

***Noualhieridia guentheri* sp. nov., a new species of Acanthosomatidae (Heteroptera) from Madagascar**

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Kurzfassung

***Noualhieridia guentheri* sp. nov., eine neue Acanthosomatiden-Art (Heteroptera) aus Madagaskar**

Noualhieridia guentheri sp. nov., eine neue Art der Gattung *Noualhieridia* BREDDIN, 1898 (Heteroptera: Acanthosomatidae: Blaudusinae: Blaudusini) aus Zentral-Madagaskar wird in dieser Arbeit beschrieben. Ein aktueller Bestimmungsschlüssel mit Fotografien aller vier bekannten Arten der Gattung wird präsentiert. Ein neuer Nachweis für die Art *Noualhieridia ornatula* BREDDIN, 1898 wird aufgeführt.

Abstract

Noualhieridia guentheri sp. nov., a new species of the genus *Noualhieridia* BREDDIN, 1898 (Heteroptera: Acanthosomatidae: Blaudusinae: Blaudusini), is described from central Madagascar. An up-dated key and figures are provided for all the four known species of the genus. An additional record of *Noualhieridia ornatula* BREDDIN, 1898 is also given.

Key words: Acanthosomatidae, Blaudusinae, *Noualhieridia*, Madagascar, New record, New species, Pentatomoidea

1. Introduction

So far, three genera and eight species of the family Acanthosomatidae have been known from Madagascar (CACHAN 1952, KMENT 2005). Two genera – *Catadipson* BREDDIN, 1903 and *Mahea* DISTANT, 1909 – are classified in the subfamily Acanthosomatinae (KUMAR 1974). *Catadipson*, distributed also in South and West Africa, is represented in Madagascar with one endemic species – *C. imernensis* (CACHAN, 1952). *Mahea* includes five species, of which *M. sexualis* DISTANT, 1909 occurs in Seychelles, whereas the other four species are endemic to Madagascar (*M. andriai* (CACHAN, 1952), *M. distanti* KMENT, 2005, *M. durrelli* KMENT, 2005, and *M. parvula* KMENT, 2005). The genus *Noualhieridia* BREDDIN, 1898 is classified in the subfamily Blaudusinae, tribe Blaudusini (KUMAR 1974). It is endemic to Madagascar and contains three described species –

N. ornatula BREDDIN, 1898, *N. rufa* CACHAN, 1952, and *N. marginata* CACHAN, 1952. A key to the genera and all the species of Acanthosomatidae known from Madagascar and Seychelles was published by KMENT (2005). In this paper, a new species of *Noualhieridia* is described and named in honour of Dr. Hannes Günther.

2. Results

***Noualhieridia guentheri* sp. nov.**
(Figs. 1, 6)

Specimen examined: HOLOTYPE, female: 'MADAGASCAR C / Moramanga env. / 10-18.xii.1997 / P. Pacholátko leg. [white printed label]', 'Naturhistorisches / Museum, Wien [white printed label]', '♀ [white printed label]', 'HOLOTYPUS / NOUALHIERIDIA / GUENTHERI / sp. nov. / det. P. KMENT 2007 [red printed label]'. Deposited in the collection of the Naturhistorisches Museum, Wien.

Description: Female (holotype) (Fig. 6). Body brownish to blackish-brown, with dense concolorous punctures. Length 11.0 mm, width of pronotum between humeral angles 5.9 mm.

Head reddish-brown, outer margins of mandibular plates and antenniferous tubercles blackened. Head surface with deep concolorous punctures, deepest on vertex; apart from the punctures, fine transversal wrinkles present in the antecular part of head. Head indistinctly shorter than wide (1 : 1.12), its width about one third (1 : 2.9) of pronotum width. Mandibular plates narrowing apically, their outer margins raised, slightly sinuous anterior to eyes, apically curved inwards, indistinctly longer than clypeus. Apex of clypeus free, depressed. Eyes brownish, ocelli translucent. Antennae black, only basal sixth of antennomere 5 yellowish. Antennomere 1 most robust, twice thicker than antennomeres 2-3; antennomeres 2-3 slender, cylindrical; antennomere 4 slender, slightly widening apically; antennomere 5 slender, fusiform. Antennomeres 1-3 covered with sparsely and antennomeres 4-5 with densely arranged very short, semierect hairs. Antennomere lengths: 1 – 0.75 mm, 2 – 1.40 mm, 3 – 1.00 mm, 4 – 1.63 mm, 5 – 1.63 mm. Head ventrally and rostrum yellowish ochraceous, bucculae low, first rostral segment not surpassing apex of bucculae, maxillary plate tubercle absent.

Pronotum brownish-black, along anterior and antero-lateral margins paler, reddish brown; lateral margins narrowly bordered black. Concolorous punctures evenly distributed on the entire pronotal disc, only the area of cicatrices with four small, indistinct, unpunctured spots. Pronotum slightly narrower than hemelytra, arched, sloping anteriorly from the line connecting humeral angles, with a shallow depression on each side along antero-lateral margins and a very shallow depression medially on disc. Antero-lateral margins almost straight, not concave, evenly carinate, not flattened. Humeral angles evenly rounded. Posterior margin of pronotum straight. Median carina on pronotum indistinct. Scutellum equilater-

ally triangular, anterior 2/3 convex, posterior third sloping caudally, with low median carina; apex of scutellum projected caudally, narrowly rounded. Scutellum basal angles with small yellowish callosities, convex anterior part blackish-brown, posterior part brownish. Hemelytra brownish, only exocorium slightly darker; membrane brownish, translucent, only in the basal angle black, surpassing apex of abdomen.

Thorax ventrally yellowish ochraceous with sparse, shallow, concolorous punctures, and a black round spot at the apex of each peritreme. Ostiole and peritreme of the same shape as in *N. ornatula* (see KMENT 2005). Legs ochraceous, apices of femora, entire tibiae and tarsi slightly infumated (compared to femora basis).

Abdomen ventrally ochraceous. Pendergrast organ in the form of a round, matt, concolorous spot laterally on each side of ventrites 6-7 (Fig. 1, the same situation as in *N. ornatula*). Connexiva both ventrally and dorsally slightly orange, with black spots on intersegmental sutures. Posterolateral angles of laterotergites rectangular, only slightly prominent out of connexivum outline. External genitalia as in Fig. 1.

Male unknown.

Differential diagnosis: *Noualhieridia guentheri* sp. nov. is most similar to *N. marginata* (see the Key). *Noualhieridia marginata* differs in having the antero-lateral margins of pronotum slightly concave, each bearing a long pale spot, the base of corium with a pale spot laterally, and the pale antennae with only the apical halves of antennomeres 3-5 darkened. The holotype of *N. marginata* is also paler, more vividly red, with median carina on pronotum and scutellum more prominent.

Etymology: This species is dedicated to Dr. Hannes Günther (Ingelheim, Germany), an outstanding heteropterist.

Bionomics: Unknown.

Distribution: East of central Madagascar (Moramanga env. – 18°56' S, 48°12' E). Known only from the holotype.

***Noualhieridia ornatula* BREDDIN, 1898**
(Figs. 2, 4)

Specimens examined: MADAGASCAR: Ampasimena p., without date, 1 male and 3 females, Sikora lgt., det. P. Kment (coll. Naturhistorisches Museum, Wien).

Distribution: So far known from central Madagascar (Antananarivo) and western Madagascar (Maevatanana) (CACHAN 1952). There are at least eight sites of the name Ampasimena located in different parts of Madagascar. The itinerary of Sikora's expeditions unfortunately does not allow to place the locality more precisely (V. STAGL & H. ZETTEL, pers. comm.).

Key to the genera of Madagascar Acanthosomatidae and the species of *Noualhieridia*

- 1) Mesosternal carina absent. Antennae 5-segmented, antennomere 2 not exceptionally long. Mesopleuron with a lateral black round spot at the peritreme apex. Body of pentatomid appearance, broadly oval.

***Noualhieridia* BREDDIN, 1898 → 2**

- Mesosternal carina well developed. Antennae 4-segmented, antennomere 2 very long. Mesopleuron without a lateral black round spot at the peritreme apex. Body slender, more or less parallel.

→ 5

- 2) Body dorsally (including connexiva), antennae and legs entirely terracotta orange to red. Antero-lateral margins of pronotum convex. 12 mm.

***Noualhieridia rufa* CACHAN, 1952 (Fig. 3)**

- Body dorsally, antennae and legs of different coloration, postero-lateral angles of connexiva bearing black spots. Antero-lateral margins of pronotum convex to slightly concave.

→ 3

- 3) Antero-lateral margins of pronotum convex, flattened, with a pale oval spot extending onto the pronotal disc; base of corium with another pale spot laterally; trochanters, femora apices, entire tibiae, tarsi, and antennae black. 11 mm.

***Noualhieridia ornatula* BREDDIN, 1898 (Fig. 4)**

- Antero-lateral margins of pronotum straight to slightly concave; legs entirely pale.

→ 4

- 4) Antero-lateral margins of pronotum slightly concave, with a long narrow pale spot not extending onto the pronotal disc; base of corium with a pale spot laterally; antennae pale, only the apical halves of antennomeres 3-5 blackened. 9.5 mm.

***Noualhieridia marginata* CACHAN, 1952 (Fig. 5)**

- Antero-lateral margins of pronotum straight, evenly carinate, black; base of corium brown, lacking a pale spot laterally; antennae black, only the antennomere 5 basally narrowly yellowish. 11 mm.

***Noualhieridia guentheri* sp. nov. (Fig. 6)**

- 5) Body elongate oval. Head very broad, slightly broader than two thirds of pronotum width. Clypeus apex free, mandibular plates projected as conspicuous apical spines. Humeral angles of pronotum rounded. Connexivum margins lacking conspicuous spines. Head and pronotum bearing very large black punctures.

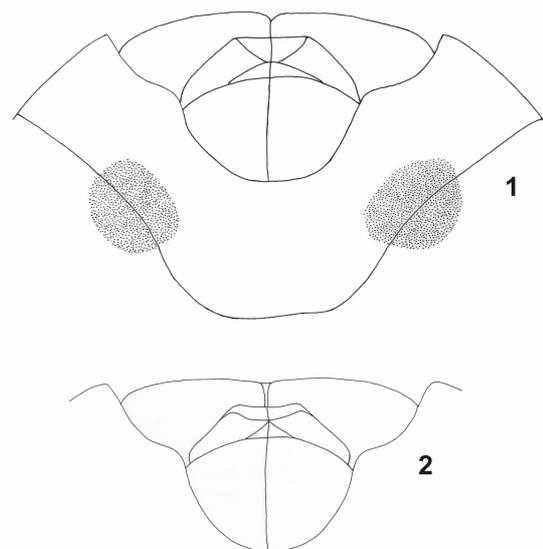
***Catadipson* BREDDIN, 1903**

***Catadipson imernensis* (CACHAN, 1952)**

- Body parallel, not conspicuously elongate. Head narrower, only as broad as ca. one half to one third of pronotum width. Mandibular plates without apical spines, completely or nearly joining in front of clypeus. Humeral angles of pronotum each produced into a conspicuous spine. Connexivum margins spinous. Head and pronotum bearing small dark punctures.

***Mahea* DISTANT, 1908**

(for a key to species see KMENT 2005)



Figs. 1-2: 1 – *Noualhieridia guentheri* sp. nov., female, holotype. Apex of abdomen with Pendergrast organ (dotted) and external genitalia (ventral view). 2 – *N. ornatula* BREDDIN, 1898, female from Ampasimena. External genitalia (ventral view).



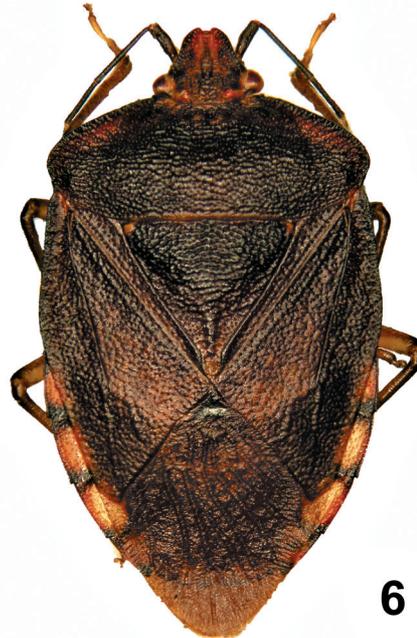
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4



5



6

Figs. 3-6: 3 – *Noualhieridia rufa* CACHAN, 1952, female, lectotype. 4 – *N. ornatula* BREDDIN, 1898, female from Ampasimena. 5 – *N. marginata* CACHAN, 1952, female, holotype. 6 – *N. guentheri* sp. nov., female, holotype. (Photos: P. Kment – Figs. 3, 5; J. Macek – Figs. 4, 6).

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