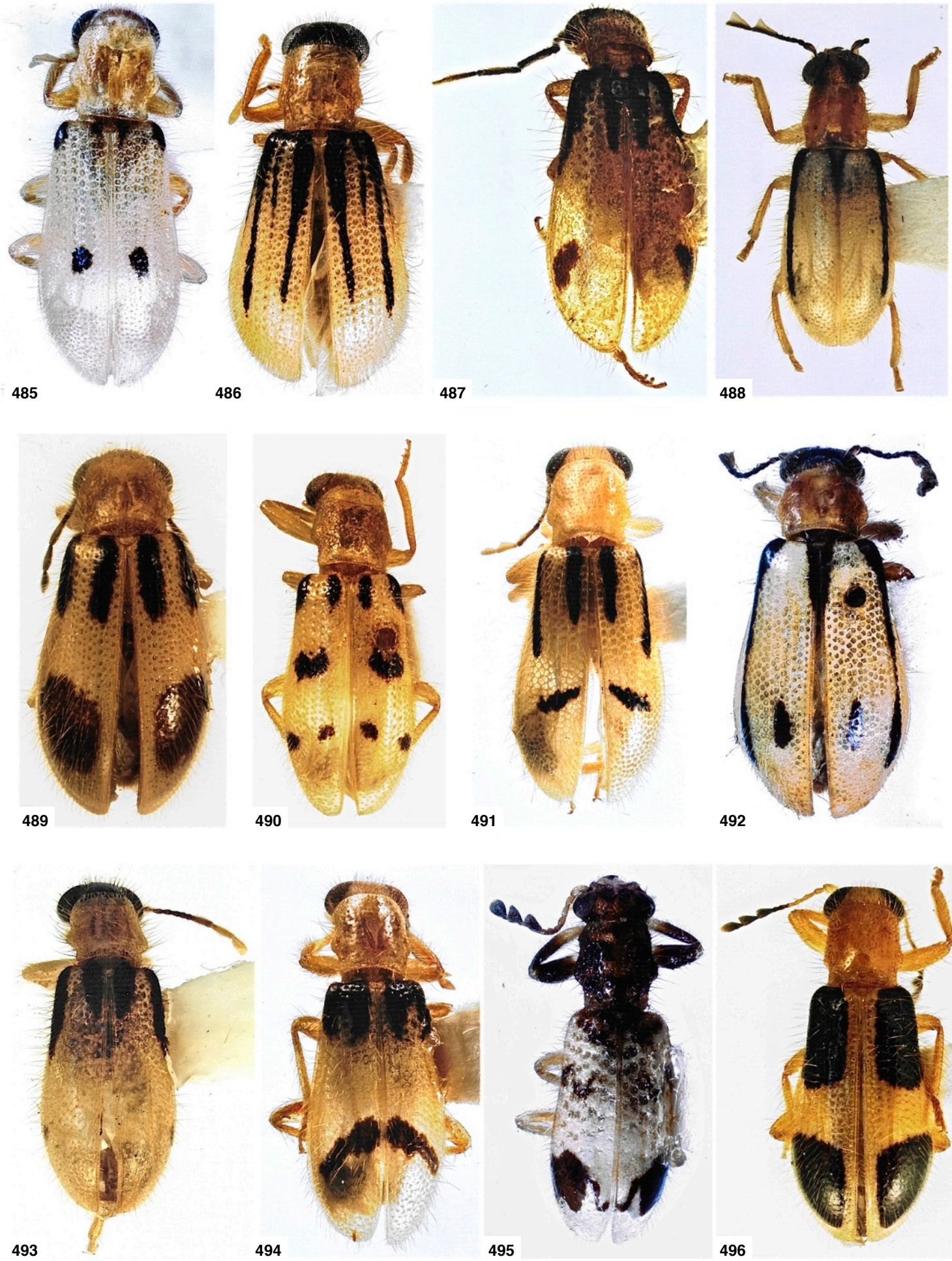


**Fig. 485-496**. - Habitus of *Cregya* species. **(485)** *C. glena* **n. sp. (486)** *C. hexalineata* **n. sp. (487)** *C. juxta* **n. sp. (488)** *C. mekosa* **n. sp. (489)** *C. nebula* **n. sp. (490)** *C. nigropunctata* (Chevrolat, 1876). **(491)** *C. stilastichosa* **n. sp. (492)** *C. terapoto* **n. sp. (493)** *C. tetralineata* **n. sp. (494)** *C. jatai* **n. sp. (495)** *C. inscripta* (Gorham, 1883). **(496)** *C. asarota* **n. sp.**

– Horto Florestal, 21-XII-1962. J. Halik;
– *idem*, 5-I-1963, J. Halik; Santo Amaro, ?-II-1945, collector not noted;
– Ciudade do São Paulo, ?-XII-1945;
– Sitio Bananal, Guarulhos, 30-XII-1958, J. Halik;
– Cantareira, 30-XII-1929;
– Jabaguara, 24-XII-1933, J. Halik;
– Cantereira, ?-II-1962, J. Halik;
– Ville de Alegre Santos, 16-XII-1912, A. Mares;
– **Estado do Bahia**, Chapada, ?-XI-?, collector not noted;
– **Estado do Minas Gerais**, Cerro do Caraça, 27-XI-5-XII-1972, Exp. Mus. Zool.;
– Vicosa, 3-IV-1933, E. J. Hambleton; Mar de Hespanha, 15-I-1909, J. F. Zilkán;
– Sertão de Diamentina, Fazenda las Melancias, 10-XI-1902, E. Gounelle;
– Villa Victoria, ?-?-1890, Ch. Pujol; Cachimbo, ?-?-1890, Ch. Pujol;
– Rio Piracicaba, ?-?-1885, Février;
– **Estado do Rio de Janeiro**, Novo Friburgo, ?-II-1884, P. Germain; Itatiaia, 3-III-1962, J. Halik;
– **Estado do Goiás**, Jatai, ?-?-1898, Ch. Pujol;
– **Estado do Pernambuco**, Pernambuco, 12-III-1893, Gounelle.

Specimens are deposited in: BMNH, CMNH, FMNH, MNHN, MZSP, NCBN, USNM, WFBC, and WOPC.

***Notes***. – I examined the holotype, and selected a homotype, in 1974, which was used to provide this redescription. I did not locate the specimens that represent the abovementioned aberrations. I rely on Corporaal's judgment that they are associated with this species.

### 116. ***Cregya trilineata*** Opitz **n. sp.**

(Fig. 140, 276, 372, 387, 505)

ZooBank : http://zoobank.org/15591551-2E02-45A4-BDCB-D0393057DE76

**Holotype**. ♂. BOLIVIA, Santa Cruz, 3.7 km SSE, Buena Vista, Hotel Flora & Fauna, 405m, 5-15 XI-2011, 17°29'S 63°33'W, M. C. Thomas & B. K. Dozier, tropical transition forest (MNKM).

**Paratypes**. 4 specimens.

**Bolivia**

– **Departamento de Santa Cruz**, Santa Cruz, 4-6 km SSE Buena Vista, Flora & Fauna Hotel, 22-32-X-2002, Wappes & Morris (ACMT, 1);
– *idem*, 1-8-XI-2002, J. E. Wappes (ACMT, 1);
– *idem*, 14-16-X-2000, R. Morris (RFMC, 1; WOPC, 1).

***Diagnosis***. – Elytral disc with 3 long narrow black lines. This characteristic will distinguish specimens of this species from congeners in the *kraatzi* group.

#### *Description*

***Size***. – Length 6.0 mm. – Width 2.3 mm.

***Form***. – As in Fig. 505.

***Color***. – Yellow, except *cranium* slightly infuscated behind *eyes*, antennal fundus brown, and each *elytron* with 3 black narrow streaks, 2 extend from elytral anterior margin, 3rd streak near epipleural margin in elytral posterior 1/3rd.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum (Fig. 140), *capitulum* longer than combined length of funicular antennomeres, antennomeres 8 and 9 triangular, antennomere 10 oblong, *apex* subacuminate. – *Eye* wider than width of frons (EW/FW 35/30).

***Thorax***. – *Pronotum* (Fig. 276) oblong (PW/PL 90/95), side margin with well-developed tubercle, disc sides punctulate, middle of disc smooth. – Elytral asetiferous punctures punctulate, 9 punctiferous striae, punctures obsolete in elytral posterior 1/3rd (EL/EW 270/75).

***Abdomen***. – *Pygidium* scutiform, concave distally. – Phallic post-apical flap absent, phallic apex triangular, apex tip blunt, phallobasic apodeme short and broad (Fig. 372).

***Variations***. – Size: Length 6.0-8.0 mm; width 2.3-3.2 mm. Except for body size, the available specimens are quite homogeneous.

***Natural History***. – Specimens were captured during October and November, the holotype at 405 m.

***Distribution*** (Fig. 387). – Known from Bolivia.

***Etymology***. – The trivial name, *trilineata*, is a Latin compound name derived from the prefix *tri-* (= three) and the noun *linea* (= line); with reference to the black lines on the elytral disc.

### 117. ***Cregya verticula*** Opitz **n. sp.**

(Fig. 141, 277, 373, 387, 506)

ZooBank : http://zoobank.org/624A1812-3588-4935-89D1-C21C3259E187

**Holotype**. ♀. ECUADOR, Pichincha Prov., Tinalandia, 7-X-1997, F. Hovore (CSCA).

**Paratypes**. 10 specimens.

**Ecuador**

– **Provincia Pichincha**, Tinalandia, 2-II-1983, L. Huggert (WOPC, 2);
– Alluvium, collection date not noted, Vicarra (QCAZ, 1);
– 15 km E Santo Domingo, Tinalandia, 23-26-II-1981, beating *Inga* Trees, 700 m, H. F. Howden (CMNC, 3; WOPC, 2);
– **Provincia Bolivar**, Balzapamba, ?-III-IV-1894, M. de Mathan (MNHN, 1; WOPC, 1).

***Diagnosis***. – The O-shaped macula on the base of each elytron will distinguish these beetles from congeners.

#### *Description*

***Size***. – Length 7.0 mm. – Width 3.0 mm.

***Form***. – As in Fig. 506.

***Color***. – Yellow, except *fundus* brown and each *elytron* with two sets of black markings, one ring-like mark near humerus and one crescentic mark near *elytral apex*.

***Head***. – *Funicular antennomeres* subfiliform, progressively shorter towards capitulum (Fig. 141), *capitulum* longer than combined length of funicular antennomeres, capitular antennomeres 8 and 9 triangular, antennomere 10 obovate. – *Eye* wider than width of frons (EW/FW 40/20).

***Thorax***. – *Pronotum* (Fig. 277) oblong (PW/PL 90/115), side margin with shallow tubercle, disc sides punctulate, middle of disc smooth; elytral asetiferous punctation shallow near humerus, not clearly striate, punctures punctulate in rest of elytral disc (EL/EW 320/100).

***Abdomen***. – *Pygidium* scutiform, slightly concave distally. – Phallic post-apical flap absent, phallic apex long triangular, phallobasic apodeme lengthened and broad (Fig. 373).

***Variations***. – The available specimens are quite homogeneous.

***Natural History***. – Specimens were captured from February through April, and during October. Five specimens were collected by beating tree branches of *Inga* Mill. (Fabaceae).

***Distribution*** (Fig. 387). – Known from Ecuador.

***Etymology***. – The trivial name, *verticula*, is a Latin name derived from *verticulus* (= circle); with regard to the black circle-like mark on the elytral humeral region.







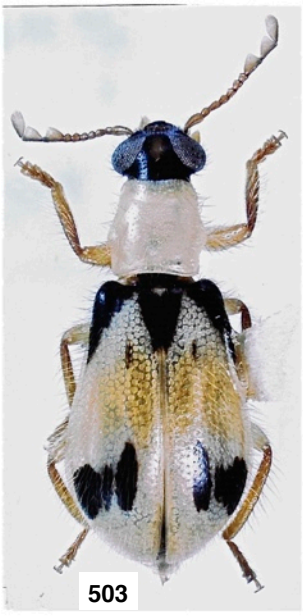






**Fig**. **497-506**. - Habitus of *Cregya* species. **(497)** *C. catoma* **n**. **sp**. **(498)** *C. confluens* (Gorham, 1877). **(499)** *C. egeri* **n**. **sp**. **(500)** *C. kraatzi* (Schenkling, 1900). **(501)** *C. morrisi* **n**. **sp**. **(502)** *C. nubilosa* **n**. **sp**. **(503)** *C. odonta* **n**. **sp**. **(504)** *C. sexnotata* (Klug, 1842). **(505)** *C. trilineata* **n**. **sp**. **(506)** *C. verticula* **n**. **sp**. **Fig**. **507**. - Habitus of *Walterianella* sp. (Chrysomelidae).

## Phylogenetic Interpretation

Despite the general lack of morphological diversity in *Cregya*, seven lines of evolution, corresponding to seven species groups, are recognized in this work. The phylogenetic diagrams (Figs. 278, 279) represent my current hypothesis about the evolution of the *Cregya* species groups. Morphological analysis, application of Hennigian phylogenetic principles, and knowledge gained from character analysis, motivates me to posit that ancestral *Cregya* (ancestor A, Fig. 278) possessed the following morphological characteristics: Antenna comprised of 11 antennomeres and with a well-developed capitulum, eyes coarsely facetted and bulging, pronotum quadrate, elytral asetiferous punctures arranged into striae, tarsal unguis with a well-developed denticle, and the aedeagus comprised of a sub-membranous phallobase that had non-fimbriate short lobes and a phallobasic rod, and a phallus that showed broad phallic plates that ended with a triangular phallic apex.

I hypothesize that from ancestor A there evolved the progenitor of the *chevrolati* group, characterized by a keel-shaped phallobasic apodeme. Progenitor A also yielded ancestor B, from which evolved ancestral species C (elytral acetiferous puncture became minute) and ancestor E. Progenitor C produces the *fimbriolata* group, in which the elytral asetiferous punctured became concentrated in the elytral humeral region, and generated the ancestor (D) of the *kraatzi* and *gemina* groups. In the former group the phallobasic lobe became short and broad; in the *gemina* group the phallobasic apodeme became extraordinarily long. We proceed with ancestor E, which evolved the progenitor of the *abacula* group and progenitor F. In the latter genotype, the elytral acetiferous punctures became oval, which led to the *castanea* group. Ancestral species F also generated ancestor G (with post-apical flap), which evolved the ancestry of the *america* group, in which the phallic apex became digitiform, and evolved the ancestry of the *inscripta* group in which the elytral disc became scabrous. The biogeographical origin of the *Cregya* lineage is not discernible now. The more primitive species of this group (*america* group) appear not to be involved in mimicry and are largely found in the North American/ Middle American clerofaunas (*sensu* Opitz 2005), whereas the more derived components of the genus are highly mimetic and are widely distributed in South America.

## *Cregya* Species *Incertae sedis*

The specimens that represent the following names have not been found.

– *Cregya amazonica* Pic, 1952: 4.
– *Galeruclerus mathani* Pic, 1950: 16.
– *Galeruclerus preapicalis* Pic, 1950: 16.
– *Galeruclerus subarcuatus* Pic, 1950: 16.
– *Cregya wittmeri* Pic, 1952: 4.

## Acknowledgments

I thank the curators listed in the “Repositories of specimens” section for entrusting me with specimens in their charge. The excellent review of Robert H. Turnbow. I thank Jean-Michel Maes and Roland Gerstmeier for their translation of the abstract. My wife Galena provided much support with her preparations of the Montage, Leica and SEM images. My thanks to Paul E, Skelley for numerous departmental courtesies, and to the Florida Department of Agriculture, DPI, for institutional affiliation and support.

# Repository of Specimens

I used codens as noted in Arnett, Jr. *et al*. (1993) to indicate repositories of specimens, with some modifications to accommodate institutional name changes:

– **ACMT**: American Coleoptera Museum, 8734 Paisano Pass, San Antonio, Texas 78255, United States of America (James E. Wappes; wappes@earthlink.net).

– **AMNH**: American Museum of Natural History, Department of Entomology, Central Park West at 79th Street, New York, New York 10024-5192, United States of America (Lee Herman; herman@amnh.org).

– **ANSP**: The Academy of Natural Sciences, Department of Entomology, 1900 Benjamin Franklin Parkway, Philadelphia, Pennsylvania 19103-1101, United States of America (Jason D. Weintraub; weintraub@ansp.org).

– **BMNH**: British Museum of Natural History, Department of Entomology, SW 5BD, London, United Kingdom (Beulah Garner; b.garner@nhm.ac.uk. Maxwell V. L. Barclay; m.barclay@nhm.ac.uk).

– **BYUC**: Brigham Young University, Monte L. Bean Life Science Museum, Insect Collections, 645 East 1430 North, Provo, Utah 84602, United States of America (Shawn M. Clark: shawn_clark@byu.edu).

– **CASC**: California Academy of Sciences, Department of Entomology, Golden Gate Park, San Francisco, California 94118, United States of America (Chris Grinter: cgrinter@calacademy.org).

– **CMNC**: Canadian Museum of Nature, Insect Collection, Post Office Box 3443, Station D, Ottawa, Ontario, Canada K1P 6P4, Canada (Robert S. Anderson; randerson@mus-natur-ca. Francois Genier; fgenier@mus-natur.ca).

– **CMNH**: Carnegie Museum of Natural History, Invertebrate Zoology, 4400 Forbes Avenue, Pittsburgh, Pennsylvania 15213, United States of America (Robert L. Davidson: davidson@clpgh.org; Robert Androw: androwr@carnegiemnh.org).

– **CNCI**: Canadian National Collection of Insects, Agriculture-Food Canada, K.W. Neatby Building, 960 Carling Avenue, Ottawa, K1A OC6, Canada (Serge Laplante: serge.laplante@agr.gc.ca).

– **CSCA**: California State Collection of Arthropods, Plant Pest Diagnostics Branch, California Department of Food & Agriculture, 3294 Meadowview Road, Sacramento, California 95832-1448, United States of America (Andrew R. Cline; Andrew.cline@cdfa.ca.gov).

– **CSCB**: Campos Seabra Collection, Brazil. CSUC Colorado State University, Department of Bioagricultural Sciences and Pest Management, 1177 Campus Delivery. Fort Collins, Colorado 80523-1177, United States of America (Boris C. Kondratieff; Boris.kondratieff@colostate.edu).

– **EMEC**: Essig Museum of Entomology, University of California, College of Agriculture, Division of Entomology and Parasitology, California Insect Survey, Berkeley, California 94720, United States of America (Pete Oboyski; poboyski@nature.berkeley.edu).

– **EMUS**: Utah State University, Department of Biology, 5305 Old Main Hill, Logan, Utah 84322-5305, United States of America (James Pitts; james.pitts@usu.edu).

– **FMNH**: Field Museum of Natural History, Department of Entomology, Roosevelt Road at Lake Shore Drive, Chicago, Illinois 60605, United States of America (Crystal Maier; cmaier@fieldmuseum.org).

– **FSCA**: Florida State Collection of Arthropods, Division of Plant Industry/ Entomology, Doyle Connor Building, 1911 SW 34th Street, Florida Department of Agriculture, Gainesville, Florida 32614-7100. United States of America (Paul E. Skelley; paul.skelley@freshfromflorida.com).

– **FWSC**: Fredrick W. Skillman Collection, Longhorn Ranch, 751 N Cochise Stronghold Road, Pearce, Arizona 85606, United States of America (azbycid@yahoo.com).

– **UVGC**: University of the Valley of Guatemala, Laboratorio de Entomología Sistemática, Apartado 82, Guatemala City, Guatemala, 01015 (jschuste@uvg.edu.gt).

– **JMLC**: John M. Leavengood, Jr. Collection, USDA-APHIS-PPQ, 9325 Bay Plaza Boulevard, Suite 206, Tampa, Florida 33619, United States of America (john.m.leavengood@aphis.usda.gov).

– **JNRC**: Jaques Rifkind Collection, 5105 Morella Avenue, Valley Village, California 91607-3219, United States of America (clerid@aol.com).

– **JPHC**: Jeffrey P. Huether Collection, 443 Turk Road, Geneva, New York 14456, United States of America (jmeloid@hotmail.com).

– **MAIC**: Michael A. Ivie Collection, Montana Entomology Collection, 1911 West Lincoln Street, Montana State University, Bozeman, Montana 59717-3150, United States of America (mivie@montana.edu).

– **MCZC**: Museum of Comparative Zoology, Harvard University, Entomology, 26 Oxford Street, Cambridge, Massachusetts 02138, United States of America (Philip D. Perkins; perkins@oeb.harvard.edu).

– **MEMU**: Mississippi Entomological Museum, 100 Old Highway 12, Mississippi State University, Box 9775, Mississippi State, Mississippi 39762-9775, United States of America (Terrence Schiefer; tscheifer@entomology.msstate.edu).

– **MLPA**: Universidad Nacional de la Plata, Facultad de Ciencias Naturales Y Museo, Division Entomologia, 1900 Paseo del Bosque, La Plata, Argentina (Liliana A. Fernández; liliafer@museo.fcnym.unlp.edu.ar).

– **MNHN**: Museum d'Histoire Naturelle, Entomologie, 45 bis, Rue de Buffon, Paris (Ve), France (Antoine Mantilleri; amantill@mnhn.fr).

– **MNKM**: Museo Historia Natural, Noel Kempff Mercado, Santa Cruz de la Sierra, Bolivia (Julieta Ledzema; jledezma@museonoelkempff.org).

– **MZSP**: Museu de Zoologia Universidade de São Paulo, Caixa Postal 42.694 01064-970, São Paulo, Brazil (Sônia Casari; casari@usp.br).

– **NCBN**: Naturalis Biodiversity Center, P. O. Box 9517, 2300RA, Leiden, The Netherlands (Hans Huijbregts; Hans.huijbregts@naturalis.nl).

– **NCSU**: North Carolina State University, Department of Entomology, 100 Derieux Place, 2301 Gardner Hall, Raleigh, North Carolina 27695-7613, United States of America (Robert L. Blinn; bob_blinn@ncsu.edu).

– **NHMB**: Naturhistorisches Museum Basel, Augustinergasse 2, Postfach 1048, CH 4001 Basel, Switzerland (Michel Brancucci; Michel.brancucci@bs.ch).

– **NHRS**: Swedish Museum of Natural History, Department of Zoology, P. O. Box 50007, SE 104 05, Stockholm, Sweden (Johannes Bergsten; Johannes.bergsten@nrm.se).

– **PMNH**: Peabody Museum of natural History, Yale University, 170 Whitmey Avenue, Connecticut, United States of America (Lawrence F. Gall: lawrence.gall@yale.com).

– **QCAZ**: Pontifica Universidad Católica del Ecuador, Departamento de Biologia, Apartado 17-1-2184, Quito, Ecuador (Clifford Kyle; keil617@yahoo.com).

– **RDCC**: Ronald D. Cave Collection, Indian River Research & Education Center, University of Florida, 2199 S Rock Road, Ft. Pierce, Florida 34945-3138, United States of America (rdcave@fas.ufl.edu).

– **RFMC**: Roy F. Morris II Collection, 2635 Ewell Road, Lakeland, Florida 33811, United States of America (beetlesandbirds@gmail.com).

– **RGCM**: Roland Gerstmeier Collection, Technische Universität München, Lehrstuhl für Zoologie AG Entomologie, Hans-Carl-von-Carlowitz-Platz 2 85354, Freising, Germany (gerstmei@wzw.tum.de).

– **RHTC**: Robert H. Turnbow, Jr. Collection, 59 Brookview Court, Enterprise, Alabama 36330, United States of America (grumpyndovr@gmail.co).

– **SDEI**: Deutsches Entomologisches Institute, Leibniz-Zentrum für Agrarlandschaffs-und Landnutzungsforschung e. V. Eberswalde Str. 84, D-15374 Müncheberg, Germany (Lutz Behne; lbehne@senckenberg.de).

– **SEMC**: The University of Kansas, Snow Entomological Division, The Natural History Museum of the University of Kansas, Lawrence, Kansas 66045-2454, United States of America (Zachary Falin; ksem@ku.edu).

– **TAMU**: Texas A & M University, College of Agriculture and Life Sciences, Department of Entomology, Minnie Belle Heep Building, College Station, Texas 77843-7029, United States of America (Andrew J. Graf; cipher_the_noble@tamu.edu).

– **UCDC**: University of California-Davis, Department of Entomology, R. M. Bohart Museum of Entomology, 1 Schields Avenue, Davis, California 95616-85849, United States of America (Steve L. Heydon; slheydon@ucdavis.edu).

– **UGCA**: University of Georgia Collection of Arthropods, Museum of Natural History, University of Georgia, Athens, Georgia 30602-2603 (E. Richard Hoebeke; rhoebecke@uga.edu).

– **UMRM**: University of Missouri, Wilbur R. Enns Entomology Museum, College of Agriculture, Food and Natural Resources Plant Science Unit, Department of Entomology, 1-87 Agricultural Building, Colombia, Missouri 65211 (Kristin B. Simpson; simpsonk@missouri.edu).

– **USNM**: United States Department of Agriculture. Systematic Entomology Laboratory, c/o National Museum of Natural History MRC 168, Washington, D.C. 20560-0165, United States of America (Floyd Shockley; ShockleyF@si.edu).

– **UTBC**: University of Texas Biodiversity Collections, University of Texas Insect Collection, Lake Austin Center, 3001 Lake Austin Boulevard, Suite 1.314, Austin, Texas 78703, United States of America (Alexander L. Wild; alex.wild@utexas.edu).

– **WFBM**: William F. Barr Museum, University of Idaho, Department of Plant, Soil, and Entomological Sciences, 606 Rayburn Street, Moscow, Idaho 83844-2339, United States of America (Luc Leblanc; leblancl@uidaho.edu).

– **WOPC**: Weston Opitz Collection, Research Associate, Florida State Collection of Arthropods, Division of Plant Industry/ Entomology, Florida Department of Agriculture and Consumer services, 1911 SW 34th Street, Gainesville, Florida 32614-7100, United States of America (opitz@kwu.edu).

# Figures

**Fig**. **38-44**: Mesodermal reproductive organs.

**38**. – *C. fimbriolata* (Chevrolat, 1843). Female . . . . . **27**
**39**. – *C. fimbriolata* (Chevrolat, 1843). Male
**40**. – *C. kraatzi* (Schenkling, 1900). Female
**41**. – *C. kraatzi* (Schenkling, 1900). Male
**42**. – *Cregya* species A, male, Mexico
**43**. – *Cregya* species B, male, Costa Rica
**44**. – *Cregya* species C, male, Brazil

**Fig**. **45-162**: Antennae.

**45**. – *C. nebula* **n**. **sp**. . . . . **29**
**46**. – *C. nigropunctata* (Chevrolat, 1876)
**47**. – *C. stilastichosa* **n**. **sp**.
**48**. – *C. jatai* **n**. **sp**.
**49**. – *C. duodecimpunctata* (Klug, 1842), ♀
**50**. – *C. hedra* **n**. **sp**.
**51**. – *C. insignata* Pic, 1952
**52**. – *C. stricta* **n**. **sp**.
**53**. – *C. inscripta* (Gorham, 1883)
**54**. – *C. confluens* (Gorham, 1877)
**55**. – *C. sexnotata* (Klug, 1842)
**56**. – *C. tetralineata* **n**. **sp**.
**57**. – *C. abacula* **n**. **sp**.
**58**. – *C. ferratilis* **n**. **sp**.
**59**. – *C. guttula* **n**. **sp**.
**60**. – *C. paragramma* **n**. **sp**.
**61**. – *C. asarota* **n**. **sp**.
**62**. – *C. catoma* **n**. **sp**.
**63**. – *C. egeri* **n**. **sp**.
**64**. – *C. lunulata* (Pic, 1940)
**65**. – *C. abdita* Wolcott, 1927 . . . . . **31**
**66**. – *C. america* **n**. **sp**.
**67**. – *C. apicula* **n**. **sp**.
**68**. – *C. rifkindi* **n**. **sp**.
**69**. – *C. bicolor* (Laporte, 1836)
**70**. – *C. campana* **n**. **sp**.
**71**. – *C. casusa* **n**. **sp**.
**72**. – *C. contaminata* (Klug, 1842)
**73**. – *C. cruzvera* **n**. **sp**.
**74**. – *C. helva* **n**. **sp**.
**75**. – *C. inornata* **n**. **sp**.
**76**. – *C. alicula* **n**. **sp**.
**77**. – *C. andersoni* **n**. **sp**.
**78**. – *C. aragua* **n**. **sp**.
**79**. – *C. atracapitis* **n**. **sp**.
**80**. – *C. bilineicolle* (Chevrolat, 1874) **nov**. **stat**.
**81**. – *C. casselorum* (Opitz, 2014)
**82**. – *C. catarina* (Opitz, 2014)
**83**. – *C. corumba* **n**. **sp**.
**84**. – *C. ekteina* **n**. **sp**.
**85**. – *C. karafucosa* **n**. **sp**.
**86**. – *C. infula* **n**. **sp**.
**87**. – *C. insularis* (Gorham, 1898)
**88**. – *C. lenticula* **n**. **sp**.
**89**. – *C. lineolata* (Gorham, 1883)
**90**. – *C. linomolina* **n**. **sp**.
**91**. – *C. linea* **n**. **sp**.
**92**. – *C. marysearsi* **n**. **sp**. . . . . **33**
**93**. – *C. mexcala* **n**. **sp**.
**94**. – *C. palaga* **n**. **sp**.
**95**. – *C. pallida* **n**. **sp**.
**96**. – *C. pereira* **n**. **sp**.
**97**. – *C. preclara* **n**. **sp**.
**98**. – *C. quadrinotata* (Chevrolat, 1874) **nov**. **stat**.
**99**. – *C. quadrisignata* (Spinola, 1844)
**100**. – *C. robusta* **n**. **sp**.
**101**. – *C. vittipennis* (Schenkling, 1906)
**102**. – *C. withlacoochee* Rifkind, 2012
**103**. – *C. mocagua* **n**. **sp**.
**104**. – *C. mixta* LeConte, 1865
**105**. – *C. oculata* (Say, 1835)
**106**. – *C. pannusa* **n**. **sp**.
**107**. – *C. pictila* **n**. **sp**.
**108**. – *C. sina* **n**. **sp**.
**109**. – *C. tambopata* **n**. **sp**.
**110**. – *C. tessara* **n**. **sp**.
**111**. – *C. urica* **n**. **sp**.
**112**. – *C. yojoa* **n**. **sp**.
**113**. – *C. zacapa* **n**. **sp**.
**114**. – *C. rileyi* **n**. **sp**.
**115**. – *C. vitticeps* (Blanchard, 1844)
**116**. – *C. agnosta* **n**. **sp**. . . . . **35**
**117**. – *C. caraca* **n**. **sp**.
**118**. – *C. assumenta* **n**. **sp**.
**119**. – *C. fimbriolata* (Chevrolat, 1843)
**120**. – *C. goias* **n**. **sp**.
**121**. – *C. guyanensis* (Chevrolat, 1876)
**122**. – *C. teretis* **n**. **sp**.
**123**. – *C. ametra* **n**. **sp**.
**124**. – *C. gemina* (Schenkling, 1900)
**125**. – *C. hexalineata* **n**. **sp**.
**126**. – *C. apanthesa* **n**. **sp**.
**127**. – *C. chevrolati* Corporaal, 1950
**128**. – *C. caruaru* **n**. **sp**.
**129**. – *C. gutta* **n**. **sp**.
**130**. – *C. hamatilis* **n**. **sp**.
**131**. – *C. kreagris* **n**. **sp**.
**132**. – *C. ungula* **n**. **sp**.
**133**. – *C. dybasi* **n**. **sp**.
**134**. – *C. juxta* **n**. **sp**.
**135**. – *C. mekosa* **n**. **sp**.
**136**. – *C. cariari* **n**. **sp**.
**137**. – *C. panna* **n**. **sp**.
**138**. – *C. kraatzi* (Schenkling, 1900) . . . . . **37**
**139**. – *C. nubilosa* **n**. **sp**.
**140**. – *C. trilineata* **n**. **sp**.
**141**. – *C. verticula* **n**. **sp**.
**142**. – *C. terapoto* **n**. **sp**.
**143**. – *C. glena* **n**. **sp**.
**144**. – *C. castanea* **n**. **sp**.
**145**. – *C. diffusa* **n**. **sp**.
**146**. – *C. elegantula* **n**. **sp**.
**147**. – *C. morrisi* **n**. **sp**.
**148**. – *C. odonta* **n**. **sp**.
**149**. – *C. ardis* **n**. **sp**.
**150**. – *C. cerina* **n**. **sp**.
**151**. – *C. variegata* **n**. **sp**.
**152**. – *C. lita* **n**. **sp**.
**153**. – *C. villavera* **n**. **sp**.
**154**. – *C. decima* **n**. **sp**.
**155**. – *C. seabrai* Peracchi, 1962 . . . . . **39**

**156**. – *C turrialba* **n**. **sp**.
**157**. – *C. furfurosi* **n**. **sp**.
**158**. – *C. duodecimpunctata* (Klug, 1842), ♂
**159**. – *C. decusoris* **n**. **sp**.
**160**. – *C. andros* **n**. **sp**.
**161**. – *C. bipunctipennis* **n**. **sp**.
**162**. – *C. versicula* **n**. **sp**.

**Fig**. **163-277**: Pronota.
**163**. – *C. terapoto* **n**. **sp**. . . . . **41**
**164**. – *C. tetralineata* **n**. **sp**.
**165**. – *C. jatai* **n**. **sp**.
**166**. – *C. inscripta* (Gorham, 1883)
**167**. – *C. abacula* **n**. **sp**. . . . . **43**
**168**. – *C. andros* **n**. **sp**.
**169**. – *C. bipunctipennis* **n**. **sp**.
**170**. – *C. bicolor* (Laporte, 1836)
**171**. – *C. campana* **n**. **sp**.
**172**. – *C. cerina* **n**. **sp**.
**173**. – *C. decusoris* **n**. **sp**.
**174**. – *C. duodecimpunctata* (Klug, 1842)
**175**. – *C. tambopata* **n**. **sp**.
**176**. – *C. ardis* **n**. **sp**.
**177**. – *C. elegantula* **n**. **sp**.
**178**. – *C. ferratilis* **n**. **sp**.
**179**. – *C. guttula* **n**. **sp**.
**180**. – *C. hedra* **n**. **sp**.
**181**. – *C. apicula* **n**. **sp**.
**182**. – *C. insignata* Pic, 1952 . . . . . **45**
**183**. – *C. lita* **n**. **sp**.
**184**. – *C. lunulata* (Pic, 1940)
**185**. – *C. paragramma* **n**. **sp**.
**186**. – *C. america* **n**. **sp**.
**187**. – *C. seabrai* Peracchi, 1962
**188**. – *C. stricta* **n**. **sp**.
**189**. – *C. abdita* Wolcott, 1927
**190**. – *C. alicula* **n**. **sp**.
**191**. – *C. andersoni* **n**. **sp**.
**192**. – *C. aragua* **n**. **sp**.
**193**. – *C. atracapitis* **n**. **sp**.
**194**. – *C. bilineicolle* (Chevrolat, 1874) **nov**. **stat**.
**195**. – *C. casselorum* (Opitz, 2014)
**196**. – *C. casusa* **n**. **sp**. . . . . **47**
**197**. – *C. catarina* (Opitz, 2014)
**198**. – *C. contaminata* (Klug), 1842
**199**. – *C. corumba* **n**. **sp**.
**200**. – *C. cruzvera* **n**. **sp**.
**201**. – *C. ekteina* **n**. **sp**.
**202**. – *C. helva* **n**. **sp**.
**203**. – *C. infula* **n**. **sp**.
**204**. – *C. inornata* **n**. **sp**.
**205**. – *C. insularis* (Gorham, 1898)
**206**. – *C. karafucosa* **n**. **sp**.
**207**. – *C. lenticula* **n**. **sp**.
**208**. – *C. linea* **n**. **sp**.
**209**. – *C. lineolata* (Gorham, 1883)
**210**. – *C. linomolina* **n**. **sp**.
**211**. – *C. marysearsi* **n**. **sp**.
**212**. – *C. mexcala* **n**. **sp**. . . . . **49**
**213**. – *C. mixta* LeConte, 1865
**214**. – *C. mocagua* **n**. **sp**.
**215**. – *C. oculata* (Say, 1835)
**216**. – *C. pannusa* **n**. **sp**.
**217**. – *C. palaga* **n**. **sp**.
**218**. – *C. pallida* **n**. **sp**.
**219**. – *C. pereira* **n**. **sp**.
**220**. – *C. pictila* **n**. **sp**.
**221**. – *C. preclara* **n**. **sp**.
**222**. – *C. quadrinotata* (Chevrolat, 1874) **nov**. **stat**.
**223**. – *C. quadrisignata* (Spinola, 1844)
**224**. – *C. rifkindi* **n**. **sp**.
**225**. – *C. rileyi* **n**. **sp**.
**226**. – *C. robusta* **n**. **sp**.
**227**. – *C. sina* **n**. **sp**. . . . . **51**
**228**. – *C. tessara* **n**. **sp**.
**229**. – *C. turrialba* **n**. **sp**.
**230**. – *C. urica* **n**. **sp**.
**231**. – *C. versicula* **n**. **sp**.
**232**. – *C. yojoa* **n**. **sp**.
**233**. – *C. vitticeps* (Blanchard), 1844
**234**. – *C. vittipennis* (Schenkling, 1906)
**235**. – *C. withlacoochee* Rifkind, 2012
**236**. – *C. zacapa* **n**. **sp**.
**237**. – *C. agnosta* **n**. **sp**.
**238**. – *C. castanea* **n**. **sp**.
**239**. – *C. apanthesa* **n**. **sp**.
**240**. – *C. caraca* **n**. **sp**.
**241**. – *C. chevrolati* Corporaal, 1950
**242**. – *C. variegata* **n**. **sp**.
**243**. – *C. ametra* **n**. **sp**. . . . . **53**
**244**. – *C. assumenta* **n**. **sp**.
**245**. – *C. cariari* **n**. **sp**.
**246**. – *C. caruaru* **n**. **sp**.
**247**. – *C. fimbriolata* (Chevrolat, 1843)
**248**. – *C. goias* **n**. **sp**.
**249**. – *C. gutta* **n**. **sp**.
**250**. – *C. guyanensis* (Chevrolat, 1876)
**251**. – *C. hamatilis* **n**. **sp**.
**252**. – *C. kreagris* **n**. **sp**.
**253**. – *C. panna* **n**. **sp**.
**254**. – *C. teretis* **n**. **sp**.
**255**. – *C. ungula* **n**. **sp**.
**256**. – *C. villavera* **n**. **sp**. . . . . **55**
**257**. – *C. decima* **n**. **sp**.
**258**. – *C. diffusa* **n**. **sp**.
**259**. – *C. dybasi* **n**. **sp**.
**260**. – *C. juxta* **n**. **sp**.
**261**. – *C. furfurosi* **n**. **sp**.
**262**. – *C. gemina* (Schenkling, 1900)
**263**. – *C. hexalineata* **n**. **sp**.
**264**. – *C. mekosa* **n**. **sp**.
**265**. – *C. nubilosa* **n**. **sp**.
**266**. – *C. nigropunctata* (Chevrolat, 1876)
**267**. – *C. stilastichosa* **n**. **sp**.
**268**. – *C. asarota* **n**. **sp**. . . . . **57**
**269**. – *C. catoma* **n**. **sp**.
**270**. – *C. confluens* (Gorham, 1877)
**271**. – *C. egeri* **n**. **sp**.
**272**. – *C. kraatzi* (Schenkling, 1900)
**273**. – *C. morrisi* **n**. **sp**.
**274**. – *C. odonta* **n**. **sp**.
**275**. – *C. sexnotata* (Klug, 1842)
**276**. – *C. trilineata* **n**. **sp**.
**277**. – *C. verticula* **n**. **sp**.

**Fig**. **278-279**: Phylogeny of *Cregya* species groups.
**278**. – Phylogeny . . . . . **59**
**279**. – Bootstrap

**Fig**. **280-373**: Aedeagi.
**280**. – *C. abacula* **n**. **sp**. . . . . **61**
**281**. – *C. andros* **n**. **sp**.
**282**. – *C. campana* **n**. **sp**.
**283**. – *C. cerina* **n**. **sp**.
**284**. – *C. decusoris* **n**. **sp**.
**285**. – *C. duodecimpunctata* (Klug, 1842)
**286**. – *C. guttula* **n**. **sp**.
**287**. – *C. lunulata* (Pic, 1940)
**288**. – *C. lita* **n**. **sp**.
**289**. – *C. seabrai* Peracchi, 1962
**290**. – *C. abdita* Wolcott, 1927
**291**. – *C. alicula* **n**. **sp**.
**292**. – *C. america* **n**. **sp**. . . . . **63**
**293**. – *C. andersoni* **n**. **sp**.
**294**. – *C. apicula* **n**. **sp**.
**295**. – *C. aragua* **n**. **sp**.
**296**. – *C. ardis* **n**. **sp**.
**297**. – *C. atracapitis* **n**. **sp**.
**298**. – *C. bilineicolle* (Chevrolat, 1874) **nov**. **stat**.
**299**. – *C. casselorum* (Opitz, 2014)
**300**. – *C. casusa* **n**. **sp**.
**301**. – *C. catarina* (Opitz, 2014)
**302**. – *C. contaminata* (Klug, 1842)
**303**. – *C. corumba* **n**. **sp**.
**304**. – *C. cruzvera* **n**. **sp**. . . . . **65**
**305**. – *C. ekteina* **n**. **sp**.
**306**. – *C. helva* **n**. **sp**.
**307**. – *C. inornata* **n**. **sp**.
**308**. – *C. karafucosa* **n**. **sp**.
**309**. – *C. lenticula* **n**. **sp**.
**310**. – *C. linea* **n**. **sp**.
**311**. – *C. lineolata* (Gorham, 1883)
**312**. – *C. linomolina* **n**. **sp**.
**313**. – *C. marysearsi* **n**. **sp**.
**314**. – *C. mexcala* **n**. **sp**.
**315**. – *C. mixta* LeConte, 1865
**316**. – *C. mocagua* **n**. **sp**. . . . . **67**
**317**. – *C. oculata* (Say, 1835)
**318**. – *C. pallida* **n**. **sp**.
**319**. – *C. pannusa* **n**. **sp**.
**320**. – *C. pereira* **n**. **sp**.
**321**. – *C. pictila* **n**. **sp**.
**322**. – *C. preclara* **n**. **sp**.
**323**. – *C. quadrinotata* (Chevrolat, 1874) **nov**. **stat**.
**324**. – *C. quadrisignata* (Spinola, 1844)
**325**. – *C. rileyi* **n**. **sp**.
**326**. – *C. robusta* **n**. **sp**.
**327**. – *C. sina* **n**. **sp**.
**328**. – *C. tambopata* **n**. **sp**. . . . . **69**
**329**. – *C. turrialba* **n**. **sp**.
**330**. – *C. urica* **n**. **sp**.
**331**. – *C. versicula* **n**. **sp**.
**332**. – *C. vitticeps* (Blanchard, 1844)
**333**. – *C. vittipennis* (Schenkling, 1906)
**334**. – *C. withlacoochee* Rifkind, 2012
**335**. – *C. yojoa* **n**. **sp**.
**336**. – *C. zacapa* **n**. **sp**.
**337**. – *C. castanea* **n**. **sp**.
**338**. – *C. agnosta* **n**. **sp**.
**339**. – *C. apanthesa* **n**. **sp**.
**340**. – *C. caraca* **n**. **sp**. . . . . **71**
**341**. – *C. chevrolati* Corporaal, 1950
**342**. – *C. variegata* **n**. **sp**.
**343**. – *C. fimbriolata* (Chevrolat, 1843)
**344**. – *C. guyanensis* (Chevrolat, 1876)
**345**. – *C. hamatilis* **n**. **sp**.
**346**. – *C. kreagris* **n**. **sp**.
**347**. – *C. teretis* **n**. **sp**.
**348**. – *C. ungula* **n**. **sp**.
**349**. – *C. villavera* **n**. **sp**.
**350**. – *C. decima* **n**. **sp**.
**351**. – *C. diffusa* **n**. **sp**.
**352**. – *C. dybasi* **n**. **sp**. . . . . **73**
**353**. – *C. furfurosi* **n**. **sp**.
**354**. – *C. gemina* (Schenkling, 1900)
**355**. – *C. hexalineata* **n**. **sp**.
**356**. – *C. juxta* **n**. **sp**.
**357**. – *C. mekosa* **n**. **sp**.
**358**. – *C. nebula* **n**. **sp**.
**359**. – *C. nigropunctata* (Chevrolat, 1876)
**360**. – *C. stilastichosa* **n**. **sp**.
**361**. – *C. terapoto* **n**. **sp**.
**362**. – *C. tetralineata* **n**. **sp**.
**363**. – *C. jatai* **n**. **sp**.
**364**. – *C. inscripta* (Gorham, 1883) . . . . . **75**
**365**. – *C. asarota* **n**. **sp**.
**366**. – *C. catoma* **n**. **sp**.
**367**. – *C. confluens* (Gorham, 1877)
**368**. – *C. egeri* **n**. **sp**.
**369**. – *C. kraatzi* (Schenkling, 1900)
**370**. – *C. morrisi* **n**. **sp**.
**371**. – *C. sexnotata* (Klug, 1842)
**372**. – *C. trilineata* **n**. **sp**.
**373**. – *C. verticula* **n**. **sp**.

**Fig**. **374-389**: Geographic distribution of *Cregya* species.
**374**.
– *C. america* **n**. **sp**. . . . . **77**
– *C. contaminata* (Klug, 1842)
**375**.
– *C. mixta* LeConte, 1865
– *C. withlacoochee* Rifkind, 2012
**376**.
– *C. oculata* (Say, 1835) . . . . . **79**
**377**.
– *C. andros* **n**. **sp**.
– *C. quadrinotata* (Chevrolat, 1874) **nov**. **stat**.
**378**.
– *C. abacula* **n**. **sp**. . . . . **81**
– *C. bipunctipennis* **n**. **sp**.
– *C. cerina* **n**. **sp**.
– *C. duodecimpunctata* (Klug, 1842)
– *C. elegantula* **n**. **sp**.
– *C. ferratilis* **n**. **sp**.
– *C. guttula* **n**. **sp**.
– *C. hedra* **n**. **sp**.

**394**. – *C. cerina* **n. sp.**
**395**. – *C. decusoris* **n. sp.**
**396**. – *C. duodecimpunctata* (Klug, 1842)
**397**. – *C. elegantula* **n. sp.**
**398**. – *C. ferratilis* **n. sp.**
**399**. – *C. guttula* **n. sp.**
**400**. – *C. hedra* **n. sp.**
**401**. – *C. insignata* Pic, 1952
**402**. – *C. lita* **n. sp.** . . . . . **95**
**403**. – *C. lunulata* (Pic), 1940
**404**. – Hybrid, *C. kraatzi / C. sexnotata*
**405**. – *C. paragramma* **n. sp.**
**406**. – *C. seabrai* Peracchi, 1962
**407**. – *C. stricta* **n. sp.**
**408**. – *C. abdita* Wolcott, 1927
**409**. – *C. alicula* **n. sp.**
**410**. – *C. america* **n. sp.**
**411**. – *C. andersoni* **n. sp.**
**412**. – *C. apicula* **n. sp.**
**413**. – *C. aragua* **n. sp.**
**414**. – *C. ardis* **n. sp.** . . . . . **97**
**415**. – *C. atracapitis* **n. sp.**
**416**. – *C. bicolor* (Laporte, 1836)
**417**. – *C. bilineicolle* (Chevrolat, 1874) **nov. stat.**
**418**. – *C. casselorum* (Opitz, 2014)
**419**. – *C. casusa* **n. sp.**
**420**. – *C. catarina* (Opitz, 2014)
**421**. – *C. contaminata* (Klug, 1842)
**422**. – *C. corumba* **n. sp.**
**423**. – *C. cruzvera* **n. sp.**
**424**. – *C. ekteina* **n. sp.**
**425**. – *C. helva* **n. sp.**
**426**. – *C. infula* **n. sp.** . . . . . **99**
**427**. – *C. inornata* **n. sp.**
**428**. – *C. insularis* (Gorham, 1898)
**429**. – *C. karafucosa* **n. sp.**
**430**. – *C. lenticula* **n. sp.**
**431**. – *C. linea* **n. sp.**
**432**. – *C. lineolata* (Gorham, 1883)
**433**. – *C. linomolina* **n. sp.**
**434**. – *C. mexcala* **n. sp.**
**435**. – *C. mixta* LeConte, 1865
**436**. – *C. mocagua* **n. sp.**
**437**. – *C. oculata* (Say, 1835)
**438**. – *C. palaga* **n. sp.** . . . . . **101**
**439**. – *C. pallida* **n. sp.**
**440**. – *C. pannusa* **n. sp.**
**441**. – *C. pereira* **n. sp.**
**442**. – *C. pictila* **n. sp.**
**443**. – *C. preclara* **n. sp.**
**444**. – *C. quadrinotata* (Chevrolat, 1874) **nov. stat.**
**445**. – *C. quadrisignata* (Spinola, 1844)
**446**. – *C. rifkindi* **n. sp.**
**447**. – *C. rileyi* **n. sp.**
**448**. – *C. robusta* **n. sp.**
**449**. – *C. sina* **n. sp.** . . . . . **103**
**450**. – *C. tambopata* **n. sp.**
**451**. – *C. tessara* **n. sp.**
**452**. – *C. turrialba* **n. sp.**
**453**. – *C. urica* **n. sp.**
**454**. – *C. versicula* **n. sp.**
**455**. – *C. vitticeps* (Blanchard, 1844)
**456**. – *C.vittipennis* (Schenkling, 1906)
**457**. – *C. withlacoochee* Rifkind, 2012
**458**. – *C. yojoa* **n. sp.**
**459**. – *C. zacapa* **n. sp.**
**460**. – *C. castanea* **n. sp.**
**461**. – *C. agnosta* **n. sp.** . . . . . **105**
**462**. – *C. apanthesa* **n. sp.**
**463**. – *C. caraca* **n. sp.**
**464**. – *C. chevrolati* Corporaal, 1950
**465**. – *C. variegata* **n. sp.**
**466**. – *C. ametra* **n. sp.**
**467**. – *C. assumenta* **n. sp.**
**468**. – *C. cariari* **n. sp.**
**469**. – *C. caruaru* **n. sp.**
**470**. – *C. fimbriolata* (Chevrolat, 1843)
**471**. – *C. goias* **n. sp.**
**472**. – *C. gutta* **n. sp.**
**473**. – *C. guyanensis* (Chevrolat, 1876)
**474**. – *C. hamatilis* **n. sp.** . . . . . **107**
**475**. – *C. kreagris* **n. sp.**
**476**. – *C. panna* **n. sp.**
**477**. – *C. teretis* **n. sp.**
**478**. – *C. ungula* **n. sp.**
**479**. – *C. villavera* **n. sp.**
**480**. – *C. decima* **n. sp.**
**481**. – *C. diffusa* **n. sp.**
**482**. – *C. dybasi* **n. sp.**
**483**. – *C. furfurosi* **n. sp.**
**484**. – *C. gemina* (Schenkling, 1900)
**485**. – *C. glena* **n. sp.** . . . . . **109**
**486**. – *C. hexalineata* **n. sp.**
**487**. – *C. juxta* **n. sp.**
**488**. – *C. mekosa* **n. sp.**
**489**. – *C. nebula* **n. sp.**
**490**. – *C. nigropunctata* (Chevrolat, 1876)
**491**. – *C. stilastichosa* **n. sp.**
**492**. – *C. terapoto* **n. sp.**
**493**. – *C. tetralineata* **n. sp.**
**494**. – *C. jatai* **n. sp.**
**495**. – *C. inscripta* (Gorham, 1883)
**496**. – *C. asarota* **n. sp.**
**497**. – *C. catoma* **n. sp.** . . . . . **111**
**498**. – *C. confluens* (Gorham, 1877)
**499**. – *C. egeri* **n. sp.**
**500**. – *C. kraatzi* (Schenkling, 1900)
**501**. – *C. morrisi* **n. sp.**
**502**. – *C. nubilosa* **n. sp.**
**503**. – *C. odonta* **n. sp.**
**504**. – *C. sexnotata* (Klug, 1842)
**505**. – *C. trilineata* **n. sp.**
**506**. – *C. verticula* **n. sp.**
**507**. – *Walterianella* sp. (Chrysomelidae)

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Le genre *Cregya* LeConte après révision renferme 117 species, dont 89 espèces nouvelles décrites dans la présente étude qui propose 6 nouvelles synonymies et la désignation de 19 lectotypes.

Ce travail comprend :

- un résumé en Anglais, Français, Espagol et Allemand
- une brève discussion sur l'histoire naturelle du genre
- une analyse morphologique
- une clé du genre *Cregya*
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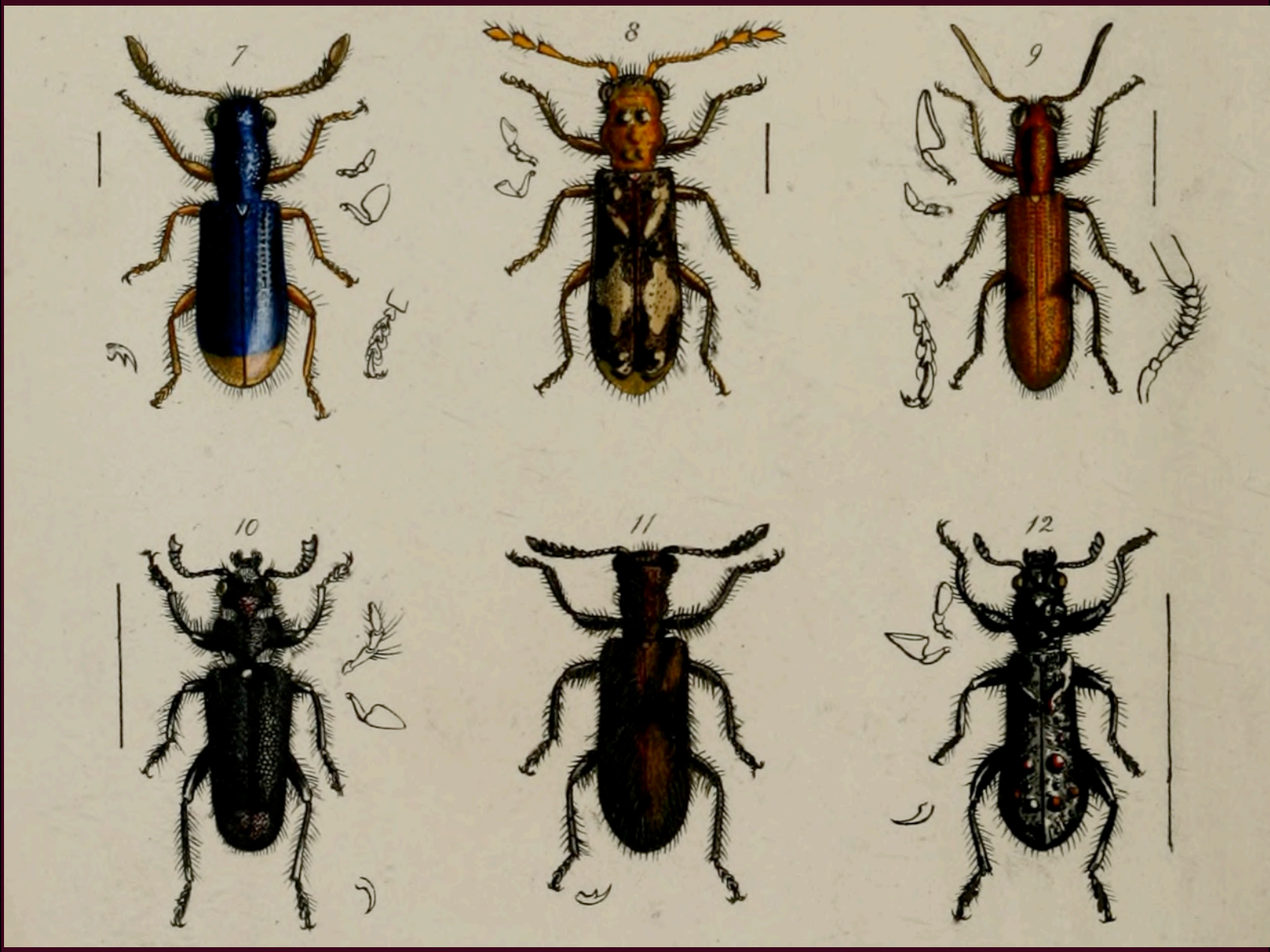


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