

A new species of *Metrocoris* (Heteroptera: Gerridae) from Sangihe Island (Indonesia)

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Abstract: *Metrocoris medius* spec. nov. from Sangihe Island, Indonesia is described and compared with related species. In addition some new records for two other species of the *Metrocoris philippinensis*-group are presented.

Key words: Sulawesi, Mindanao, Gerridae, *Metrocoris*, new species.

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Introduction

Sangihe Island, the main island of the group with the same name, is situated about 200 km N of the northern point of the main island of Sulawesi. The terrain is mostly hilly to mountainous, and the highest point is Gunung Awu, 1320 m above sea level. Flat low lying areas are small, the largest one is near Naha (where the airport is), across the island from its capital and main port Tahuna.

The specimens described and mentioned in this paper belong to a small collection of water bugs made by the second author, which will be more completely reported on later. It was decided to publish this description earlier, since the result may be needed for a cladistic analysis of the genus, which is planned for the near future.

Measurements represent the mean value based on five apterous specimens of each sex. The abbreviations LIV and LV mean 4th and 5th instar larva. Depositories are indicated as registered by Arnett et al. (1993): NHMW (Vienna, Austria); ZMAN (Amsterdam, The Netherlands). Not registered collections: N. Nieser collection (NCTN), Tiel, The Netherlands; P. P. Chen collection (PCHC), Beijing, P. R. China.

Metrocoris medius spec. nov.

(figs 1-9)

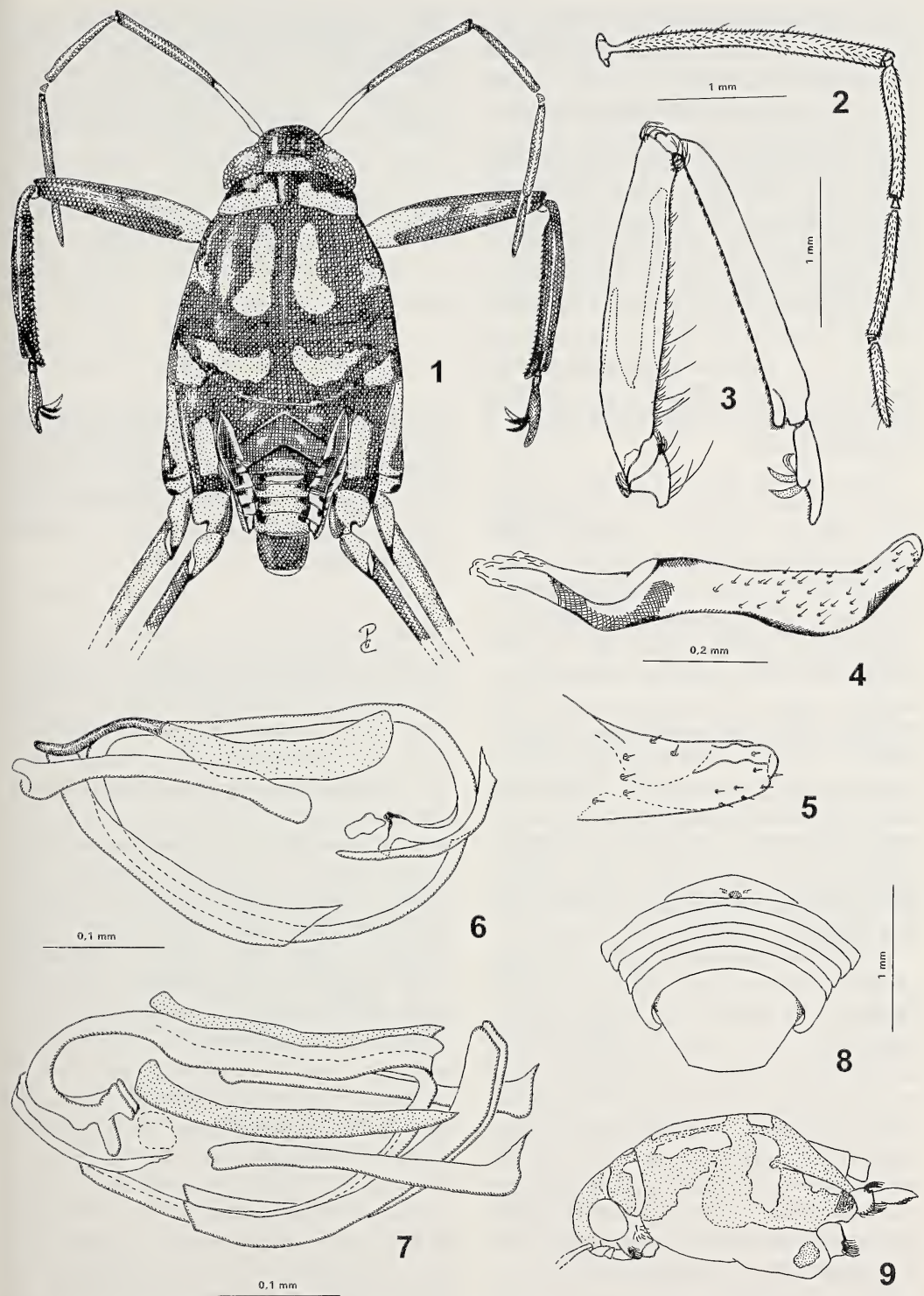
Type material

Holotype: apterous ♂, Indonesia, Sulawesi Utara, Pulau Sangihe, Sungai Limu, near Gunung, 19.xi.1994, N9479, leg. N. Nieser (ZMAN). Mountain stream, cascades & pools, boulders; *Metrocoris* from pools. Paratypes: 3 apterous ♂, 6 apterous ♀, 2 macropterous ♂, same data as holotype (ZMAN: allotype, apterous ♀; NHMW: 1 macropterous ♂, 2 apterous ♀; PCHC: 1 apterous ♂, 2 apterous ♀; NCTN: 2 apterous ♂, 1 apterous ♀, 1 LIV, 1 macropterous ♂, 1 LV); 1 apterous ♂, 1 LV, Pulau Sangihe, Bowokulu, 19.xi.1994, N9477, leg. N. Nieser (NCTN). Upper reaches of mountain stream, not much water, boulders, narrow stretches with strong current alternating with quiet pools (*Metrocoris* on pools).

Description

Apterous specimens (fig. 1). Dimensions. Length: ♂ 4.5 mm, ♀ 4.5 mm; width of head: ♂ 1.5 mm, ♀ 1.4 mm; width (across mesoacetabula): ♂ 2.7 mm, ♀ 2.8 mm.

Colour (fig. 1). Generally dorsally very dark, venter pale. Interocular dark mark large, rectangular with short caudolateral extensions, antennal segments dark, basal third to half of first segment lighter. T-shaped dark mark on pronotum variable, varying from specimens with a narrow anterior transverse band not reaching laterally of eyes to speci-



Figs 1-9. *Metrocoris medius* spec. nov. 1-7, ♂ paratype; 1, dorsal view (middle and hind legs cut off); 2, antenna; 3, fore leg; 4, paramere; 5, detail of apex of paramere; 6, endosoma, lateral view; 7, endosoma, dorsolateral view; 8-9, ♀ paratype; 8, abdomen, ventral view; 9, dorsolateral view of body illustrating acetabular and coxal pilosity.

mens with roughly anterior half of pronotum dark. Mesonotum with well developed anterior transverse and median black stripe, sublateral stripes usually reaching the anterior transverse band of metanotum, broad, usually as broad as or broader than the central yellowish patches on mesonotum; lateral stripes reduced. Metanotum and abdominal first tergite blackish except for a pair of yellowish patches on the metanotum. Anterior margins of remaining abdominal tergites and of connexiva blackish. Pleura and venter yellowish except for the mesoacetabular V-shaped marks. Femur of fore leg yellowish, apex blackish with four stripes of variable extent running in proximal direction.

Body covered by short yellow pilosity mixed with very short relatively stout blackish hairs. Propleura, anterior acetabula, middle and hind coxae with tufts of longer blackish bristles (fig. 9), those on propleura strongly developed compared to most other species.

Synthlipsis slightly wider than an eye (0.58/0.50), width of an eye subequal to its posterior width (0.5); posterior part of eye covering anterior half of pronotum. Length of antennal segments I:II:III:IV: ♂ 2.10:1.05:1.12:0.67; ♀ 1.73:0.89:0.98:0.61; second segment comparatively long (fig. 2). Pronotum slightly wider than head (1.57:1.50). First abdominal tergite clothed with longer pilosity, more distinct in females than in males. Leg measurements, see table 1.

Male. Fore femur slender (fig. 3), slightly constricted about midway and ventral surface flattened in distal half but without teeth or indentations, 5.5 times as long as wide (2.25:0.40); fore tibia not modified (except for the apical groove with yellow pilosity which is normal in the genus). Genital segment well developed, left paramere as in figs 4-5. Endosoma characteristic with a pair of additional anterior sclerites, a strongly developed sheath-like anteromedian sclerite and posteriorly with an additional pair of sclerites (figs 6-7).

Female. Fore femur slender, nearly 7 times as long as wide (2.13:0.32). First abdominal tergite strongly declivent, nearly vertical. Abdominal sternum VII large (fig. 8), three

Table 1. Measurements (in mm) of *Metrocoris medius* spec. nov. based on 5 specimens of each sex.

		femur	tibia	tarsus
apterous ♂	fore leg	2.25	1.85	0.76
	middle leg	6.20	4.50	1.80
	hind leg	5.51	3.80	0.78
macropterous ♂	fore leg	2.25	1.80	0.85
	middle leg	5.60	4.00	1.90
	hind leg	5.00	3.60	0.70
apterous ♀	fore leg	2.13	1.65	0.75
	middle leg	5.72	3.95	1.90
	hind leg	5.01	2.75	0.78

quarters the length of the preceding abdominal sterna together (0.6:0.8) boat-shaped with its posterior margin evenly rounded, in ventral view covering the apex of abdomen, except for the proctiger which is usually just visible behind sternum VII.

Comparative notes

This species apparently belongs to the *Metrocoris philippinensis*-group (Chen & Nieser, 1993). The parameres and the endosoma are distinctive. The pilose nearly vertically declivent first abdominal tergum of the female is also characteristic. *Metrocoris medius* is similar to *M. celebensis* D. A. Polhemus, which in addition differs in having the antennal segments I and II distinctly longer (2.8 and 1.5 mm respectively) and the fore femur of male having a rather wide shallow indentation about halfway on ventral margin. The parameres of *M. medius* are somewhat similar to those of *M. philippinensis* den Boer males of which are, however, distinctly larger (length ♂ 5.8-6.1 mm) and have the fore femur dorsally with black spinules and ventrally with a subapical indentation with a tooth. The females are of roughly the same size but the length of antennal segment II is relatively shorter in *M. philippinensis* (I: 1.7 mm, II: 0.6 mm). Moreover, in female *M. philippinensis* the first abdominal tergum is not distinctly pilose and less strongly declivent, and the fore femur has a small subapical indentation.

Finally *Metrocoris breviculus* Chen & Nie-

ser, known from Sulawesi Tengah, is slightly smaller (length ♂ 4.3 mm, ♀ 4.2 mm) with a less extensive black pattern on thoracic dorsum, notably the sublateral stripe on mesonotum is not connected with the posterior transverse stripe. The male has more slender parameres and the first antennal segment less than twice the length of second (1.9:1.1). The females of *M. breviculus* lack the distinct pilosity of the first abdominal tergite found in *M. medius*.

Etymology

Medius, latin adjective meaning "situated in the middle" or "intermediate" referring to the intermediate geographical position of the species between *M. celebensis* and *M. philippinensis*.

Remarks

Several specimens are quite teneral. The description is based on the alcohol sample, several specimens have shrivelled later, after dry preparation.

Additional records of related species

Metrocoris celebensis D. A. Polhemus

Indonesia: Sulawesi Selatan, Sungai Anowah, 41 km N of Wotu along Trans-Sulawesi Highway, 24.x.1993, narrow stream in undisturbed rainforest above waterfall, 650 m above sea level, leg. J. P. & M. J. Duffels, 1 ♂, 4 ♀, all apterous (NCTN: 1 ♂, 1 ♀; ZMAN:

3 ♀). So far only recorded from the central part of Sulawesi.

Metrocoris philippinensis den Boer

Philippines: Romblon Prov. Sibuyan, E. Magdiwang Silum, 19.xi.1994, leg. H. Zettel, 3 apterous ♀, 1 macropterous ♂, 4 macropterous ♀ (NHMW: 1 apterous ♀; NCTN: 1 macropterous ♀). Formerly recorded from Cebu and Mindanao only (D. A. Polhemus, 1990)

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References

- ARNETT, R. H., G. A. SAMUELSON & G. M. NISHIDA, 1993. Insect and spider collections of the world (2nd ed.). – *Flora Fauna Handbk* 11: i-vi, 1-310.
- BOER, M. H. DEN, 1965. Revisionary notes on the genus *Metrocoris* Mayr (Heteroptera, Gerridae), with description of four new species. – *Zool. Verh. Leiden* 74: 1-34.
- CHEN, P. P. & N. NIESER, 1992. Gerridae, mainly from Sulawesi and Pulau Buton (Indonesia). – *Tijdschr. Ent.* 135: 145-162.
- CHEN, P. P. & N. NIESER, 1993. A taxonomic revision of the oriental water strider genus *Metrocoris* Mayr (Hemiptera, Gerridae) I, II. – *Steenstrupia* 19: 1-43, 45-82.
- POLHEMUS, D. A., 1990. A revision of the genus *Metrocoris* Mayr (Heteroptera: Gerridae) in the Malay Archipelago and the Philippines. – *Ent. scand.* 21: 1-28.

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