

TWO NEW SPECIES OF *MONOCORYNA* GORHAM, 1885 FROM THE PHILIPPINES (COLEOPTERA: COCCINELLIDAE), WITH NOTES ON SOME KNOWN SPECIES

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Abstract.— Two new species of *Monocoryna* (Coleoptera: Coccinellidae: Monocorynini) are described from the Philippines, Mindanao: *Monocoryna nicolebertiae* **sp. nov.** and *M. philippinensis* **sp. nov.** *Monocoryna borneensis* Arrow, 1926 is synonymized with *Monocoryna moultoni* (Sicard, 1913), and *Monocoryna javanica* Miyatake, 1988 with *Monocoryna decempunctata* Gorham. The lectotypes of *Walteria* (= *Monocoryna*) *antennalis* Sicard, 1913 and *M. borneensis* Arrow, 1926 are designated. A catalogue of all known *Monocoryna* is provided.



Key words.— Coleoptera, Coccinellidae, *Monocoryna*, new species, new synonymy.

CHARACTERS OF THE LARVAL HEAD OF *MYCETINA* *CRUCIATA* (SCHALLER) (COLEOPTERA: ENDOMYCHIDAE) AND THEIR PHYLOGENETIC IMPLICATIONS

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Abstract.— Head structures, especially internal features of the larva of *Mycetina cruciata* are described and discussed with respect to their functional and phylogenetic relevance. Spore masses are collected in the preoral chamber, mechanically treated by the mandibular molae, diluted with secretions, and sucked back by the unusually strong prepharyngeal and pharyngeal pumping apparatus. The presence of tube-like glands is a possible synapomorphy of all cucujiform superfamilies. Posterior tentorial arms which are shifted anteriorly and separated from the tentorial bridge, thin and flattened dorsal tentorial arms, and reduced anterior arms are apomorphic features shared by larvae of *Mycetina*, *Coccinella*, *Glischrochilus*, and cleroid larvae. The origin of a strong bundle of M. tentoriotipitalis from the dorsal hypopharyngeal wall is another unusual derived character state shared by larvae of these taxa. Whether these structural affinities are due to a closer relationship between Endomychidae, Coccinellidae, Nitidulidae, and Cleroidea, or due to parallelism is a matter of further investigation. Presumably derived external features of the head are shared by several genera of Endomychidae. They suggest a closer relationship between *Mycetina*, *Aphorista*, *Amphix*, Epipocinae (excluding *Periptytus*), and *Bystus* (Anamorphinae). Larval characters are in conflict with the monophyly of Lycoperdininae and Epipocinae.



Key words. — *Mycetina cruciata*, larva, internal head structures, feeding mechanism, phylogeny.