

# A new *Onthophagus* species from Kerala, India (Coleoptera: Scarabaeidae, Scarabaeinae)

Paul Schoolmeesters & Sabu K. Thomas

**Samenvatting.** Een nieuwe soort *Onthophagus* uit India, Kerala (Coleoptera, Scarabaeidae, Scarabaeinae)

Uit India, Kerala wordt *Onthophagus devagiriensis* beschreven.

**Résumé.** Une nouvelle espèce d'*Onthophagus* de l'Inde, Kerala (Coleoptera, Scarabaeidae, Scarabaeinae)

La nouvelle espèce *Onthophagus devagiriensis*, est décrite d'Inde, Kerala

**Key words:** Coleoptera – Scarabaeidae – *Onthophagus* – new species

Schoolmeesters, P.: Langeveldstraat, 23, B-3020 Herent e-mail: schoolp@skynet.be

Thomas, Dr. S. K.: St. Joseph's college, Devagiri, Calicut 673008, Kerala, India e-mail: sabukthomas@rediffmail.com

A research team of the co-author collected two males and three females of a species in the genus *Onthophagus* Latreille, 1802. The specimens were collected using a Bison dung baited trap. The collecting area belongs to the Terrestrial eco-region "North-Western Ghats moist deciduous forests" and is located at the southern end of the eco-region known as the Wayanad forests in the Kerala region, South-West India.

## *Onthophagus devagiriensis* sp. n.

Holotype ♂, India, Kerala, Wayanad District, Thirunelly, 900 m, 07.ix.2003, bison dung baited pittrap, will be deposited in the Royal Institute of Natural Sciences, Brussels; Paratypes 1♂ and 3♀, same data as holotype, 1♀ in the first author's collection, Herent, Belgium, 1♂ and 2♀ paratypes in the collection of the St. Joseph's college, Devagiri, Calicut, Kerala, India.

Male. (Fig. 1) Length: 7 mm.

Head and pronotum shiny black with a slight greenish cast. Elytra yellow with black markings distributed as follows: basally a black spot on the third elytral interval, a black spot on the 5<sup>th</sup>, extending slightly onto the 6<sup>th</sup>, and a humeral black spot. Before the centre there is a black marking stretching from the 6<sup>th</sup> onto the elytral margin. Behind the centre there is a transverse marking stretching from the 2<sup>nd</sup> elytral interval onto the elytral margin; this marking is less long in the 3<sup>rd</sup> and 6<sup>th</sup> interval. Finally there is a black apical spot occupying the apex of the elytral intervals 3 to 7.

Setae on pronotum, elytra and pygidium yellow, long but not dense. Femora yellow, tibia and tarsi reddish brown. Pygidium black. Antennal club yellowish brown.

Clypeus truncate, not sinuate antero-medially, anterior margin upturned, lateral sides straight to the genal suture, from there evenly rounded backwards.



Fig. 1.– *Onthophagus devagiriensis* sp. n. Holotype ♂, dorsal and frontal view.



Fig. 2.– *Onthophagus devagiriensis* sp. n. Paratype ♀, dorsal and frontal view.

Punctures on the lateral sides of clypeus large, separated by about their diameter, in the middle of the clypeus the punctures are very small, widespread and short setigerous, not visible with naked eye. Frontal suture not present. Vertex elevated into a plate with two long and slender, backwards bent and inwards curved horns, the external angle of the horns nearly rectangular and flattened, the edge of the plate between the horns nearly straight. The base of the horns with identical great punctures as on the clypeus.

Pronotal anterior margin strongly bordered, posterior margin very finely bordered. Pronotal anterior angles acute, lateral margin behind the anterior angles not emarginate, nearly straight to the median angle, posterior angles

emarginate. Pronotal disk confluent, great, deep and setigerous punctate. Pronotal anterior declivity smooth except for some great punctures bothsides, these punctures identical to the great punctures on the clypeus but separated by more than their diameter. Above the anterior declivity are two indicated (only visible in frontal view), punctate gibbosities, and a greater, impunctate gibbosity in the middle of the disk.

Elytral striae fine, simple, strial punctures distinct, very small, not crenating the interstitial sides. Elytral intervals flat to barely convex, biseriatae granulate, granules greater than the strial punctures.

Metasternum punctate except for a longitudinal midline. Pygidium basally bordered, setigerous punctate.

The femora ventrally setigerous punctate. Protibia elongate, quadridentate externally, the fourth denticle very small, with the margin above and between the teeth denticulate. Tarsi of middle and hind legs as long as the tibia.

Female. (Fig. 2) Length: 6–7 mm.

Differing from male in the following characters: Head with cupreous cast. Frontal suture more or less indicated. Punctuation of the head more intensive, anteriorly rugose, the great punctures also present in the middle of the vertex. Vertex highly elevated into a nearly quadrangular plate, the upper edge emarginate. Otherwise as in male.

### **Differential diagnoses**

Using the key of the genus *Onthophagus* (Balthasar 1963) this species fits the characters for *Onthophagus lemniscatus* Gillet, 1924, but it differs in the following characters; 1) setae on dorsal surface longer and recumbent; 2) metallic lustre on head and pronotum; 3) the distribution of the black markings on the elytra; 4) the form of the horns in the male, which are like in *Onthophagus taurus* (Schreber, 1759), without plate in the middle.

### **Acknowledgements**

Financial assistance received by the co-author from the Ministry of Environmentt & Forests, Government of India, to record the forest litter diversity of the region is gratefully acknowledged

### **References**

- Balthasar, V. 1963. Monographie der Scarabaeidae und Aphodidae der palaearktischen und Orientalischen Region (Coprinae Onitini Oniticellini Onthophagini). — *Tschechoslowakische Akademie der Wissenschaften*, Prag 2: 1–627.
-