Two new species of Spermophagus Schoenherr from South Africa (Coleoptera, Bruchidae: Amblycerinae)

by L. Borowiec, Wroclaw

Abstract — Spermophagus endrodii sp. n. and S. transvaalensis sp. n. are described from South Africa. With 10 figures.

In the collection of the Hungarian Natural History Museum (Budapest) there are Spermophagus specimens from South Africa which represent two new species. All specimens were collected by the excellent Hungarian coleopterist, Dr. S. Endrődi. With 10 figures.

I would like to express my sincere thanks to Dr. O. Merkl for the loan of the specimens.

Spermophagus endrodii sp. n. (Figs 1, 4, 7, 10)

Dedicated to Dr. S. Endrődi who collected the holotype.

Description — Length (pronotum-elytrae): 2.0 mm, width: 1.4 mm. Black, only hind tibial spines reddish. — Vestiture moderately dense, yellowish and brownish, covering body surface. Darker hairs on pronotum and elytrae forming indistinct spots and bands (Fig. 1). Ventral surface of body uniformly pubescent. — Head slightly elongate, mouth part about as long as temporal one. Frons narrow, with distinct, short, medial keel. — Antennae long, extending to 2/3 body length. Antennal article 3 about 2.3 times longer than 2. Articles 7-10 about 1.8 times longer than wide (Fig. 4). — Pronotum about 1.5 times wider than long, pronotal disc doubly punctured. Large punctures disposed almost uniformly on whole pronotal disc. Pronotal edge in lateral view distinctly convex. — Elytra slightly longer than wide, intervals doubly punctured, large punctures not forming longitudinal rows. Elytral rows distinctly punctate. — Pygidium moderately convex, with large and dense punctures. Ventral surface with no diagnostic characters. Hind legs without sexual characters. Hind tibial spines sharp, of equal length. Tarsal claws with large basal denticle.

Male — Sternum 5 emarginate to half length. Ventral lobe elongate, ventral valve pentagonal. Internal sac with 6 pairs of spine-like sclerites (Fig. 7). Lateral lobes strongly modified (Fig. 10).

Female unknown.


Spermophagus transvaalensis sp. n. (Figs 2—3, 6, 9)

Named after terra typica, prov. Transvaal in South Africa.

Description — Length (pronotum-elytrae): 1.9-2.0 mm, width: 1.3-1.5 mm. Black, only hind tibial spines reddish. — Vestiture moderately dense, white and yellow, or white and dark brown, covering body surface. Light hair forming on dorsal surface irregular spots and hands (Fig. 2). The form with white and brown hair is coloured more contrasting than the form with white and yellow hair. Ventral part of body uniformly pubescent. — Head slightly shorter than in the previous species, especially in mouth part, frons with distinct medial keel. — Antennae long, slimmer than in S. endrodii, reaching to 2/3 body length. Antennal article 3 about 2.1 times longer than 2. Articles 7-10 about 1.8 times longer than wide (Fig. 3). — Pronotum about 1.5 times wider than long, pronotal disc doubly punctured. Large punctures disposed almost uniformly on whole pronotal disc. Pronotal edge in lateral view slightly convex. — Elytra slightly stouter than in S. endrodii, intervals doubly punctured, large punctures shallow, not forming longitudinal rows. Elytral rows distinctly punctate. Ventral surface with no diagnostic characters. Hind legs without sexual characters. Hind tibial spines sharp, of equal length. Tarsal claws with large basal denticle.
Male — Sternum 5 emarginate to half length. Ventral lobe long, ventral valve pentagonal, internal sac with 10–11 large, spine-like sclerites (Fig. 6). Lateral lobes short, oval, not modified (Fig. 9).

Female unknown.

Holotype and paratype, males: S. Africa, Transvaal, Nylsvley, 3. II. 1978, cow-dung trap, leg. Dr. S. Endrödi; 2 male paratypes: the same locality, 16. I. 1978, netted, leg. Dr. S. Endrödi; holotype and 2 paratypes deposited in the Hungarian Natural History Museum, Budapest, 1 paratype in the author’s collection.

** Comments — Both new species and Spermophagus okahandjensis Decelle, 1973 form a natural group of small species distributed in Namibia and South Africa only. The common characters of this group are the structure of the median lobe in the male genitalia with pentagonal or subpentagonal ventral valve and an internal sac with several spine-like sclerites, the frons with distinct medial keel, and long antennae in the male reaching to 2/3 of the body length. S. okahandjensis distinctly differs from both new species in its reduced basal denticle on the tarsal claws and greater number of sclerites in the internal sac (Fig. 5). The structure of the lateral lobes in S. okahandjensis is similar to that of S. transvaalensis (Fig. 8). S. endrodii and S. transvaalensis are externally very similar and difficult to distinguish. S. endrodii differs in its strongly modified lateral lobes, unique in structure in the whole genus Spermophagus.

Author’s address: DR. LECH BOROWIEC
Katedra Zoologii AR
Cybulskiego 20
PL 50-205 Wroclaw
Poland

Figs 1 and 4. Spermophagus endrodii sp. n. 1 = dorsal vestiture, 4 = antenna. — Figs 2–3. S. transvaalensis sp. n.: 2 = dorsal vestiture, 3 = antenna

Atmals hist.-nat. Mus. natn. hung., 78, 1986
Figs 5 and 8. *Spermophagus okahandjensis* Decelle, male genitalia: 5 = median lobe, 8 = lateral lobes. — Figs 6 and 9. *S. transvaalensis* sp. n., male genitalia: 6 = median lobe, 9 = lateral lobes. — Figs 7 and 10. *S. endrodii* sp. n., male genitalia: 7 = median lobe, 10 = lateral lobes

*Anns hist.-nat. Mus. natn. hung.*, 78, 1986