



## ***Gebrukothuria profundus*, a new genus and species of laetmogonid holothurian (Elasipodida, Laetmogonidae) from around the Crozet Plateau in the Southern Indian Ocean\***

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### **Abstract**

A new genus and species of laetmogonid holothurian (Elasipodida, Laetmogonidae), collected from around the Crozet Plateau in the Southern Indian Ocean, is described. It differs from other members of the family in that the body wall lacks the wheel-shaped calcareous deposits completely. Instead only rods are present. The genus is also distinguished by the combination of other morphological characters lacking in other known genera: absence of circum-oral and ventrolateral papillae together with development of midventral tube feet. All other members of the family Laetmogonidae are known to have wheel-shaped deposits, therefore diagnosis of the family is refined.

**Key words:** Laetmogonidae, Holothuroidea, deep sea

### **Introduction**

Material collected on the RRS *Discovery* 300 cruise around the Crozet Islands (December 2005–January 2006) contained 47 different species of holothurians mainly from the order Elasipodida and the family Synallactidae (order Aspidochirotida). Six species were found which were undescribed species, including *Gebrukothuria profundus*, a new genus and species of laetmogonid holothurian described here.

The family Laetmogonidae Ekman, 1926 consists of five genera: *Apodogaster* Walsh, 1891, *Benthogone* Koehler, 1896, *Laetmogone* Théel, 1879, *Pannychia* Théel, 1882 and *Psychronaetes* Pawson, 1983. According to the last diagnosis of the family given by Hansen (1975), laetmogonids are characterised by small wheel-shaped deposits in the body wall and, in addition, scattered rods or (in *Laetmogone violacea* Théel, 1879) spinous crosses. The genus *Gebrukothuria* differs from all other known genera of the family by both the absence of wheels and the presence of numerous rods in the body wall. A revised diagnosis of the family Laetmogonidae is given.

### **Taxonomy**

Order Elasipodida Théel, 1882

Suborder Deimatina Hansen, 1975

Family Laetmogonidae Ekman, 1926