

A third valgine species from the island of Sulawesi (Coleoptera: Cetoniidae)

J. KRIKKEN

KRIKKEN, J., 1987. A THIRD VALGINE SPECIES FROM THE ISLAND OF SULAWESI (COLEOPTERA: CETONIIDAE). – *ENT. BER., AMST.* 47(8): 122-124.

Abstract: *Charitovalgus vermeulena* sp. nov. from Sulawesi, Indonesia, is described and illustrated. The shape of its pygidium is unique within the genus, and this makes the species easily recognisable. It is the third valgine species described from the island; its biogeographic status is discussed.

Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden.

Introduction

The *Charitovalgus* described below is the third member of the Valginae reported from the Indonesian island of Sulawesi. The others are *Dasyvalgus beccarii* (Gestro), which seems to be rather widespread over the island, and *D. pulcher* Moser, reported without distributional details. The new *Charitovalgus* is quite characteristic in its scale pattern, and even more so in the shape of the female pygidium and its stylus, which, to my knowledge, differs from all its congeners. The twelve other species of *Charitovalgus* Kolbe (cf. Krikken, 1986) have been recorded from China, Japan and the Andamans to New Guinea, and in addition I have seen material from Queensland, Australia. None of these species seems closely related to *Ch. vermeulena* described below. Some *Charitovalgus* species were recently transferred to *Neovalgus* Miyake, 1985, while this author at the same occasion added a new one to his genus. The simpler parameral structure of these *Neovalgus* species might indeed provide some justification for a removal from *Charitovalgus*. The world genera were for the last time reviewed by Krikken (1978).

Biogeographic status

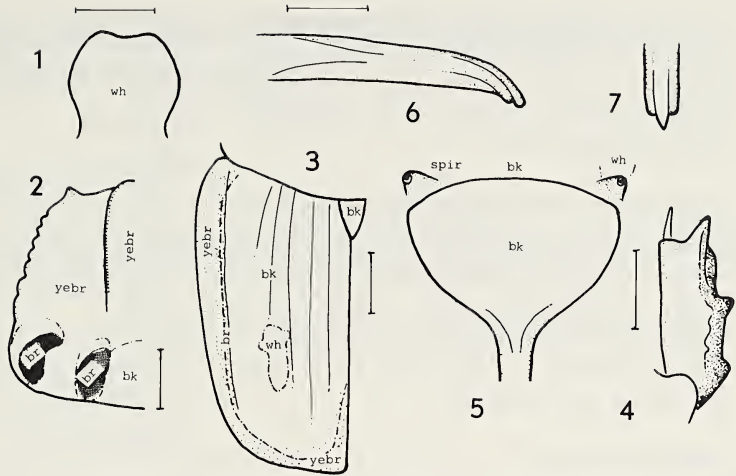
The 14 known species (plus some subspecies) of *Charitovalgus* sensu lato seem to con-

stitute a typically Oriental-East Palearctic group, with a few stragglers in New Guinea and Queensland. This kind of distribution is exceptional among the Cetoniidae (Krikken, 1984): most cetoniid groups do not cross the biogeographic Line of Weber running North-South just east of Sulawesi. The valgine fauna of Australasia consists, apart from a few species in *Charitovalgus*, of several species of *Microvalgus* Kraatz (ca 17 species described from Australia, 1 from Borneo, ca 18 from Africa). *Microvalgus* appears to be a primitive, presumably Gondwanian group. Only the two valgine genera *Microvalgus* and *Charitovalgus* are known from Australasia. On the Oriental side of Weber's line (except for the single *Microvalgus* just mentioned) the valgine fauna is very diverse and evidently derivative, i.e. there are many more genera and species, characterized by various apomorphic features. The Sulawesi novelty only partly fills the *Charitovalgus* gap in the Indo-Australasian transitional zone: no valginas at all have so far been reported from the Moluccas, and I look forward to seeing material from these islands.

Technical notes

Most Valginae have a characteristic morphology imposing certain descriptive con-

Figs. 1-7. *Charitovalgus vermeulena*, holotype. Contours and scale cover lay-out of: 1, clypeus; 2, pronotum, left half; 3, left elytron and scutellum; 4, right protibia; 5, pygidium, 6, with stylus (left lateral view) and 7, its tip. (Scale lines equal 0.5 mm. Key to scale pattern and other details: dash-point lines delimit major scale colour areas, with colours abbreviated wh(ite), ye(ellow), br(own), b(lac)k; scale tufts are indicated black; spir = spiracle.)



ventions. The terms relating to shape are self-explanatory on examination of an actual valgine specimen. Important identification features include the pronotal shape (especially the ridges), the pronotal, elytral and propygidial scale tufts, the pygidial shape, the protibial dentation, other leg features, genitalic structure, and, in many groups, the shapes, colours, modes of implantation of the scales, and their distribution and abundance. Subtleties in scale colour adjectives are avoided (as far as possible). An ampersand symbol (&) denotes mixture, a hyphen (-) denotes intermediate situation, a slash (/) denotes separated occurrence within same part (e.g. scale-tuft half brown, aslf black), "to" denotes a transitional situation from one part to another. Protibial formula: external denticles (usually 1-5 from base to apex) are s(trong), m(edium), o(bsolescent), or a(bsent). Scale pattern is mapped, avoiding detail (cf. key in caption with figures).

Charitovalgus vermeulena sp. nov.

(figs. 1-7)

Type-material. Holotype female from C Sulawesi: nr Morowali, Ranu River area, 27.i-20.iv.1980, leg. M. J. D. Brendell (in British Museum (Natural History)). Paratype female from N Sulawesi: Dumoga Bone National Park HQ, 17.vii.1985, leg. C. Vermeulen (in Leiden museum).

Holotype (female). Length ca 6 mm. Derm reddish; scales white, yellow, brown, black;

black and white predominant.

Clypeal border feebly bisinuate in front (fig. 1). Pronotal paramedian ridges strongly pronounced (fig. 2); lateral edges moderately crenulate. Propygidial spiracles strongly produced, very sharp (fig. 5). Pygidium flat, with long downward stylus (figs. 6, 7). Protibial formula 1m2a3s4o5m (fig. 4). Meso- and metatibiae slightly swollen, outer side not dentate. Length of metatarsal segment 1 ca 2.5 times that of segment 2.

Some features of scale cover: Head with scales mostly white. Pronotum with scales mostly white & pale-brown to yellow-brown, scales on basomedian area black; scale tufts very poorly pronounced, centrally and mediolaterally absent, posteromedially yellow-brown / black, posterolaterally also yellow-brown & black. Scutellum elongate-subtriangular, with black scales. Elytron with scales on disc mostly black, laterally mostly brown to yellow-brown, subcentral patch distinct, white; scale tufts very poorly pronounced, on humerus black & pale-brown, on distal declivity ditto. Propygidium with scales black; epispiracular area with white scales, propygidial scale tufts absent. Pygidium with scales black. Scales on ventral side of body mostly white. Mesepimeron with white scales. Scales on legs mostly white.

Measurements (in mm): Maximum width of clypeus 0.65, of head (incl. eyes) 10.5.

Pronotal median length 1.90, maximum width 2.05. Elytral sutural length (apex scutellum - apex elytra) 1.95, maximum length (parallel to suture) 2.55, maximum width combined 2.55.

Identification. The strongly deflexed pygidial stylus seems unique. The scale patterns on the various squamose body parts (see figures) is very characteristic. Note that in some valgines there is a strong sexual dimorphism in scale patterns — the male of *Ch. vermeulena* is still unknown.

Acknowledgements

Thanks are due to Martin Brendell of the British

Museum (Natural History), London, and to Charlotte Vermeulen, Amsterdam, for providing the specimens. The species has been named after the latter collector.

References

- KRIKKEN, J., 1978. Valgine beetles: a preliminary review of the genera, with descriptions of some novelties. — *Zool. Med. Leiden* 53: 153-164.
- KRIKKEN, J., 1984. A new key to the suprageneric taxa in the beetle family Cetoniidae, with annotated lists of the known genera. — *Zool. Verh. Leiden* 210: 1-75.
- KRIKKEN, J., 1986. Provisional checklist of the Valginae (Coleoptera: Cetoniidae). — *Haroldius* 1: 1-17.
- MIYAKE, Y., 1985. A revision of the subfamily Valginae from Taiwan (Coleoptera: Scarabaeidae). — *Lamellicornia* 1: 1-14.

Accepted 4.iv.1987.