

**A new species of the Madagascan genus *Censorinus*
(Heteroptera: Reduviidae: Reduviinae)**

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Abstract. A new species of the genus *Censorinus* Distant, 1903, *C. karinae* sp. nov., is described, based on a single male from Madagascar selected from unidentified materials in the Muséum National d'Histoire Naturelle, Paris. The habitus and diagnostic characters of the male genitalia are illustrated.

Key words. Heteroptera, Reduviidae, Reduviinae, new species, taxonomy, Madagascar

Introduction

The subfamily Reduviinae is one of the largest subfamilies of the family Reduviidae (MALDONADO CAPRILES 1990). The genus *Censorinus*, endemic to Madagascar, was described by DISTANT (1903), and with 10 described species it is a relatively small genus belonging to the mentioned subfamily. Fifty years later, MILLER (1953) described a second species and the remaining ones were described by VILLIERS (1950, 1962, 1968). All of them were keyed by VILLIERS (1968).

A single specimen of *Censorinus* has been found among unidentified specimens collected in Madagascar and housed in the Muséum national d'Histoire naturelle in Paris. Comparison with type specimens and representatives of all 10 described species confirmed that it belongs to a new, undescribed species, which is described in the present paper.

Material and methods

External structures were examined under an Olympus SZX9 stereoscopic microscope. All drawings were made using a camera lucida attached to the microscope. Genitalia were mace-rated in 10% KOH for 6 hours in 36°C to remove soft tissue, rinsed in distilled water, and dissected under the microscope. Measurements are given in millimeters.

Taxonomy

Censorinus Distant, 1903

Type species. *Censorinus ferrugineus* Distant, 1903: 58 (by monotypy).

An orange or yellowish anterior pronotal lobe is a typical character for four species of the genus *Censorinus*: *C. ferrugineus* Distant, 1903, *C. peyrierasi* Villiers, 1968, *C. nigripes* Villiers, 1968 and *C. robinsoni* Villiers, 1968. The remaining six species, *C. dubius* Villiers, 1962, *C. variegatus* Villiers, 1950, *C. brancsiki* Miller, 1953, *C. monticolus* Villiers, 1962, *C. umbrosus* Villiers, 1962, *C. geniculatus* Villiers, 1962, have a brown, dark brown or black anterior pronotal lobe. The new species, *C. karinae* sp. nov., is similar to the group with light-colored anterior pronotal lobe. A key for this group is provided below.

Key to the species of *Censorinus* with pale anterior pronotal lobe

- 1 Anterior pronotal lobe orange with concolorous lateral spines. 2
- Anterior pronotal lobe yellowish with black lateral spines. ... *C. robinsoni* Villiers, 1968
- 2 Collar of pronotum black. *C. karinae* sp. nov.
- Collar of pronotum orange. 3
- 3 Apical part of femora and basal part of tibiae black. *C. nigripes* Villiers, 1968
- Apical part of femora and basal part of tibiae orange. 4
- 4 Basal part of corium pale brown with black markings. *C. ferrugineus* Distant, 1903
- Basal part of corium black. *C. peyrierasi* Villiers, 1968

Censorinus karinae sp. nov.

(Figs. 1–13)

Type material. HOLOTYPE: ♂, 'Madagascar Ouest / reserve spés. Du Zombitsy / Est de Sakaraha / Matsabory, 640 m / 5/7-XII-1966 / P. Viette et P. Griveaud [printed] // Museum Paris / Coll. Generale [printed] // Holotype [printed on red label] // *Censorinus / karinae* n.sp [handwritten] / det. D. Chlond 2009'. Deposited in the Muséum national d'Histoire naturelle, Paris.

Description. Male. Colour. Body generally dark brown to black with orange and yellowish markings on corium and apical part of membrane (Fig. 1). Head black with orange anterior margin and all dorsal surface from transverse suture to base of clypeus (including antennifers and dorsal margin of mandibular plates). Two orange spots laterally on postocular part of head, connected with margins of ocelli. Eyes and ocelli black. First antennal segment black; second antennal segment black with orange apical part. First and second labial segments black with brown apical margin. Third labial segment brown. Anterior pronotal lobe orange with grayish areas and black collar. Posterior pronotal lobe orange. Scutellum black with slightly light-colored apex. Hemelytra generally dark brown with yellowish spots in medial part (on corium and membrane) and in apical parts of membrana. Fore and middle legs dark brown with light-colored apical margin of coxae and trochanters. Fore and middle femora with reddish spot on ventral side of apex. Fore tibiae with dark brown basal 1/3 and reddish apical part with short, longitudinal, dark line at apex. Middle tibiae dark brown with reddish

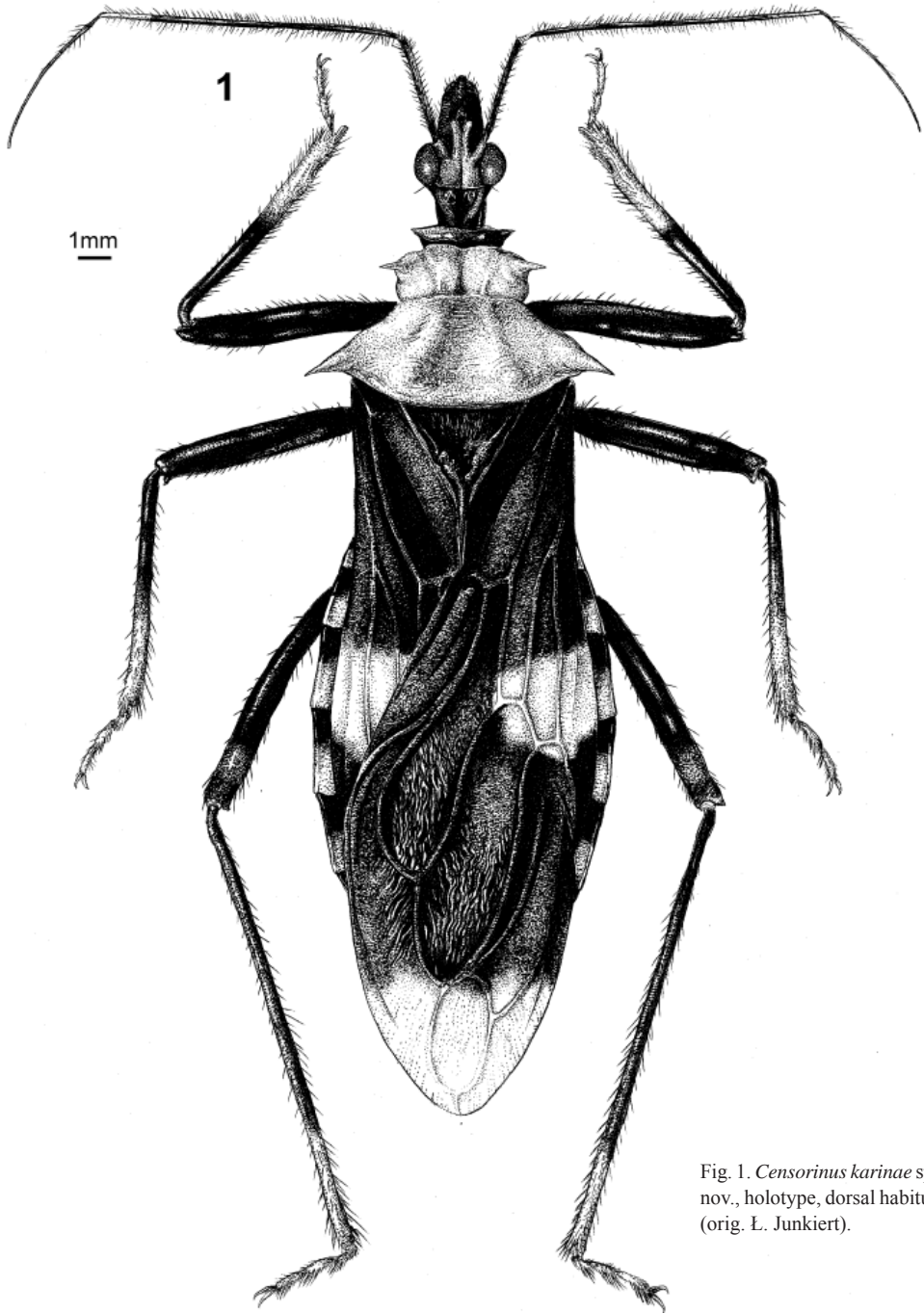
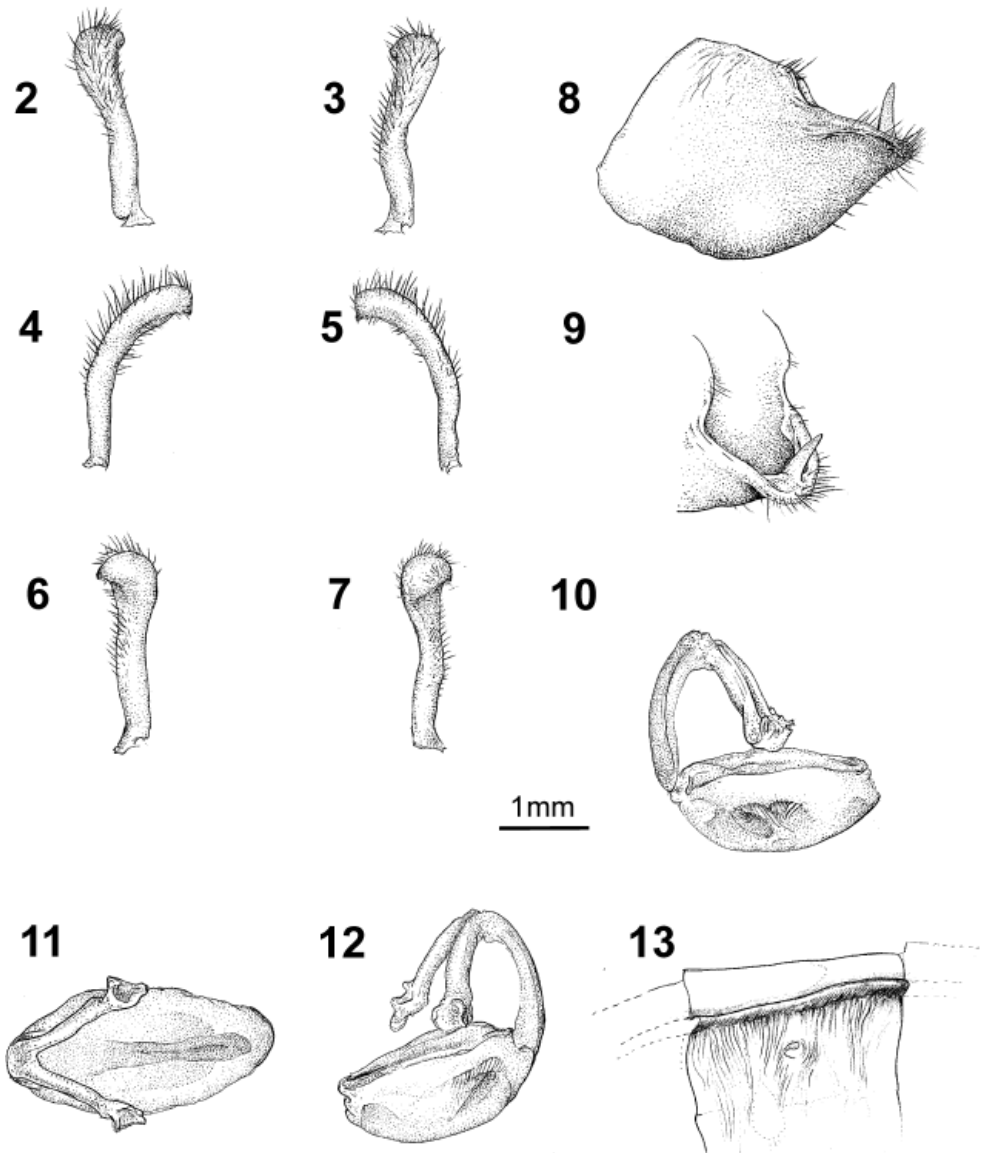


Fig. 1. *Censorinus karinae* sp. nov., holotype, dorsal habitus (orig. L. Junkiert).



Figs. 2–13. *Censorinus karinae* sp. nov. 2 – left clasper, outer view; 3 – right clasper, outer view; 4 – left clasper, lateral view; 5 – right clasper, lateral view; 6 – left clasper, inner view; 7 – right clasper, inner view; 8 – pygophore, lateral view; 9 – pygophore, middle process, dorso-lateral view; 10 – phallus, left lateral view; 11 – phallus, dorsal view; 12 – phallus, right lateral view; 13 – connexivum, dorsal view.

apical 1/3. Hind legs dark brown with red ring close to apex of femur and reddish apex of tibia. Tarsi yellow. Thorax black with paler spots on pro-, meso- and metathoracic pleura. Connexiva bicolorous with anterior 1/3 black, orange posteriorly. Abdominal sterna beneath dark brown with orange markings in lateral parts and orange anterior margin of sternite III. Pygophore and parameres black.

Structure. Body large, robust. Head with short adpressed setae. Clypeus with several short, erected setae. First and second antennal segments with very dense and short, erect setae. First and second labial segments with several short, erect setae, third segment with dense medium-sized and long erect setae. Second labial segment more than two times longer than third segment, almost reaching posterior margin of head. Anteocular part of head 1.85 times as long as postocular part. Surface sculpture distinct, consisting of irregular, transverse lines on maxillary plates in lateral view and on ventral side of head and thorax. Eyes and ocelli large. Anterior pronotal lobe with distinct calli, rounded on apex. Distinct, medium-sized, hollowed lines placed laterally on collar between each callus and medial part of collar. Spines on anterior pronotal lobe with pointed apex. Anterior pronotal lobe with slightly depressed, wide, irregular sculpture. Basal part of anterior pronotal lobe with median sulcus distinctly hollowed in basal part. Posterior pronotal lobe with distinct, irregular sculpture, sharp lateral spines and small, distinct medio-lateral callose structures near posterior margin. Scutellum with distinct, globular lateral callose structures, medial depressed area and very long, oblique apical spine with slightly curved apex. Basal part of scutellum with very short and dense, adherent setae. Legs with heterogenous pilosity arranged in regular, longitudinal lines. Latero-ventral side of fore and middle tibiae with lines of distinctly longer setae. Hemelytra dull with short adpressed setae. Membrane with distinct sculpture, distinctly surpassing apex of abdomen. Abdominal sternites with distinct surface sculpture and strongly elongated lateral margins (Fig. 13). Sparse setae of variable size visible on abdominal sternites (dense and long setae present near medial part of posterior margin of each sternite).

Genitalia. Middle process of pygophore long and straight with pointed apex (Figs. 8, 9). Paramere elongate, slender with dense, long hairs laterally and medium-sized hairs medially (Figs. 2–7). Claspers slightly curved, left clasper visibly wider in apical part. Phallosoma long and wide, wider in basal part and slightly curved (Figs. 10, 12). Dorsal phallosomal sclerite long and straight, distinctly enlarged in apical part (Fig. 11).

Measurements (all in mm). Body length: 31.7; maximum width of abdomen: 9.6; head length: 5.0; head width: 2.65; length of anteocular part: 2.2; length of postocular part: 1.2; length of synthlipsis: 1.15; interocellar distance: 0.4; lengths of antennal segments I: 3.8, II: 9.4, segments III and IV missing; lengths of labial segments I: 2.3, II: 2.8, III: 1.3; maximum length of anterior pronotal lobe: 1.3; maximum length of posterior pronotal lobe: 3.4; maximum width of anterior pronotal lobe: 4.9; maximum width of posterior pronotal lobe: 9.4; length of scutellum: 4.2; length of hemelytra: 24.1.

Female. Unknown.

Differential diagnosis. This species can be easily distinguished from other representatives of the genus by the different colour pattern (see the key above).

Etymology. It is a great pleasure to dedicate the name of this new species to Karina Wieczorek, a great aphidologist who is always helping and supporting me in my work.

Distribution. West Madagascar, Special Reserve of Zombitsy.

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