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# A new *Adelina* Dejean, 1835 species from Mexico (Coleoptera: Tenebrionidae: Diaperini)

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## Keywords:

Coleoptera; taxonomy;  
Tenebrionidae; new species;  
Diaperini; description;  
*Adelina*; Mexico.

**Abstract.** – *Adelina papanoa* sp. nov. from Mexico is described, illustrated and compared with the similar species *Adelina bifurcata* (Champion, 1893). The new species differs by the horns and depressions on the head and by the male genitalia.

Háva J. & Zahradník P., 2022. – A new *Adelina* Dejean, 1835 species from Mexico (Coleoptera: Tenebrionidae: Diaperini). *Faunitaxys*, 10(22) : 1 – 5.

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## Introduction

The tenebrionid genus *Adelina* Dejean, 1835 belongs to the tribe Diaperini and subtribe Adelina which includes 12 genera worldwide (Bouchard et al. 2005, 2021). The genus currently includes 25 species worldwide: five species from the Nearctic Region and 23 from the Neotropical Region (Ardoin 1977, Bousquet et al. 2018), two species from the Palearctic Region (Iwan & Löbl 2020) and one species from the Oriental and Australian Regions (Merkel 1992, Matthews & Lawrence 2005). A large contribution regarding the genus *Adelina* (as genus *Doliema*, a synonym of *Adelina*) from the Nearctic and Neotropical Regions was published by Ardoin (1977), and additional new species of *Adelina* were published by Doyen (1984), Triplehorn & Ivie (1983) and Steiner (2005, 2006). A new species of *Adelina* from Mexico: Guerrero is here described.

## Material and methods

- The following collection acronyms are used:

**JHAC:** Private Entomological Laboratory & Collection, Jiří Háva, Únětice u Prahy, Prague-West, Czech Republic;

**PZAC:** Petr Zahradník, private collection, Jesenice u Prahy, Czech Republic.

- Specimens of the presently described species are provided with a red printed label with the following text:

« HOLOTYPE [or ALLOTYPE or PARATYPE] *Adelina papanoa* sp. nov. J. Háva & P. Zahradník det. 2022 ».

## Results

Subfamily **Diaperinae** Latreille, 1802

Tribe **Diaperini** Latreille, 1802

Subtribe **Adelina** LeConte, 1862

Genus *Adelina* Dejean, 1835

*Adelina papanoa* sp. nov.

(Fig. 1-6)

ZooBank: <http://zoobank.org/9435B889-0696-431F-B11C-F90CC17EDDB1>

**Holotype**, ♂: Mexico: Guerrero, 30 km NW Papanoa, 19.X.2016, S. Prepsl lgt. (PZAC).

**Allotype**, ♀: same data as holotype (PZAC).

**Paratype**, 1 ♂: same data as holotype (JHAC).

### Description of holotype.

Body form very flat, elongate, parallel sided; surface smooth, shining; color brown (Fig. 1).

#### Measurements.

– Length (from clypeal margin to elytral apex): 5.2–5.7 mm;

– Width (across middle of elytra): 1.9–2.1 mm.

**Head.** – Finely punctate, nearly twice as wide as long. In the male, the clypeus is very slightly indented in front, the anterior edge followed by a blunt carina behind which are two transverse, shiny and deep punctures, located on each side and not emerging on the anterior edge. – **Clypeus** deeply set in relation to the frons and the genae, the latter flat, dilated and projecting forwards, the middle of their anterior border adorned with a fairly long sharp, the extremity of which runs downwards. – **Frons** flat. – **Eyes** convex and slightly protruding. – **Antennae** subfiliform, long, exceeding the middle of the body, joints five to eight slightly conical, dilated at the apex, about one and a half times longer than wide in the male, shorter but with the same joints longer than wide in the female.

**Scutellum.** – Flat impunctate, with shape of a rounded-off triangle.

**Elytra.** – With small stria punctures, regularly spaced, separated by about the diameter of a puncture.

**Meso- metasternum.** – Finely punctured.

**Legs.** – Smooth, setae inconspicuous; front tibia straight, mostly parallel sided to apex, with a crenulate outer margin (Fig. 3).

**Abdominal ventrites.** – Brown, finely punctate (Fig. 5). All ventrites with small, lateral, depressions.

**Male genitalia.** – As in Fig. 4.

**Female.**

– Length (from clypeal margin to elytral apex) 4.9 mm;

– Width (across middle of elytra) 1.7 mm.

In the female, the clypeus is shiny, slightly indented in front, without keel on the anterior edge, located at the same level as the forehead and the cheeks, marked, on each side, with a dimple wider but less deep than that of the male, the cheeks not protruding, set back in relation to the anterior edge of the clypeus, without teeth on their anterior edge.

**Differential diagnosis.** – The new species belong to „1° species group“ defined by Ardoin (1977) and is very visually similar to *Adelina bifurcata* (Champion, 1893), but differs from it by the blunt apex of the horn and depressions on head (Fig. 2 & 7) and by the structure of the male genitalia (Fig. 4 & 8); from other known species it differs by the same characters.

**Etymology.** – Toponymic, named for the locality Papanoa City where the specimens were collected.

**Distribution.** – Mexico: Guerrero.

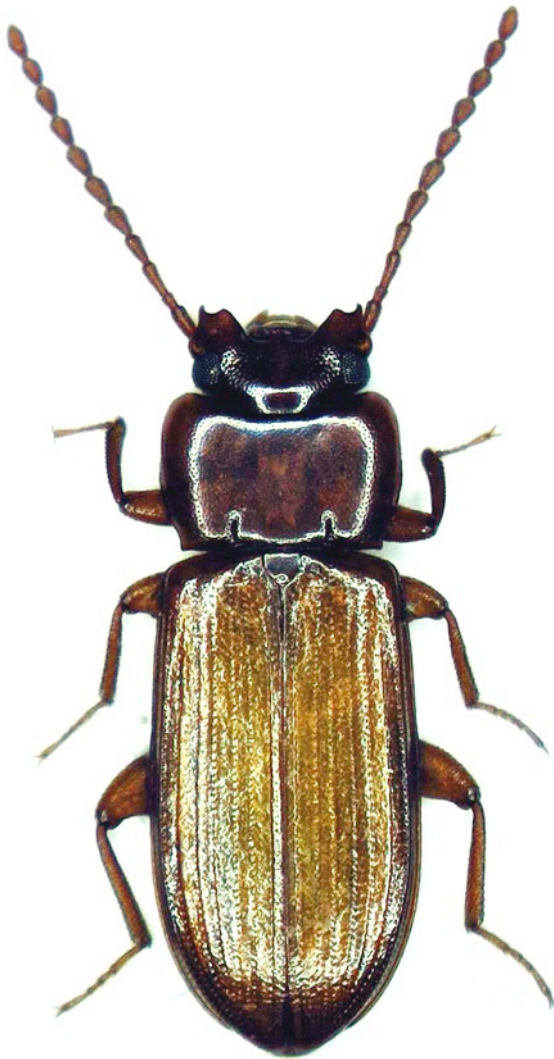


Fig. 1. *Adelina papanoa* sp. nov., ♂.

**Checklist of *Adelina* Dejean, 1835 species**

= *Doliema* Pascoe, 1860  
= *Schedarosus* Reitter, 1876

« 1° species group »

- angustata* (Champion, 1886)  
Guatemala; Nicaragua.
- argentina* Pic, 1923  
Argentina; Bolivia; Brasil; Paraguay
- bacardi* Steiner, 2006  
Bahamas Is.
- bidens* (Schaeffer, 1915)  
Bahamas Is.; Cayman Is.; Cuba; Dominican Republic; Guatemala; USA: Florida, Texas
- bifurcata* (Champion, 1893)  
Costa Rica; Mexico; USA: Arizona
- clypealis* (Kulzer, 1958)  
Argentina
- cornuta cornuta* (Kulzer, 1958)  
Brasil
- cornuta recticollis* (Kulzer, 1958)  
Argentina
- denticeps* (Ardoin, 1977)  
Venezuela
- freyi* (Kulzer, 1958)  
Brasil
- frontalis* (Champion, 1886)  
Belize; Bolivia; Brasil; Fr. Guyane; Peru; Trinidad
- klapperichi* (Ardoin, 1977)  
Dominican Republic
- kulzeri* (Ardoin, 1977)  
Colombia
- latiramosa* Doyen, 1984  
Mexico: Puebla
- maryjoae* Steiner, 2005  
Bahamas Is.; Cayman Is.
- mystax* Triplehorn & Ivie, 1983  
Virgin Is.
- pallida* (Say, 1824)  
= *cucujiformis* Reitter, 1876 (*Schedarosus*)  
Belize; Chile; Colombia; Cuba; Guatemala; Mexico; Nicaragua; Puerto Rico; USA
- pici* (Ardoin, 1977)  
Bahamas Is.; Cayman Is.; Cuba; Guadeloupe; Lesser Antilles; Venezuela
- plana* (Fabricius, 1801)  
= *depressa* Erichson, 1847  
= *lecontei* Horn, 1870 (*Sitophagus*)  
= *scidarius* Reitter, 1876 (*Schedarosus*)  
= *diabolica* Pic, 1923 (*Doliema*)  
Bahamas Is.; Belize; Brasil; Cayman Is.; Chile; Colombia; Cuba; Dominican Republic; Fr. Guyane; Guatemala; Honduras; Lesser Antilles; Mexico; Nicaragua; Panama; Peru; USA; Venezuela
- subcornuta* (Ardoin, 1977)  
Brasil

« 2° species group »

- quadridentata* (Champion, 1893)  
Costa Rica; Mexico: Jalisco, Oaxaca



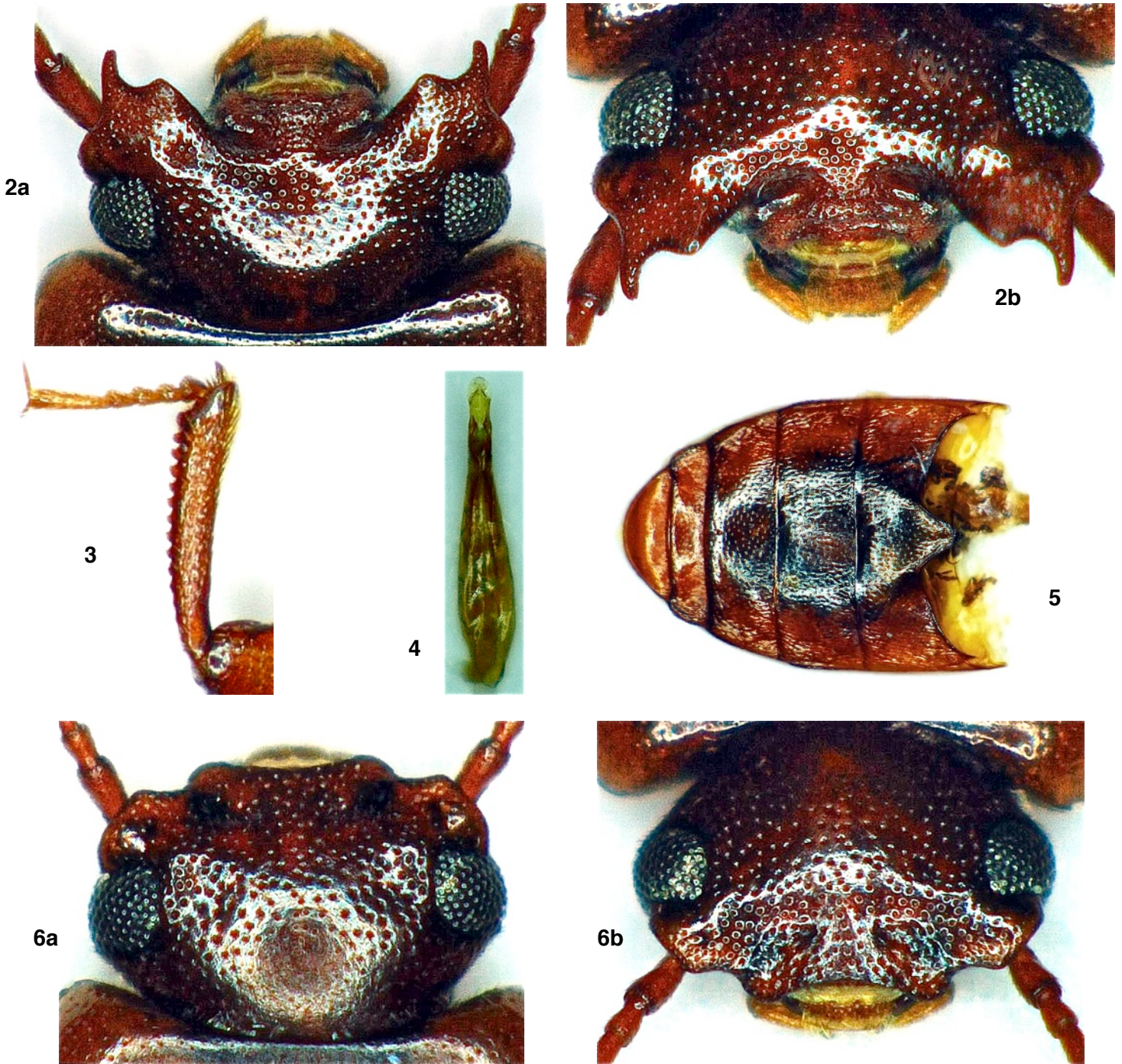


Fig. 2-6. *Adelina papanoa* sp. nov.

Fig. 2-5. Male. 2a-b. Head, dorsal view. 3. Anterior leg. 4. Genitalia. 5. Abdomen. Fig. 6. Female. 6a-b. Head, dorsal view.

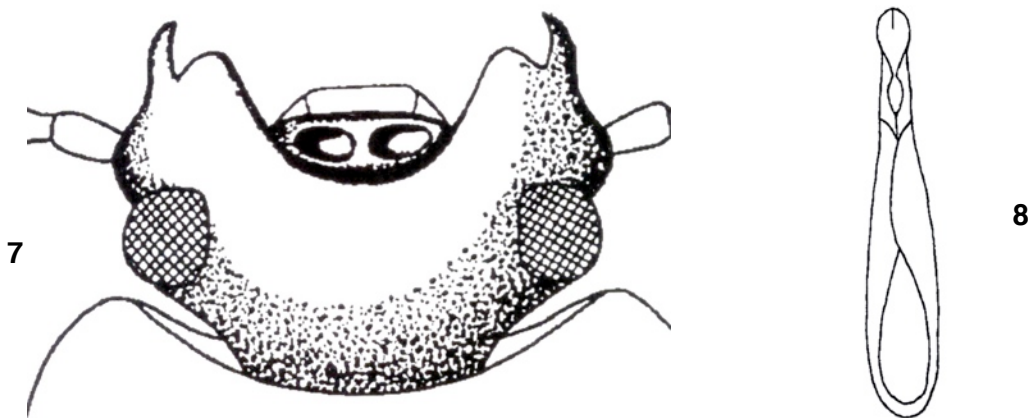


Fig. 7-8. *Adelina bifurcata* (Champion, 1893). 7. Head, dorsal view. 8. Genitalia.



*dominicana* (Ardoin, 1977)

Dominican Republic

*tridentata* (Ardoin, 1977)

Venezuela

#### Incertae sedis

*platisoides* Pascoe, 1860

= *kannegieteri* Pic, 1923 (*Doliema*)

Australia: Western Australia; China: Yunnan; Indonesia: Borneo, Moluccas; Laos; Philippines; Sri Lanka; Vietnam.

*turcica* Reitter, 1877

Greece (incl. Crete); Israel; Romania; Turkey.

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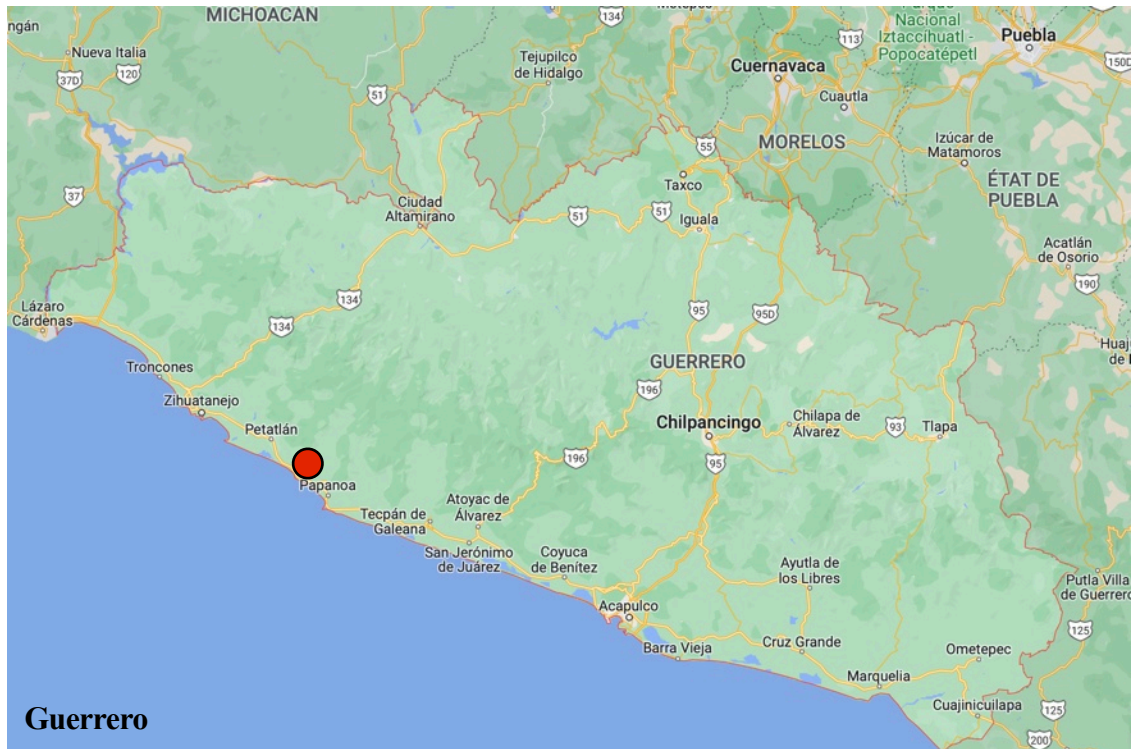
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Map 1. Distribution of *Adelina papanoa* sp. nov.



**Map 2.** Type locality of *Adelina papanoa* sp. nov.: Mexico, Guerrero, 30 km NW Papanoa.

## Résumé

Háva J. & Zahradník P., 2022. – Une nouvelle espèce du genre *Adelina* Dejean, 1835 du Mexique (Coleoptera: Tenebrionidae: Diaperini). *Faunitaxys*, 10(22) : 1 – 5.

*Adelina papanoa* sp. nov. est décrite du Mexique. Elle est illustrée et comparée à *Adelina bifurcata* (Champion, 1893). Elle se distingue des espèces les plus proches par la forme des cornes et des dépressions au niveau de la tête et par les génitalia du mâle.

Mots-clés. – Coleoptera, Tenebrionidae, Diaperini, *Adelina*, taxinomie, nouvelle espèce, description, Mexique.

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**Illustration de la couverture** : Le « *xoloitzcuintle* », aussi appelé chien nu mexicain, est une race très ancienne et rare, originaire du Mexique. Elle est à la fois calme et vigilante, mais jamais agressive.

Crédits photos :

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