ACTA ENTOMOLOGICA
MUSEI NATIONALIS PRAGAE
ISSN 1804-6487 (online) – 0374-1036 (print)

2019
59(1): 125–132
doi: 10.2478/aemnp-2019-0010
www.aemnp.eu

SHORT COMMUNICATION

New taxa of Neotropical Coreidae of the tribes Acanthocerini and Nematopodini (Hemiptera: Heteroptera)

Harry BRAILOVSKY & Ernesto BARRERA

Departamento de Zoología, Instituto de Biología, Universidad Nacional Autónoma de México, Apdo. Postal No. 70153, México 04510, Ciiudad de México; e-mails: coreidae@ib.unam.mx (HB), ernesto.barrera@ib.unam.mx (EB)

Accepted:
4th March 2019

Published online:
13th March 2019

Abstract. Four new species of Coreidae are described: *Crinocerus fernandezi* sp. nov. (Acanthocerini) from Colombia, *Nectoquintius papillosus* sp. nov. from Ecuador, *Neoquintius boyacanus* sp. nov. from Colombia, and *Neoquintius foreroi* sp. nov. from Paraguay (all Nematopodini). Keys to all the known species included in the genera *Crinocerus* Burmeister, 1835, *Nectoquintius* Brailovsky & Barrera, 2002, and *Neoquintius* Brailovsky & Barrera, 1986 are given. Photographs of dorsal habitus and male genital capsules are provided.

Key words. Hemiptera, Heteroptera, Coreidae, Acanthocerini, Nematopodini, new species, Neotropical Region

Zoobank: http://zoobank.org/urn:lsid:zoobank.org:pub:42F38469-FF3B-4008-A72E-C89300B163D7
© 2019 The Authors. This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Licence.

Introduction

The Neotropical fauna of the family Coreidae (Heteroptera) is composed of relatively heavy-bodied insects, usually robustly elongate or broadly elliptical. The family includes some of the largest of living heteropterans, as well as other species that are delicate or slender. The body length ranges from 7 to 45 mm, and many have bizarre dilations and expansions of hind femur or tibia and antennal segment III and strikingly developed humeral angles of the pronotum; the head usually small relative to body size; hemelytral membrane usually with numerous veins; well developed scent gland openings ventrally on the metathorax of adults; and nymphal dorsal abdominal scent gland orifices between terga IV–V and V–VI (Packauskas 1994, Barcellos et al. 2008, Brailovsky 2011).

Four new species are described here as part of ongoing studies related to the Neotropical coreids. One of the species belongs to the tribe Acanthocerini, genus *Crinocerus* Burmeister, 1835, represented so far by a single species widely distributed in the tropics of South America (O'Shea 1980a, Packauskas 1994). The remaining species belong to the tribe Nematopodini (O'Shea 1980b, Packauskas 1994), the genera *Nectoquintius* Brailovsky & Barrera, 2002 (a single species from Costa Rica – Brailovsky & Barrera 2002) and *Neoquintius* Brailovsky & Barrera, 1986 (7 described species distributed from Costa Rica to Bolivia, Paraguay, and Brazil – Brailovsky & Barrera 1986, 2009, 2017). An updated identification key for all three genera is provided. Because this group of coreids is never abundantly present in collections, probably due to a failure in sampling procedure to catch arboreal elements, their distributional data are limited (Dellapé et al. 2018).

Material and methods

Pictures were taken with a Nikon D200 camera. The following abbreviations are used for the institutions cited here:

INC Universidad Nacional de Colombia, Instituto de Ciencias Naturales, Bogotá, Colombia;
MPUJ Pontificia Universidad Javeriana, Colección Entomológica, Bogotá, Colombia;
PUCE Pontificia Universidad Católica del Ecuador, Quito, Ecuador;
UNAM Colección Entomológica, Instituto de Biología, Universidad Nacional Autónoma de México, México;
ZMHU Zoologisches Museum, Humboldt Universität, Berlin, Germany.

Results

Tribe Acanthocerini Bergroth, 1913

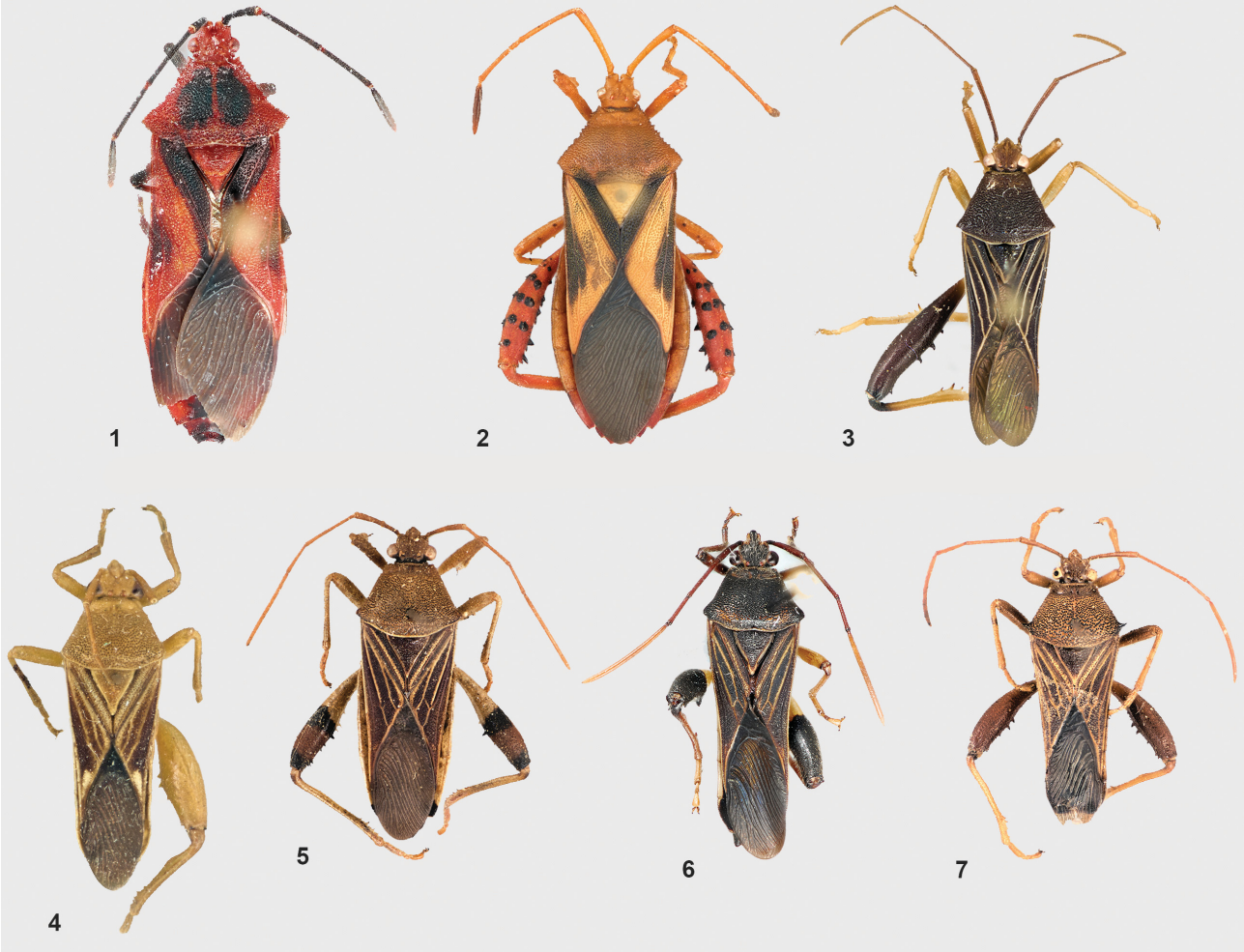
***Crinocerus fernandezi* sp. nov.**
(Fig. 1)

Type locality. Colombia, Vichada, Centro Gaviotas.
Type material. Holotype: ♀, **COLOMBIA:** Vichada, Centro Gaviotas, (on gallery forest), 180 m, 4°33′48″N–70°55′18″W, vii.1988, col. F. Fernandez (INC).

Description. Female (holotype). ***Dorsal coloration.*** Head shiny reddish orange; tylus and antennal segments I–III black; antennal segment IV black with apex yellowish orange; pronotum shiny reddish orange with two black broad rectangular spots lateral to midline; scutellum shiny reddish orange; clavus black; corium shiny reddish orange with middle third of exocorium, longitudinal stripe running near clavus, and inner angle of apical margin black; hemelytral membrane dark brown, with basal angle black; connexival segments III–VI shiny reddish orange, VII shiny reddish orange with posterior border black, VIII dark reddish orange with upper margin black, and IX black; dorsal abdominal segments III–V reddish orange, and VI–IX black with anterior half or anterior margin reddish orange.

Ventral coloration. Head and rostral segments shiny reddish orange (apex of IV black); pro-, meso-, and metasternum shiny reddish orange; pro-, meso-, and metapleura mostly black with upper margin of propleura and mesopleura, posterior third of metapleura and area near metathoracic scent gland opening shiny to dull reddish orange; acetabula black with reddish orange irregular stripe above them; legs black; abdominal sterna II–VI black with pleural margin, rim of abdominal spiracles and middle section of each sternite reddish orange; sternite VII black with pleural margin and rim of spiracle shiny reddish orange; genital plates black to dark brown.

Structure. Body medium sized, oblong. *Head.* Wider than long, subquadrate, conspicuously declivent; tylus unarmed, apically globose; jugum unarmed, shorter than tylus, in lateral view located below tylus, and with inner angle tuberculate and raised; preocellar pit deep; ocellar tubercle small; antennal segment I the longest, II longer than IV, III and IV subequal; antennal segment I twice as long as head, gently curved; segments II and III cylindrical and IV robust and fusiform; antenniferous tubercles broad, situated close together, almost meeting medially, and armed laterally with subacute spine; eyes hemispherical, prominent; rostrum reaching posterior margin of mesosternum.



Figs 1–7. Habitus in dorsal view. 1 – *Crinocerus fernandezi* sp. nov. 2 – *Crinocerus sanctus* (Fabricius, 1775). 3–7 – *Neoquintius* spp. 3 – *N. aracelianus* Brailovsky & Barrera, 2017; 4 – *N. araguacitus* (Brailovsky & Barrera, 1986); 5 – *N. bolivianus* Brailovsky & Barrera, 2009; 6 – *N. boyacanus* sp. nov.; 7 – *N. chaparenus* Brailovsky & Barrera, 2009.

Thorax. Pronotum wider than long, trapeziform, declivent; collar wide; anterolateral angles with sharp nodulose projection; anterolateral margins straight, nodulose; humeral angles slightly prominent, with short robust spine; posterolateral borders with outer half nodulose and inner half smooth; posterior border shallowly concave; calli flat, smooth; triangular process absent; metathoracic scent gland opening placed nearly ventrally; anterior lobe of metathoracic peritreme nearly reniform, slightly raised, posterior lobe semicircular, gently raised; mesosternum slightly sulcate. *Scutellum* triangular, lateral margins slightly longer than anterior margin, flat, and apically acute. *Legs*. Fore and middle femora slender, ventrally armed with three small subapical teeth; dorsal surface not tuberculate; hind femora incrassate, ventrally armed with double row of spines; dorsal surface finely tuberculate; fore and middle tibiae cylindrical, sulcate; hind tibiae sulcate, flattened, straight and armed for distal 1/3 of ventral margin. *Hemelytra* macropterous, extending beyond the apex of last abdominal segment.

Abdomen. Posterior angle of connexivum unarmed; plica of abdominal sternite VII gently curved; spiracles clearly circular, closer to anterior margin; abdominal sterna lacking median furrow.

Vestiture. Body surface shiny and glabrous; pronotum, clavus, corium, pro-, meso-, and metapleura, and acetabula deeply punctate; scutellum finely punctate and striate; head, connexivum, pro-, meso-, and metasternum, abdominal sterna and female genital plates impunctate.

Measurements (in mm; n = 1). Total body length 14.10. Head length 1.17; width across eyes 1.73; interocular width 0.88; interocellar width 0.36; preocular distance 0.88; antennal segments: I – 2.85; II – 2.41; III – 1.98; IV – 2.04. Pronotal length 2.54; maximum width across humeral angles 4.83. Scutellar length 1.73; width 1.78. Hind leg: maximum length of hind femur 5.58; maximum length of hind tibia 6.20.

Male. Unknown.

Differential diagnosis. *Crinocerus fernandezi* sp. nov. is clearly distinguished from *C. sanctus* (Fabricius, 1775) by having the head including rostral segments shiny reddish orange (apex of rostral segment IV black); antennal segments I–III black and IV black with apex yellowish orange; pronotum shiny reddish orange with two broad black rectangular spots lateral to midline; corium shiny reddish orange with middle third of exocorium and longitudinal stripe near clavus black; thorax and abdominal sterna with shiny reddish orange and black marks; legs black; and dorsal surface of hind femora with small tubercles, and ventrally with short spines. In *Crinocerus sanctus* (Fig. 2), recorded from Argentina, Bolivia, Brazil, Colombia, French Guiana, and Paraguay, the head, antennal segments I–III and pronotum are entirely pale yellowish orange; antennal segment IV dark castaneous with apex shiny yellowish orange; corium pale yellowish orange with costal margin including the exocorium in middle third black (posterior third of corium entirely yellowish orange); thorax yellowish orange with lateral margins of mesosternum pale brown, and anterior and posterior lobe of metathoracic scent glands black; legs yellowish orange with only the spines and tubercles of hind femora black; abdominal sterna III–VII yellowish orange with one or two black discoidal spots lateral to midline; genital plates pale reddish orange. Dorsal surface of hind femora with large tubercles, ventral spines larger.

Etymology. Dedicated to Fernando Fernandez, a distinguished Colombian entomologist and the collector of this remarkable specimen.

Distribution. Colombia: Vichada.

Key to the known species of *Crinocerus* Burmeister, 1835

1 Antennal segments I–III black; legs entirely black; pronotal disk shiny reddish orange with two black broad rectangular spots lateral to middle line (Fig. 1). ..... ***C. fernandezi* sp. nov.**

– Antennal segments I–III pale yellowish orange; legs pale yellowish orange with tubercles and spines on hind femora black; pronotal disk pale yellowish orange (Fig. 2). ..... ***C. sanctus*** (Fabricius, 1775)

Tribe Nematopodini Amyot & Serville, 1843

***Nectoquintius papillosus* sp. nov.**
(Figs 13, 17, 21)

Type locality. Ecuador, Lita, Imbabura.

Type material. Holotype: ♀, **ECUADOR:** Lita, Imbabura, 600 m, 00°50′N–75°27′W, 13.iv.2002, col. Mogollon (PUCE). Paratypes: 1 ♂ 2 ♀♀, same data as holotype (PUCE, UNAM).

Description. Female (holotype). ***Dorsal coloration.*** Head shiny yellow with ocellar tubercle, upper margin of antenniferous tubercle, neck, tylus (except six yellowish tubercles along midline), two longitudinal stripes that run on each side of median line, and basal angle of lateral expansion of jugum black; antennal segments I–III shiny dark red and IV shiny pale castaneous orange; pronotum shiny reddish brown with collar, scattered tubercles on calli and narrow arcuate fascia on disk yellow; anterolateral margins, humeral angles and posterior margin black; posterolateral margins reddish brown with border yellowish orange; scutellum dull black with dull median broad longitudinal yellow stripe; apex yellow; clavus dull reddish brown with punctures darker; corium dull reddish brown with costal border and irregular stripe along apical margin dull yellow; hemelytral membrane pale amber, with veins darker and basal angle black; connexival segments III–VI with dorsal surface yellow and ventral surface dark red; segment VII dark red with anterior half of dorsal surface yellow; segments VIII–IX dark red with anterior half dark orange; dorsal abdominal segments III–VI orange, VII–IX dark red tinged with dark orange.

Ventral coloration. Head and rostral segments I–IV yellow (apex of segment IV black); thorax including anterior and posterior lobe of metathoracic peritreme pale yellow; pro-, meso-, and metapleura each with one irregular shiny yellow callosity; coxae and trochanters pale yellow; femora pale orange with anterior third yellow; tibiae and

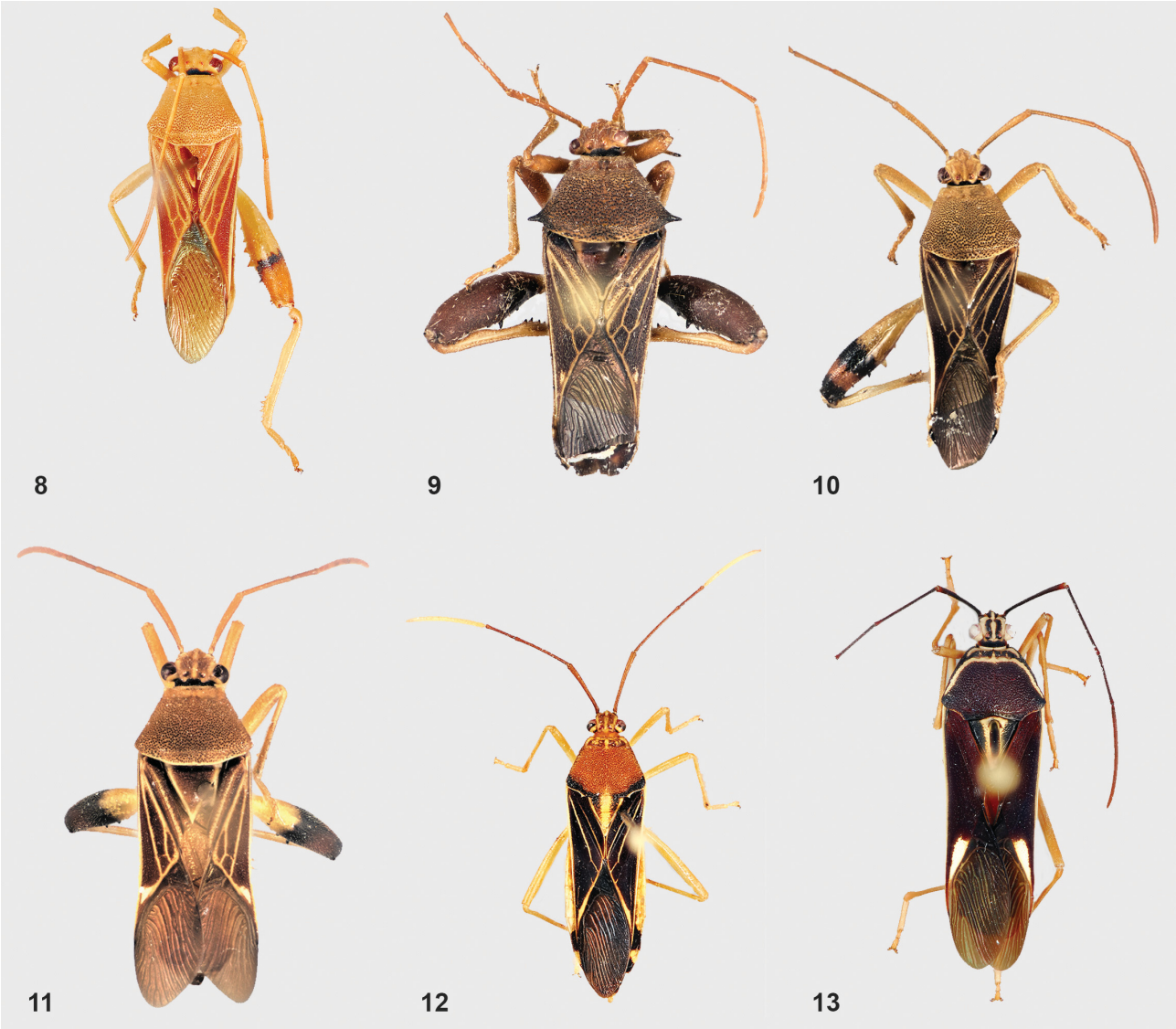
tarsi pale orange; abdominal sterna III–VI including spiracles and pleural margins pale yellow with wide irregular pale castaneous orange stripe below pleural margins; sternite VII pale yellow, with posterior margin and posterior third of pleural margins pale castaneous orange; gonocoxae I and paratergite VIII pale yellow with apical margin pale castaneous orange; paratergite IX pale castaneous orange with pale yellow spot basally.

Structure. Body medium sized, relatively narrow and elongate. *Head* wider across eyes than long, pentagonal, declivent anteriorly; tylus unarmed, apically globose, with six tubercles along midline; juga unarmed, shorter than tylus and laterally expanded in dorsal view; antenniferous tubercles broad, widely separated, unarmed; antennal segment IV the longest, III the shortest, I longer than II; preocellar pit deep; ocellar tubercles small; eyes hemispherical, prominent; postocular tubercles not prominent; rostrum reaching middle third of mesosternum.

Thorax. *Pronotum* wider than long, trapeziform, shallowly declivent; collar wide; anterolateral angles rounded; anterolateral borders straight, finely crenulate; humeral angles slightly developed; posterolateral borders sinuate, entire; posterior border concave; triangular process short, stout; calli transverse, conspicuously raised, uniformly tuberculate; anterior lobe of metathoracic peritreme reniform, weakly raised, posterior lobe small, obtuse; mesosternum flat, not sulcate. *Scutellum* triangular, flat, longer than wide and apically subacute. *Legs*. Femora slender, ventrally armed with one subapical small tooth; tibiae unarmed, cylindrical and sulcate; hind tibiae longer than hind femora. *Hemelytra* macropterous, extending beyond apex of last abdominal segment.

Abdomen. Posterior angle of connexival segments with tiny acute spine; abdominal spiracles clearly elliptic, close to anterior margin; abdominal sterna lacking median furrow.

Vestiture. Body surface shiny; dorsally glabrous, and ventrally with few long bristle-like setae located on thoracic and abdominal sterna; pronotum, scutellum, clavus, corium, propleura, posterior third of meso- and metapleura,



Figs 8–13. Habitus in dorsal view. 8–11 – *Neoquintius* spp. 8 – *N. foreroi* sp. nov.; 9 – *N. panamensis* Brailovsky & Barrera, 2009; 10 – *N. peruvianus* Brailovsky & Barrera. 2009; 11 – *N. scenicus* (Brailovsky & Barrera, 1986). 12–13 – *Nectoquintius* spp. 12 – *N. alajuelensis* Brailovsky & Barrera, 2002; 13 – *N. papillosus* sp. nov.

acetabula, and male genital capsule punctate; head, apex of scutellum, connexivum, pro-, meso-, and metasternum, anterior third of meso- and metapleura, abdominal sterna and female genitalia impunctate.

Measurements (in mm; n = 1). Total body length 16.15. Head length 1.69; width across eyes 2.10; interocular width 1.06; interocellar width 0.31; preocular distance 0.86; antennal segments: I – 4.56; II – 3.59; III – 2.23; IV – 4.96. Pronotal length 3.10; maximum width across humeral angles 4.58. Scutellar length 2.48; width 2.17. Hind leg: maximum length of hind femur 5.70; maximum length of hind tibia 6.50.

Male. Habitus and color similar to female holotype. Head yellow with ocellar tubercle, inner margin of antenniferous tubercle, and basal angle of jugal expansion black; dorsally with two pale castaneous longitudinal stripes that run on each side of midline; calli yellow with reddish brown irregular spots; connexival segments III–VI with dorsal surface yellow and ventral surface dark red; segment VII dark red with anterior half dorsal surface yellow; dorsal abdominal segments dark reddish brown with complete median yellowish orange longitudinal stripes on segments IV–V; abdominal sterna pale yellow.

Genital capsule pale castaneous orange and laterally pale yellow. Posteroventral edge deeply concave, with broad papilla-shaped projection in middle third; lateral angles prominent (Figs 17, 21).

Measurements (in mm; n = 1). Total body length 13.56. Head length 1.55; width across eyes 1.98; interocular width 0.93; interocellar width 0.30; preocular distance 0.86; antennal segments: I – 4.77; II – 3.47; III – 2.10; IV – 5.02. Pronotal length 2.66; maximum width across humeral angles 4.09. Scutellar length 2.29; width 1.61. Hind leg: maximum length of hind femur 5.40; maximum length of hind tibia 5.60.

Differential diagnosis. *Nectoquintius papillosus* sp. nov. (Fig. 13) can be distinguished by having the head shiny yellow with ocellar tubercles, upper margin of antenniferous tubercles, neck, tylus (except six yellowish tubercles along midline), basal angle of lateral expansion of juga, and two longitudinal stripes that run on each side of the median line black; antennal segments I–III shiny dark red and IV pale castaneous orange; clavus dull reddish brown with darker punctures; corium dull reddish brown with costal border and irregular stripe on apical margin dull yellow; humeral angles slightly prominent; triangular process short, stout; anterolateral borders of pronotum finely crenulate; and posterior border concave.

In *N. alajuelensis* Brailovsky & Barrera, 2002 (Fig. 12), the only previously known species, described from Costa Rica, the head and pronotum are almost entirely yellow to shiny chestnut orange; clavus and corium dark brown to black, with claval vein, claval commissure, inner corial vein, and costal and apical margin yellow; antennal segments I–III shiny orange and IV yellow to shiny orange; humeral angles obtusely rounded; triangular process of pronotum narrow and apically subacute; the anterolateral borders of pronotum smooth, entire; and posterior border straight. The posteroventral border of male genital capsule with the papilla-shaped process as well as the lateral expansions shorter (Figs 16–20).

Etymology. The specific name is Latin adjective *papillosus* (*-a*, *-um*) and refers to the papilla-shaped process on the posteroventral border of male genital capsule.

Distribution. Ecuador: Lita, Imbabura.

Key to the known species of *Nectoquintius* Brailovsky & Barrera, 2002

1 Clavus dull reddish brown, punctures darker; corium dull reddish brown with costal border and irregular stripe on apical margin dull yellow; humeral angles slightly developed; triangular process of pronotum short, stout; anterolateral borders of pronotum finely crenulate; antennal segments I–III shiny dark reddish; antennal segment IV pale castaneous orange (Fig. 13). ..... ***N. papillosus* sp. nov.**

– Clavus and corium dark brown to black with claval vein, claval commissure, inner corial veins, and costal and apical margin yellow; humeral angles obtusely rounded; triangular process of pronotum narrow and apically subacute; anterolateral borders of pronotum smooth, entire; antennal segments I–III shiny orange; antennal segment IV yellow to shiny orange (Fig. 12). ..... ***N. alajuelensis*** Brailovsky & Barrera, 2002

Neoquintius boyacanus sp. nov.

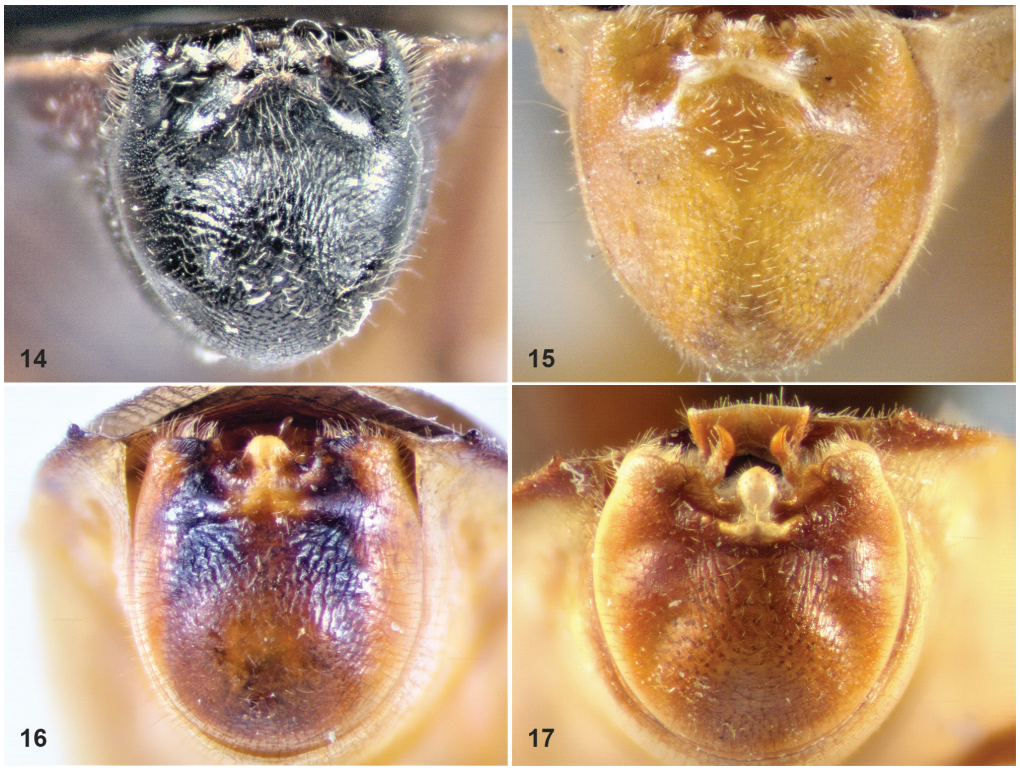
(Figs 6, 14, 18)

Type locality. Colombia, Boyaca.

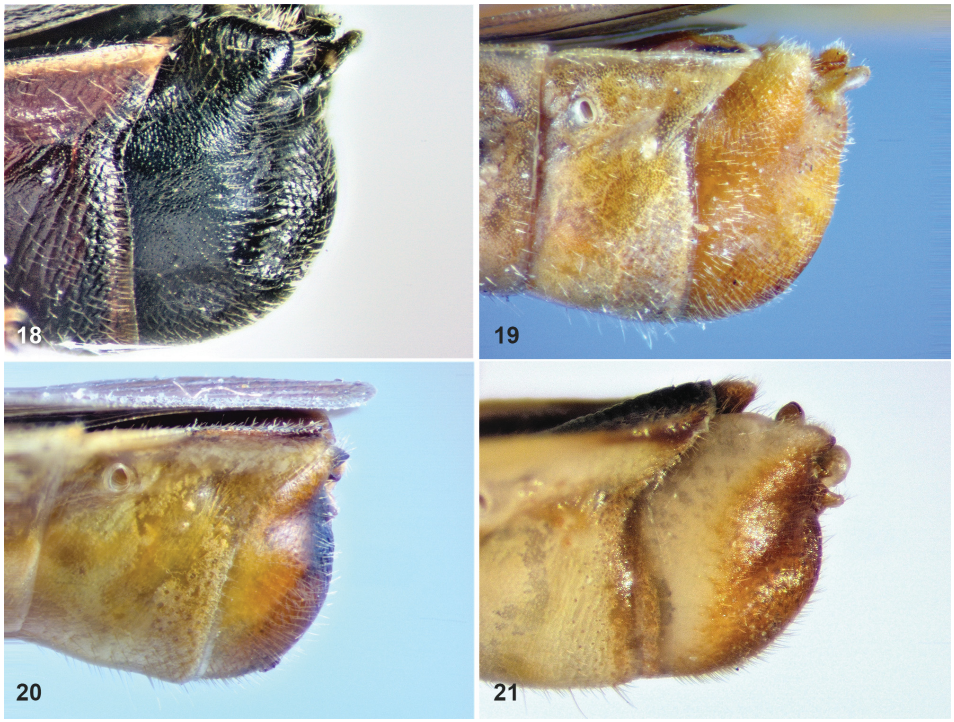
Type material. Holotype: ♂, **COLOMBIA:** Boyaca, Santa Maria, Cantera 5, 2.6 km NNW of Santa Maria, 900 m, 4.88125°N–73.27225°W, 14–18.iii.2016, D. Moreno (MPUJ). Paratype: 1 ♂, **COLOMBIA:** Boyaca, Santa Maria, Cantera 5, 2.6 km NNW of Santa Maria, 900 m, 4.88125°N–73.27225°W, 14–18.iii.2016, L. Malpica (UNAM).

Description. Male (holotype). ***Dorsal coloration.*** Head black with jugum and space between eye and ocelli dark yellow; outer margins of antennal segments I–III shiny black and inner margins shiny reddish orange; segment IV pale orange; pronotum dark brown, posterior margin tinged with dark orange irregular spots; posterior border dark castaneous; scutellum dark brown with lateral margins and apex dark yellow; clavus and corium dark brown with claval and corial veins, and costal and apical borders dark yellow; hemelytral membrane brown with basal angle darker; connexival segments III–VI pale yellow, and VII black with anterior angle pale yellow; dorsal abdominal segments black with sutures between segments IV–V and V–VI pale yellow.

Ventral coloration. Head black with longitudinal stripe near eyes, neck and apex, and outer margin of bucculae dark to pale yellow; rostral segments I–III dark brownish castaneous and IV pale castaneous orange; pro-, and metasternum black; mesosternum black with pale yellow spot at midline; propleura black with posterior border yellow; inner half of mesopleura black and posterior half dark reddish brown; metapleura dark reddish brown with acetabula black, and anterior and posterior lobe of metathoracic peritreme pale yellow; outer margin of each acetabulum pale yellow; fore leg with coxae pale yellow,



Figs 14–17. Male genital capsule in caudal view. 14 – *Neoquintius boyacanus* sp. nov. 15 – *Neoquintius foreroi* sp. nov. 16 – *Nectoquintius alajuelensis* Brailovsky & Barrera, 2002. 17 – *Nectoquintius papillosus* sp. nov.



Figs 18–21. Male genital capsule in lateral view. 18 – *Neoquintius boyacanus* sp. nov. 19 – *Neoquintius foreroi* sp. nov. 20 – *Nectoquintius alajuelensis* Brailovsky & Barrera, 2002. 21 – *Nectoquintius papillosus* sp. nov.

trochanters dark yellow, femora dark castaneous orange with apical border and ventral surface near middle third black; tibiae dark castaneous orange with basal joint and apex black; tarsal segment I dark castaneous orange except distal third black; tarsal segment II black with basal joint dark castaneous orange; tarsal segment III dark castaneous orange; middle leg pale yellow; hind legs with coxae pale yellow and posterior border pale brown, trochanters pale yellow, femora bicolorous with anterior half pale yellow and posterior half including the spines black; tibiae and tarsi pale yellow; abdominal sterna III–VI dark castaneous, VII dark castaneous with posterior margin black; pleural margins III–VII pale yellow; genital capsule black.

Structure. Body medium sized, almost glabrous. *Head* wider than long across eyes, pentagonal; antenniferous tubercles broad, widely separated, unarmed; tylus unarmed, apically globose; ocellar tubercle slightly protuberant;

Thorax. *Pronotum* wider than long, trapeziform, shallowly declivent; collar wide; calli flat, without tubercles; anterolateral angles broad, slightly prominent, subacute; anterolateral borders obliquely straight, smooth; humeral angles obtuse, slightly produced laterally; pos-

terolateral borders sinuate, smooth; posterior border of postocular tubercle not evident; rostrum reaching middle third of mesosternum. slightly convex; triangular process absent. *Scutellum* wider than long, triangular, flat, with apex subacute. *Legs.* Fore and middle femora unarmed; hind femora incrassate, ventrally armed with double row of stout spines; fore and middle tibiae unarmed; hind tibiae longer than hind femora; inner surface of hind tibiae armed with one row of acute spines and lacking large spine near middle third. Hemelytra macropterous, extending beyond apex of last abdominal segment.

Abdomen. Abdominal spiracles elliptic, close to anterior border of each segment; sterna lacking median furrow. *Genital capsule* broadly ovoid; posteroventral edge with spoon-like projection in middle third; laterally deeply concave, with lateral angles projected as robust arms (Figs 14, 18).

Measurements (in mm; n = 1). Total body length 15.70. Head length 1.57; width across eyes 2.29; interocular width 1.10; interocellar width 0.44; preocular distance 1.16; antennal segments: I – 2.72; II – 2.48; III – 1.61; IV – 4.77. Pronotal length 2.91; maximum width across humeral angles 4.71. Scutellar length 2.04; width 1.98. Hind leg: maximum length of hind femur 5.64; maximum length of hind tibia 6.22.

Female. Unknown.

Differential diagnosis. *Neoquintius boyacanus* sp. nov. resembles *N. aracelianus* Brailovsky & Barrera, 2017, *N. bolivianus* Brailovsky & Barrera, 2009, and *N. peruvianus* Brailovsky & Barrera, 2009, with apical margin of corium without yellow spot, and humeral angles obtuse, and slightly prominent (Figs 3, 5–6, 10).

In *N. boyacanus* (Colombia), the head is dorsally black, with juga and space between eyes and ocelli dark yellow; pro-, meso-, and metasternum black (except middle third of mesosternum with yellow spot near middle third); and hind legs bicolorous with anterior half yellow and posterior half black. In *N. aracelianus* (Ecuador) the hind legs are reddish brown with basal joints yellow; the head is dorsally shiny yellowish orange; and the pro-, meso-, and metasternum are shiny yellow. In *N. bolivianus* (Bolivia) the head is dorsally pale yellowish orange; pro-, meso-, and metasternum are pale yellowish orange; and hind femora are tricolored. In *N. peruvianus* (Peru) the head dorsally and pro-, meso-, and metasternum are pale yellow; and the hind legs tricolored.

Etymology. Named after the type locality of Boyaca (Colombia); adjective.

Distribution. Colombia: Boyaca.

Neoquintius foreroi sp. nov.

(Figs 8, 15, 19)

Type locality. Paraguay.

Type material. Holotype: ♂, **PARAGUAY:** '# 6070, Fiebrig, S. V.' (ZMHU).

Description. Male (holotype). ***Dorsal coloration.*** *Head*, antennal segments I–IV and pronotum pale yellowish orange, with punctures pale castaneous; neck black; posterior border of pronotum pale yellow; scutellum pale castaneous orange with lateral margins and apex pale yellow; clavus and corium pale castaneous orange with claval and corial veins, and costal and apical margins pale yellow; hemelytral membrane pale brown amber and basal angle black with bluish green metallic iridescence; connexival segments III–VI pale yellow and VII pale yellow with posterior margin black; dorsal abdominal segments pale castaneous orange, with scattered pale brown spots.

Ventral coloration. Head and rostral segments I–IV (apex of IV black) pale yellowish orange; pro-, meso-, and metasternum, acetabula, posterior margin of metapleura, and anterior and posterior lobe of metathoracic peritreme pale yellow; pro- and mesopleura pale yellowish orange with broad longitudinal black stripe; fore and middle legs pale yellowish orange; hind legs with coxae, trochanters, tibiae and tarsi pale yellowish orange, and femora tricolored, pale yellow basally, with complete black ring in middle and with distal third castaneous orange; spines yellow and black and scattered ventrally; abdomen including pleural margins III–VII and genital capsule pale yellowish orange; abdominal sterna III–V laterally with reddish black punctures.

Structure. Body medium sized, almost glabrous. *Head* wider than long across eyes; antenniferous tubercles broad, widely separated, unarmed; postocular tubercle not evident; rostrum reaching middle third of mesosternum.

Thorax. *Pronotum* wider than long, trapeziform, shallowly declivent; collar wide; calli flat, without tubercles; anterolateral angles broad, slightly prominent; anterolateral and posterolateral borders, and posterior border smooth, entire; humeral angles obtuse, not developed. *Scutellum* wider than long, triangular, flat, apically subacute. *Legs.* Fore and middle femora unarmed; hind femur incrassate, ventrally armed with double row of stout spines; fore and middle tibiae unarmed; hind tibia shorter than hind femora; inner face of hind tibiae armed with one row of acute spines and lacking large spine near middle third.

Hemelytra macropterous, extending beyond apex of last abdominal segment.

Abdomen. Abdominal spiracle elliptic, close to anterior border; sterna lacking median furrow. *Genital capsule* broadly ovoid; posteroventral edge in middle third with wide spoon-like projection; laterally deeply concave, with lateral angles projected as robust arms (Figs 15, 19).

Measurements (in mm; n = 1). Total body length 13.58. Head length 1.24; width across eyes 2.29; interocular width 1.24; interocellar width 0.48; preocular distance 0.86; antennal segments: I – 2.85; II – 2.60; III – 1.48; IV – 4.03. Pronotal length 2.97; maximum width across humeral angles 3.96. Scutellar length 1.73; width 1.67. Hind leg: maximum length of hind femur 5.89; maximum length of hind tibia 5.38.

Female. Unknown.

Differential diagnosis. *Neoquintius foreroi* sp. nov. (Paraguay) is similar to *N. peruvianus* (Peru), both sharing apical margin of corium without yellow spot, humeral angles obtuse, not prominent, hind femur tricolored and propleura with broad longitudinal black stripe (Figs 8, 10). *Neoquintius foreroi* is distinguished by mesopleura with a

broad longitudinal black stripe crossing the entire length of the segment, and the apical third of hind femora entirely castaneous orange. In *N. peruvianus*, the mesopleura have a short black stripe restricted to the anterior third of the segment, and the apical third of hind femora is entirely black.
Etymology. I dedicate this species to Dimitri Forero, a distinguished Colombian hemipterist.
Distribution. Paraguay (exact locality unknown).

Key to the known species of *Neoquintius* Brailovsky & Barrera, 1986

1 Apical margin of corium without a yellow spot. 2
– Apical margin of corium with an irregular yellow spot. 7
2 Humeral angles projected as an acute spine, elevated and directed forward (Fig. 7). Bolivia. ..... ***N. chaparenus*** Brailovsky & Barrera, 2009
– Humeral angles obtuse and blunt or gently subacute. 3
3 Hind femora reddish brown, with basal joint shiny yellow (Fig. 3). Ecuador. ..... ***N. aracelianus*** Brailovsky & Barrera, 2017
– Hind femora bicolored or tricolored. 4
4 Hind femora bicolored; head dorsally black with jugum and space between eye and ocelli dark yellow; pro-, meso-, and metapleura mostly black (Fig. 6). Colombia. ..... ***N. boyacanus* sp. nov.**
– Hind femora tricolored; head dorsally pale yellowish orange or pale castaneous orange; pro-, meso-, and metapleura mostly pale yellowish orange. 5
5 Apex of hind femora pale yellowish (Fig. 8). Paraguay. ..... ***N. foreroi* sp. nov.**
– Apex of hind femora black. 6
6 Humeral angles truncate, not prominent; apical half of hind femora black with an incomplete, dark orange mesial ring (Fig. 10). Peru. ..... ***N. peruvianus*** Brailovsky & Barrera, 2009
– Humeral angles subacute, slightly prominent; apical half of hind femora black with a complete pale castaneous orange ring (Fig. 5). Bolivia. ..... ***N. bolivianus*** Brailovsky & Barrera, 2009
7 Hind femora unicolored (Fig. 4). Venezuela. ..... ***N. araguacitus*** (Brailovsky & Barrera, 1986)
– Hind femora tricolored. 8
8 Humeral angles expanded, with a long acute spine directed outwards and slightly backwards (Fig. 9). Panama. ..... ***N. panamensis*** Brailovsky & Barrera, 2009
Humeral angles blunt, not expanded (Fig. 11). Brazil, Costa Rica, Surinam. ..... ***N. scenicus*** (Brailovsky & Barrera, 1986)

Acknowledgements

We thank the following colleagues and institutions for the loan of specimens and other assistance relevant to this study: Fernando Fernandez (INC), Dimitri Forero (MPUJ), Giovani Onore (PUCE), and Jürgen Deckert (ZMHU). Special thanks go to Diana Martinez Almaguer (UNAM) and Julio Cesar Montero (UNAM) for the design of the plates, and Oscar Federico Francke Ballvé (UNAM) for comments on the manuscript.

References

BARCELLOS A., SCHMIDT L. S. & BRAILOVSKY H. 2008: Abundance and species richness of Coreidae (Hemiptera: Heteroptera) from parque Estadual do Turvo, Southern Brazil. *Neotropical Entomology* **37**: 406–412.

BRAILOVSKY H. A. 2011*: Insecta Hemiptera Heteroptera Coreidae. Faune de Madagascar. Vol. 94.* IRD Éditions, Éditions Quæ, Muséum national d'Histoire naturelle, Paris, 275 pp.

BRAILOVSKY H. & BARRERA E. 1986: El género Quintius Stål con descripción de un subgénero nuevo y tres especies nuevas (Hemiptera-Heteroptera-Coreidae-Nematopodini). *Anales del Instituto de Biología, Universidad Nacional Autónoma de México, Serie Zoología* **56** [1985]: 437–452.

BRAILOVSKY H. & BARRERA E. 2002: New genera and new species of Neotropical Nematopodini (Hemiptera: Heteroptera: Coreidae: Coreini). *Pan-Pacific Entomologist* **78**: 265–275.

BRAILOVSKY H. & BARRERA E. 2009: Revisión del género Neoquintius stat. nov., con descripción de cuatro especies nuevas y un análisis del complejo Quintius (Hemiptera: Heteroptera: Coreidae: Nematopodini). *Revista Mexicana de Biodiversidad* **80**: 411–418.

BRAILOVSKY H. & BARRERA E. 2017: Two new species of Neotropical Nematopodini (Hemiptera: Heteroptera: Coreidae). *Proceedings of the Entomological Society of Washington* **119**: 1–8.

DELLAPÉ G., COLPO K. D., MELO M. C., MONTEMAYOR S. I. & DELLAPÉ P. M. 2018: Biodiversity of Coreoidea and Pentatomidae (Heteroptera) from Atlantic forest protected areas. Insights into their conservation. *Anais da Academia Brasileira de Ciencias* **90**: 109–122.

O'SHEA R. 1980a: A generic revision of the Acanthocerini (Hemiptera: Coreidae: Coreinae). *Studies on Neotropical Fauna and Environment* **15**: 57–80.

O'SHEA R. 1980b: A generic revision of the Nematopodini (Hemiptera: Coreidae: Coreinae). *Studies on Neotropical Fauna and Environment* **15**: 197–225.

PACKAUSKAS R. 1994: Key to the subfamilies and tribes of the New World Coreidae (Hemiptera), with a checklist of published keys to genera and species. *Proceedings of the Entomological Society of Washington* **96**: 44–53.

PACKAUSKAS R. 2010: Catalogue of the Coreidae, or Leaf-footed bugs, of the New World. *Fort Hays Studies, Fourth Series* **5**: 1–270.