

**THE GENUS *NOTOBITOPSIS* BLÖTE WITH THE
DESCRIPTION OF TWO NEW SPECIES (HEMIPTERA:
HETEROPTERA: COREIDAE: COREINAE: MICTINI)**

HARRY BRAILOVSKY AND ERNESTO BARRERA

Departamento de Zoología, Instituto de Biología Universidad Nacional
Autónoma de México Apdo Postal 70153, México 04510 D.F., México

Abstract.—Two new species of *Notobitopsis*, *N. novoguineensis* and *N. sandaracinus*, collected in New Guinea are described and illustrated. New records for *N. limbiventris* and *N. militaris* are given and a key to the five known species is provided.

Key Words.—Insecta, Hemiptera, Heteroptera, Coreidae, Mictini, *Notobitopsis*, new species, New Guinea.

Stål (1863) and Distant (1911a, b) described the three previously known species of *Notobitopsis* and included them in the genus *Mictis*: *M. aruana* Distant, *M. limbiventris* Stål and *M. militaris* Distant. Blöte (1938) placed *limbiventris* and *militaris* in a new subgenus of *Mictis* (*Notobitopsis*). O'Shea and Schaefer (1980) revised the tribe Mictini in the Asian and Australian region, recognizing nineteen genera, and including *Notobitopsis* which they elevated to generic status and redescribed.

Within the tribe Mictini, the genus *Notobitopsis* is characterized by the lack of a tubercle at the apex of scutellum; the cylindrical fore tibia; pronotum not steeply declivent with humeral angles rounded, not angulate; middle third of posterior margins of abdominal sternites III and IV not produced posteriorly; abdominal sternite III with large tubercle on each side; and posterior margin of abdominal sternite VI without a median tubercle.

This contribution adds two noteworthy records, two new species and a key to the five known species of *Notobitopsis*.

NOTOBITOPSIS ARUANA (Distant)

Mictis aruana Distant 1911b: 389–390.

This is the largest known species of *Notobitopsis* (length over 34 mm) and readily distinguishable by the following combination of characters: antennal segment IV and clavus black, and apical margin of corium yellow to orange yellow.

Distribution.—This species was described from the Aru Islands and is only known from the type specimen.

Material Examined.—1 male; data: Aru Islands. Type deposited in The Natural History Museum, London.

NOTOBITOPSIS LIMBIVENTRIS (Stål)
(Figs. 5 and 6)

Mictis limbiventris Stål 1863: 603.

This species is easily identified within the genus by having the clavus and apical margin of corium black, and the paramere tip stout and almost straight (Figs. 5

and 6). In *N. aruana* and *N. militaris* the corial apical margin is yellow to orange yellow, and the clavus orange yellow or black with reddish reflections. *Notobitopsis limbativentris* is much smaller than the two other species with a total body length of less than 30.00 mm.

Distribution.—This species was originally described from Dory, New Guinea (Stål), and subsequently reported from Salawatti, New Guinea (Blöte 1938).

Material Examined.—1 female; data: NE New Guinea. Adelbert Mts., Wanuma, 800–1000 m, 23 October 1958, J. L. Gressitt. Deposited in Bernice P. Bishop Museum, Honolulu, Hawaii. 12 males, 11 females; data: Indonesia Irian Jaya. Baliem Valley nr., Jiwika, 5800–6000', 24 October 1990, P. J. Clausen. Deposited in University of Minnesota, Insect Collection.

NOTOBITOPSIS MILITARIS (Distant)
(Figs. 7 and 8)

Mictis militaris Distant 1911a: 595–596.

This species is similar to *N. aruana* (Distant) but slightly smaller, less than 33.00 mm, with clavus orange yellow to dull sanguineous. *Notobitopsis aruana* is longer than 34.00 mm, with clavus black.

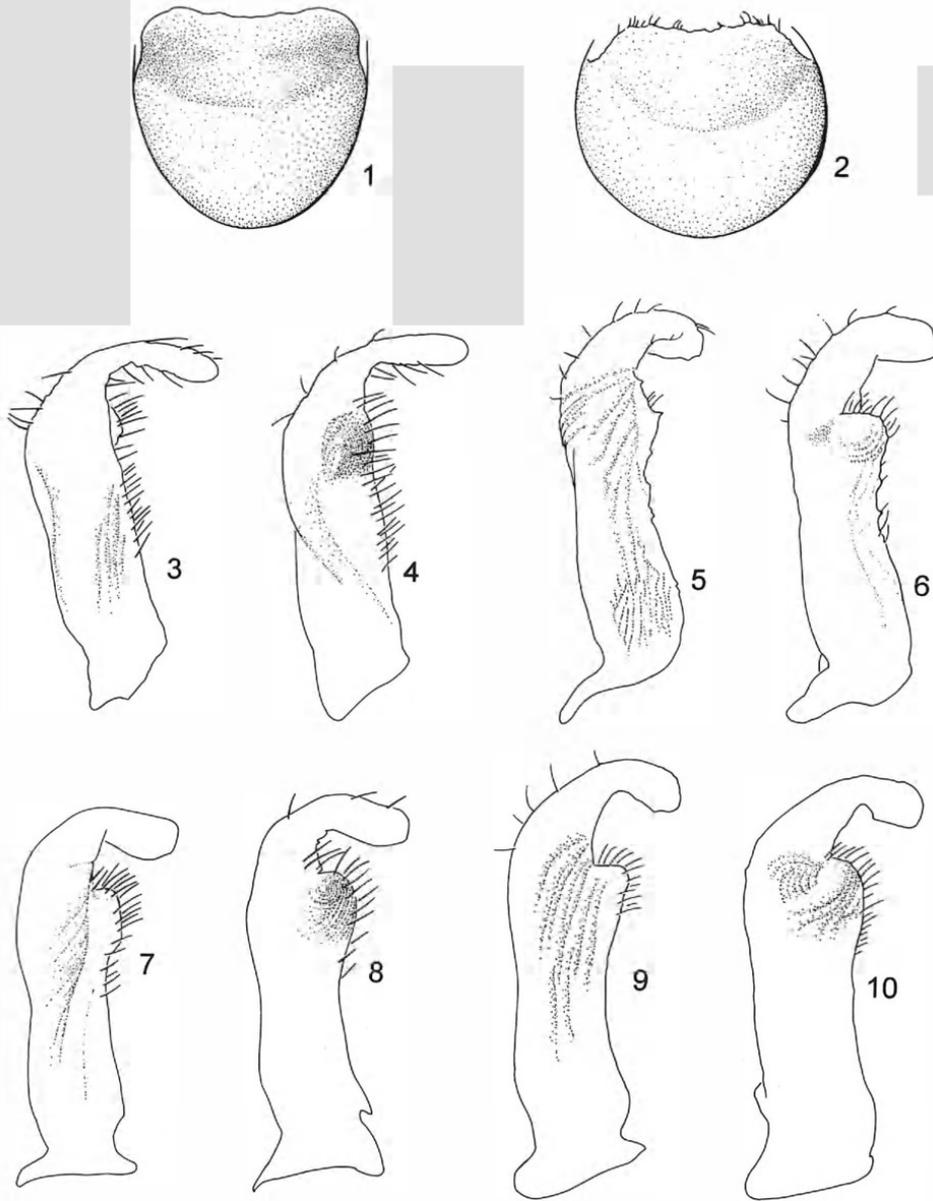
Distribution.—This species previously was known from Wataikwa River and Hollandia in New Guinea (Distant 1911a, Blöte 1938).

Material Examined.—1 female; data: New Guinea. Sidor Apo 321, March–May 1944, O. H. Graham. Deposited in Bernice P. Bishop Museum, Honolulu, Hawaii. 1 male, 2 females; data: NE New Guinea. Kar Kar Is., Kurum Bagiai Crater trail, 0–100 m, August 1968, N. L. H. Krauss. Deposited Instituto de Biología, UNAM, México.

NOTOBITOPSIS NOVOGUINENSIS BRAILOVSKY AND BARRERA, NEW SPECIES
(Figs. 1, 3 and 4, 11)

Types.—Holotype: male; data: Papua New Guinea. Eastern Highlands, Ubabubi, 20 mi S Goroka, 6°22' S, 145°11' E, June 1986, G. Dodge. Deposited in Cornell University, Insect Collection, Ithaca, New York. Paratype: 1 male: same data as holotype. Deposited in the Colección Entomológica del Instituto de Biología, UNAM, México.

Description.—*Male (holotype)*. *Dorsal coloration*: Head, antennal segments I–IV, pronotum, scutellum, and abdominal segments black; head below each postocular tubercle with small yellow discoidal spot; clavus shiny reddish dark; corium shiny reddish dark, with costal margin black; hemelytral membrane shining metallic blue; connexival segments III–VI and anterior half of VII shiny orange; posterior half of connexival segment VII black. *Ventral coloration*. Ground color including rostral segments and legs black; propleura, mesopleura, and metapleura with large carmine-red spot, one on each segment; anterior and posterior lobe of metathoracic peritreme yellow; pleural margin of abdominal sterna III–VII orange, with spiracles black. *Structure*. Head: Rostrum reaching posterior margin of mesosternum. Pronotum: Lateral margins finely dentate; humeral angles slightly produced. Legs: Fore and middle femora with two distinct spines near apex; hind femur longer, incrassate, slightly curved, attenuated at base, densely granulate, without apical spine; fore and middle tibiae sulcate, cylindrical; hind tibia sulcate, moderately dilated ventrally, with strong spine at inner face before apex. Abdomen: Abdominal sternite III with small tubercle on each side. *Genitalia* (Figs. 1, 3 and 4).—Genital capsule (Fig. 1): Posteroventral edge thickest, scarcely cordiform; body without tubercles. Parameres (Figs. 3 and 4): Stout, with elongate and almost straight tip. *Measurements*. Total body length: 26.90 mm. Head length: 2.04 mm; width across eyes: 2.66 mm; interocular space: 1.36 mm; intercellular space: 0.68 mm. Antennal segments length: I, 5.70 mm, II, 5.16 mm, III, 4.18 mm, IV, 4.18 mm. Pronotal length: 5.47 mm; width across frontal angles: 2.43 mm; width across humeral angles: 7.52 mm. Scutellar length: 3.11 mm; width: 2.96 mm.



Figures 1 and 2. Male genital capsule of *Notobitopsis* spp. Figure 1. *N. novoguineensis* Brailovsky and Barrera, NEW SPECIES. Figure 2. *N. sandaracinus* Brailovsky and Barrera, NEW SPECIES. Figures 3–10. Parameres of *Notobitopsis* spp. Figures 3 and 4. *N. novoguineensis* Brailovsky and Barrera, NEW SPECIES. Figures 5 and 6. *N. limbativentris* (Stål). Figures 7 and 8. *N. militaris* (Distant). Figures 9 and 10. *N. sandaracinus* Brailovsky and Barrera, NEW SPECIES.

Female.—Unknown.

Discussion.—This handsome species is readily separable by having the clavus and corium shiny reddish dark, and the hemelytral membrane metallic blue. The other known species have black or orange yellow clavus, the corium black, and the hemelytral membrane shiny dark olivaceous or black. The parameres are distinct (Figs. 3–10).

Distribution.—Only known from New Guinea.

Etymology.—Named for its occurrence in New Guinea.

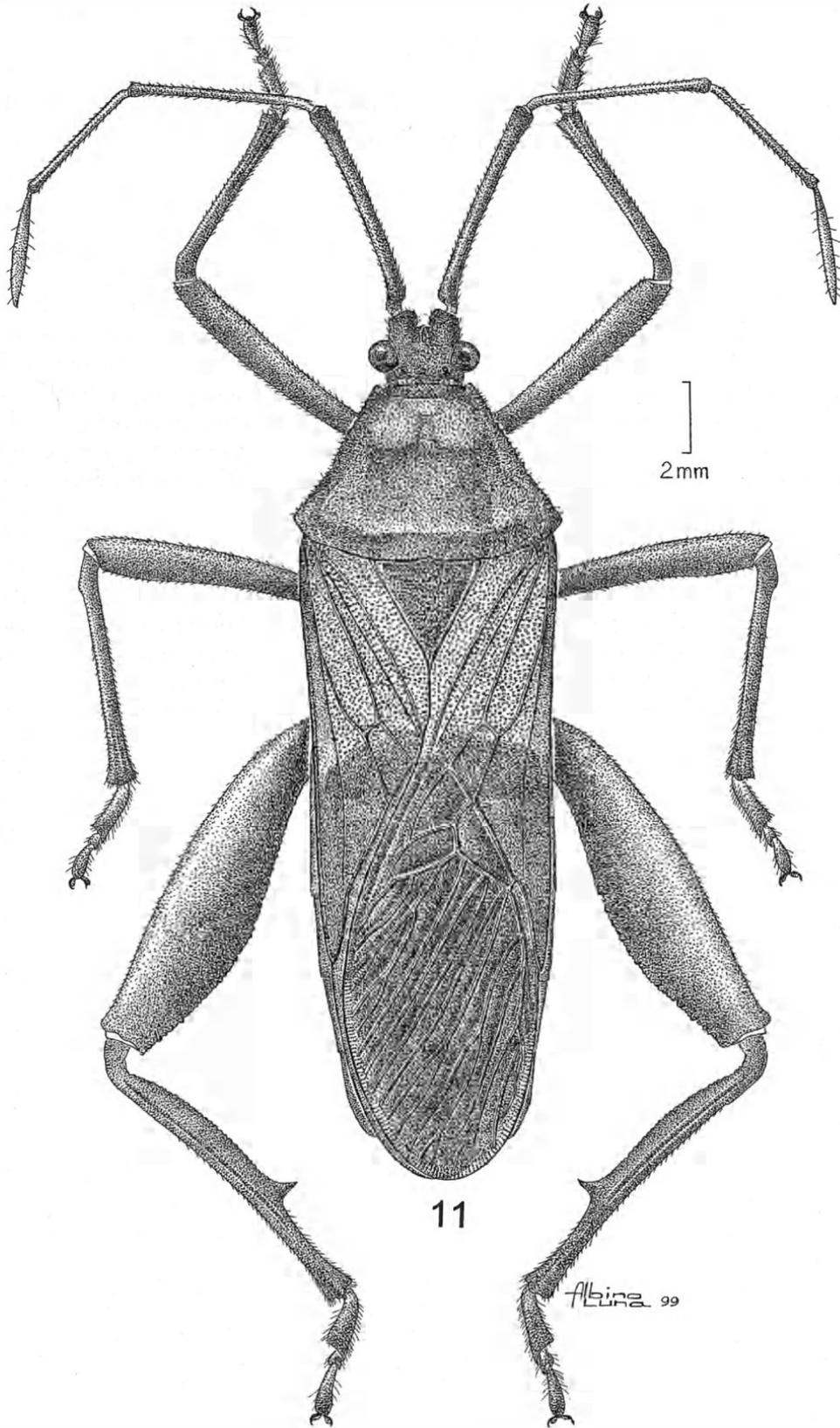


Figure 11. Dorsal view of *Notobitopsis novoguineensis* Brailovsky and Barrera, NEW SPECIES.

NOTOBITOPSIS SANDARACINUS BRAILOVSKY AND BARRERA, NEW SPECIES

(Figs. 2, 9 and 10, 12)

Types.—Holotype: male; data: New Guinea. Finschhafen, 16–21 April 1944, E. S. Ross. Deposited in California Academy of Sciences, San Francisco, California (CAS). Paratypes: 9 males, 9 females; data: same locality and date as holotype. Deposited in California Academy of Sciences, San Francisco California and Colección Entomológica del Instituto de Biología, UNAM, México.

Description.—*Male (holotype)*. *Dorsal coloration*: Head black; antennal segments I–III black reddish brown, IV shiny orange with basal joint black; pronotum chestnut orange with anterior margin, lateral margins, and humeral angles black, and lateral border orange; scutellum chestnut orange with apex orange; clavus chestnut orange; corium chestnut orange with costal margin black, and costal border yellow; hemelytral membrane dark shining olivaceous, with blue, green and pink metallic iridescence; connexival segments dark chestnut orange with upper margin densely granulate with black; dorsal abdominal segments dark chestnut orange. *Ventral coloration*. Head and bucculae shiny orange with the space close to eyes black; rostral segments I–IV black with chestnut orange reflections; prosternum, mesosternum, and metasternum chestnut orange; propleura, mesopleura, and metapleura with large and wide carmine-red spots, one on each segment; upper margin of propleura and mesopleura black, and upper margin of metapleura reddish orange; acetabulae reddish brown to shiny orange; anterior and posterior lobe of metathoracic peritreme shiny orange; coxae with inner face chestnut orange and outer face reddish brown; trochanters reddish brown; femora chestnut orange with apical joint black; fore and middle tibiae dark reddish brown, with chestnut orange reflections; hind tibia chestnut orange with subapical spine and apical third reddish brown; tarsi reddish brown; abdominal sterna dark chestnut orange with spiracles, apex of the tubercle of abdominal sternite III, and posterior margin of abdominal sternite VII black; pleural margin of abdominal sterna III–VII dirty yellow; genital capsule black. *Structure*. Head: Rostrum reaching posterior margin of mesosternum. Pronotum: Lateral margins densely crenulate; humeral angles obtuse, not exposed. Legs: Similar to *N. novoguineensis*. Abdomen: Abdominal sternite III with large and prominent tubercle on each side; upper margin of connexival segments densely granulate. *Genitalia* (Figs. 2, 9 and 10).—Genital capsule (Fig. 2): Posteroventral edge thickest, simple, with small tubercles close to middle third and sinuate. Parameres (Figs. 9 and 10): Stout with broad curved tip. *Measurements*. Total body length: 30.80 mm. Head length: 2.26 mm; width across eyes: 2.96 mm; interocular space: 1.52 mm; interocellar space: 0.82 mm. Antennal segments length: I, 6.30 mm, II, 5.92 mm, III, 4.71 mm, IV, 4.86 mm. Pronotal length: 6.08 mm; width across frontal angles: 2.66 mm; width across humeral angles: 7.82 mm. Scutellar length: 3.42 mm; width: 3.02 mm.

Female.—*Coloration*: Similar to male. Connexival segments VIII and IX dark chestnut orange; dorsal abdominal segments VIII and IX, and genital plates black. *Structure*. Legs: Hind femur slightly incrassate, granulate with distinct spine near apex; hind tibia sulcate, moderately dilated, unarmed. *Measurements*. Total body length: 31.30 mm. Head length: 2.35 mm; width across eyes: 2.99 mm; interocular space: 1.53 mm; interocellar space: 0.91 mm. Antennal segments length: I, 6.46 mm, II, 5.39 mm, III, 4.25 mm, IV, 4.94 mm. Pronotal length: 6.46 mm; width across frontal angles: 2.87 mm; width across humeral angles: 8.05 mm. Scutellar length: 3.64 mm; width: 3.19 mm.

Discussion.—Antennal segment IV of *N. sandaracinus*, is shiny orange with basal joint black, and general color of body chestnut orange. In other species, antennal segment IV is always black, and the general color of the body black or black with yellow stripes. Additionally, the shape of the parameres of *N. sandaracinus*, *N. limbativentris* (Stål), and *N. militaris* (Distant) are distinct (Figs. 5–10).

Distribution.—Only known from New Guinea.

Etymology.—From the greek *sandaracinos*, orange colored.

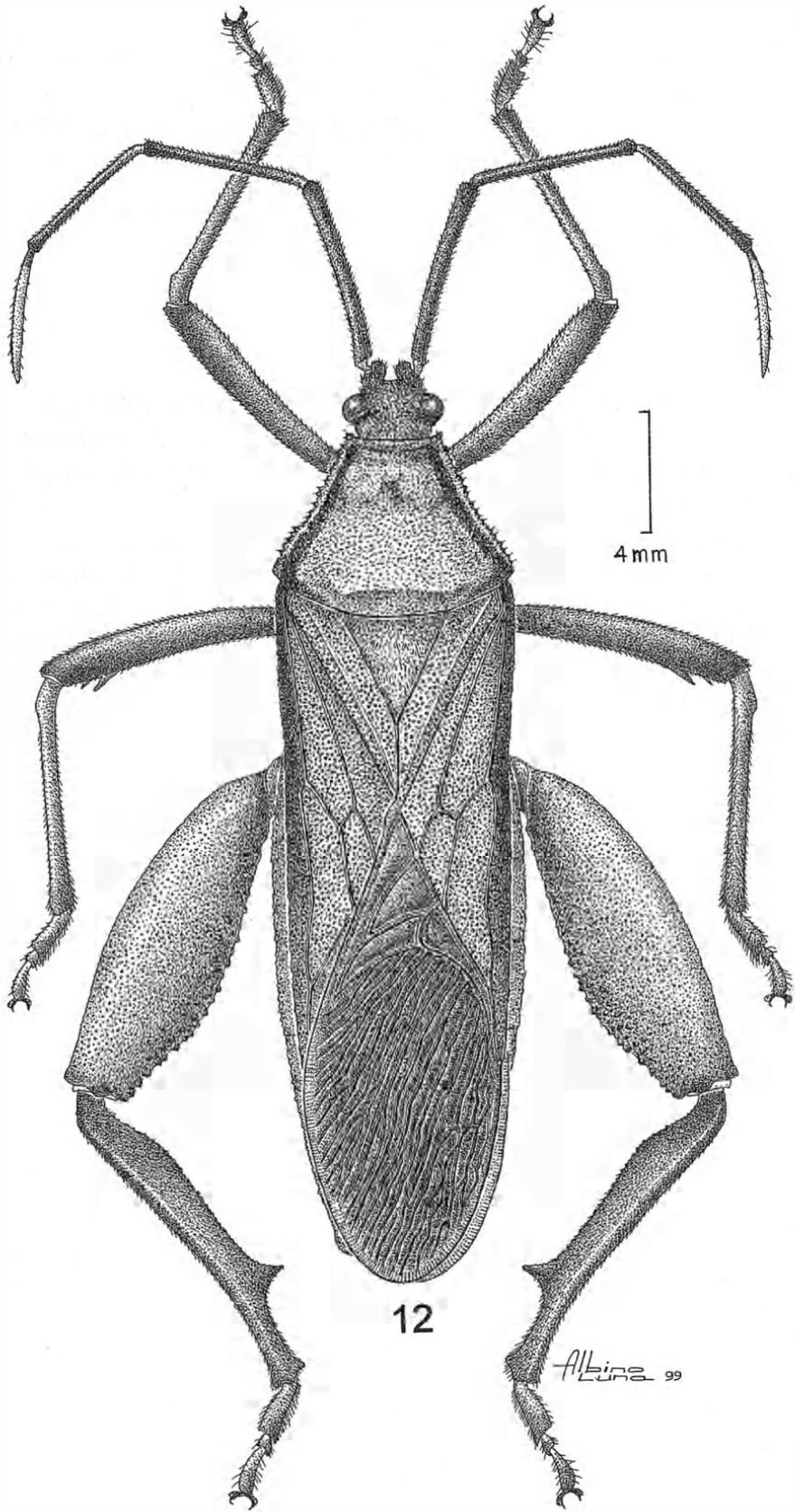


Figure 12. Dorsal view of *Notobitopsis sandaracinus* Brailovsky and Barrera, NEW SPECIES.

KEY TO SPECIES OF THE GENUS *NOTOBITOPSIS*

1. Antennal segment IV shiny orange; scutellum chestnut orange; fore and middle femora chestnut orange
..... *N. sandaracinus* Brailovsky and Barrera, NEW SPECIES
- 1'. Antennal segment IV black; scutellum black; fore and middle femora black 2
2. Clavus shiny reddish dark; corium shiny reddish dark with costal margin black; hemelytral membrane shining metallic blue
..... *N. novoguineensis* Brailovsky and Barrera, NEW SPECIES
- 2'. Clavus black or orange yellow; corium almost entirely black; hemelytral membrane dark shining olivaceous or black 3
3. Apical margin of corium black; body length less than 30.00 mm.
..... *N. limbativentris* (Stål)
- 3'. Apical margin of corium yellow to orange yellow; body length longer than 30.00 mm 4
4. Clavus orange yellow; body length less than 32.00 mm
..... *N. militaris* (Distant)
- 4'. Clavus black with reddish reflections; body length longer than 34.00 mm.
..... *N. aruana* (Distant)

ACKNOWLEDGMENT

We thank the following colleagues and institutions for loaning us specimens and giving assistance relevant to this study: Gordon Nishida (Bernice P. Bishop Museum, Honolulu, Hawaii); Mick Webb (The Natural History Museum, London, U.K.); Norman D. Penny and Vincent Lee (California Academy of Sciences, San Francisco, California); Richard C. Hoebeke (Cornell University, Insect Collection, Ithaca, New York); P. J. Clausen (University of Minnesota, Insect Collection). Special thanks to Albino Luna for dorsal view illustrations.

LITERATURE CITED

- Blöte, H. C. 1938. Catalogue of the Coreidae in the Rijksmuseum van Natuurlijke Historie Part IV. Coreinae, Third Part. Zool. Meded., 20: 275–508.
- Distant, W. L. 1911a. An Enumeration of the Rhynchota collected during the Expedition of the British Ornithologists Union to Central Dutch New Guinea. Trans. Ent. Soc. London, 3: 591–604.
- Distant, W. L. 1911b. Rhynchota from the Aru Islands. Ann. Mag. Nat. Hist. (Series 8), 8: 389–390.
- O'Shea, R. & C. W. Schaefer. 1980. A generic revision of the Asian and Australian Mictini (Heteroptera: Coreidae). Oriental Insects, 14: 221–251.
- Stål, C. 1863. Hemipterorum exoticorum generum et specierum nonnullarum novarum descriptiones. Trans. Ent. Soc. London, 1: 571–603.

Received 15 Nov 1999; Accepted May 31, 2000.



Brailovsky, Harry and Barrera, Ernesto. 2001. "The genus *Notobitopsis* Bloete with the description of two new species (Hemiptera: Heteroptera: Coreidae: Coreinae: Mictini)." *The Pan-Pacific entomologist* 77(1), 2–8.

View This Item Online: <https://www.biodiversitylibrary.org/item/252138>

Permalink: <https://www.biodiversitylibrary.org/partpdf/268645>

Holding Institution

Pacific Coast Entomological Society

Sponsored by

IMLS LG-70-15-0138-15

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Pacific Coast Entomological Society

License: <http://creativecommons.org/licenses/by-nc-sa/4.0/>

Rights: <http://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.