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Three new species of *Spermophagus* SCHOENHERR, 1833 from
Thailand, with notes on synonymy of *S. perpastus* (LEA)
(Coleoptera: Bruchidae: Amblycerinae)

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ABSTRACT. *Spermophagus horaki* n. sp., *S. kubani* n. sp. and *S. similis* n. sp. are described from Thailand. *S. pfaffenbergeri* BOROWIEC, 1986 is a new synonym of *S. perpastus* (LEA, 1899).

Key words: entomology, taxonomy, zoogeography, new species, *Spermophagus*, *Amblycerinae*, *Coleoptera*, Oriental Region, Thailand, Australia.

Abbreviations used in the text:

CKWA: Collection of author (Emmendingen, Germany);
NHMB: Naturhistorisches Museum (Basel, Switzerland);
SAMA: South Australian Museum (Adelaide, Australia);
SMNS: Staatliches Museum für Naturkunde (Stuttgart, Germany);
ZMAN: Zoologisch Museum, Universiteit Amsterdam (Amsterdam, The Netherlands).

Spermophagus kubani n. sp.
(figs. 1-3)

ETYMOLOGY

This species is dedicated to Vít KUBAŇ (Prague, Czech Republic), an expert on *Coraebinae* (*Buprestidae*, *Coleoptera*), who provided me with a lot of bruchid specimens from Thailand.

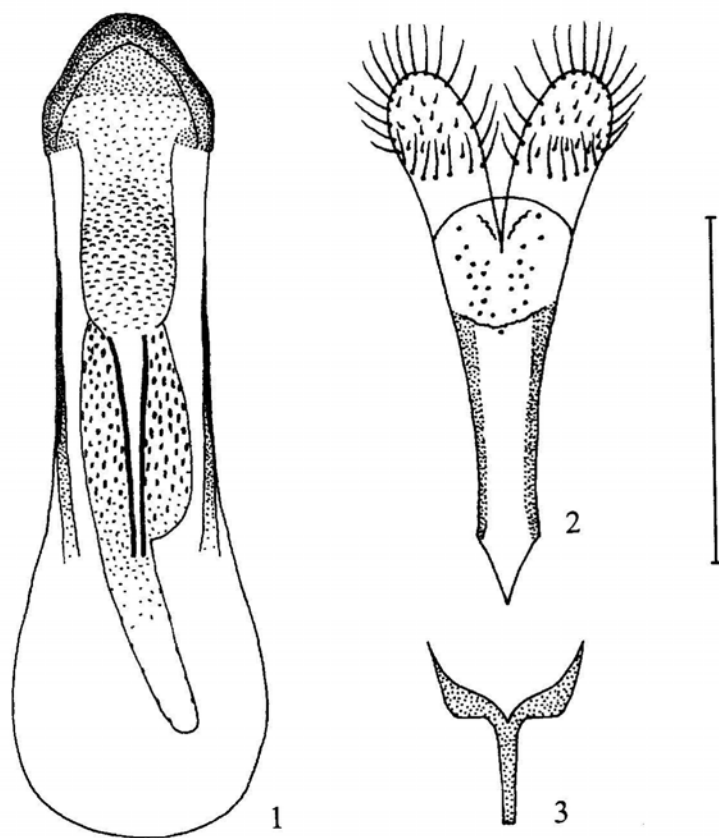
DIAGNOSIS

It is a member of the *S. ligatus* group and closely related to *S. maai* BOROWIEC, 1991. Externally *S. kubani* is very similar to *S. maai*, but the latter has the apical pygidial pubescence brownish, ventral valve distinctly broader, internal sac with an additional pair of denticle-like sclerites, and the base of the basal plate with a pair of small lobes (see figs. 316-317 in BOROWIEC 1991).

DESCRIPTION

Length (pronotum-elytra): 2.3 mm, width: 1.8 mm. Body short, oval.

Black; hind tibial spines dark red, claws red except darkened basal tooth. Vestiture moderately dense, not covering body surface completely; ventrally mixed brownish and greyish; dorsally predominately brownish with greyish pattern; apical third of elytra uniformly brownish, without greyish pattern;



1-3. *Spermothagus kubani* n. sp.: 1 - median lobe; 2 - lateral lobes; 3 - spiculum gastrale. Scale bar = 0.5 mm

pygidium with extreme base greyish, subbasally brownish changing to mixed brownish and greyish towards apex.

Head short. Eyes emarginate to half of their length, with 5-6 rows of facets beyond incision of antenna. Tempora moderately long. Distance between eyes less than half of greatest width of eye. Frons and vertex convex, with elongate, smooth, shiny interocular carina. Antennae extending to mid third of elytral length, segment 3 distinctly shorter than 1, segments 8-10 about 1.3 times longer than wide, segment 11 about 1.6 times longer than wide.

Pronotum about 1.7 times wider than long, double punctured, coarse punctures elongate, not dense, disposed uniformly on whole disc. Lateral margin in lateral view convex. Scutellum small, triangular.

Elytra nearly twice as long as pronotum, nearly as long as their combined width, with maximum width at end of apical third. Humeral calli very distinct. Elytral striae distinctly punctured, intervals with dense micropunctuation and with distinct irregular row of large punctures.

Sternites without impression or tubercles. Hind legs without sexual characters. Hind tibia with dorsolateral carina complete, lateral carina not serrate; apical spines sharp, as long as or longer than greatest width of tibia, mesal spine distinctly longer than lateral spine. Claws with distinct basal tooth.

Pygidium double punctured.

Male. Ventral margin of antennal segments without erected setae. Abdomen moderately telescoped, sternite V emarginate to two third of length, pygidium with maximum convexity at apical half. Median lobe of moderate length, ventral valve subtrapezoidal, dorsal valve subtriangular. Internal sac with elongate, tube-like sclerite (fig. 1). Lateral lobes short, oblonge-oval, tape-like, with about 23 long setae at combined margins (fig. 2). Basal plate elongate, with maximum width at apex. Basal strut oblonge, with median carina. Spiculum gastrale Y-like (fig. 3)

Female. Unknown.

Host plant unknown.

TYPES

Holotype male: Thailand, Langsang N. P., 16°48'N 98°57'E, 500 m, 18.-24.IV.1991, V. KUBAN (CKWA).

Spermophagus horaki n. sp.

(figs. 4-6)

ETYMOLOGY

This species is dedicated to Jan HORÁK (Prague, Czech Republic), an expert of *Mordellidae* (*Coleoptera*), who provided me with a lot of bruchid specimens from Thailand too.

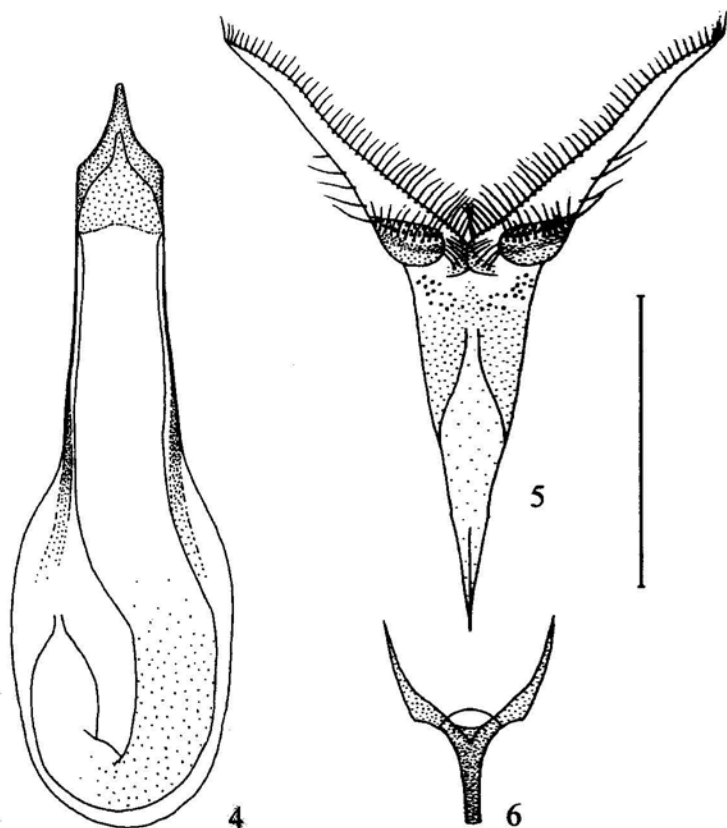
DIAGNOSIS

It is a member of the *S. niger* group and closely related to *S. semiannulatus* PIC, 1918, but the latter has the antennal segments 8-10 shorter, claws yellowish-red, the ventral valve transverse and subquadrate, and the lateral lobes with different setation (see figs. 172-173 in BOROWIEC 1991).

DESCRIPTION

Length (pronotum-elytra): 2.1 mm, width: 1.5 mm. Body of moderate length, oblonge-oval.

Black; hind tibial spines red, claws darkened. Vestiture moderately dense, not covering body surface completely; ventrally greyish-yellowish; dorsally brownish, partially mixed with greyish setae, elytra with greyish pattern, pygidium with whitish-yellowish basal transverse band, narrow median line and extreme apex greyish.



4-6. *Sperophagus horaki* n. sp.: 4 - median lobe; 5 - lateral lobes; 6 - spiculum gastrale. Scale bar = 0.5 mm

Head short. Eyes emarginate to two thirds of their length, with 4 rows of facets beyond incision of antenna. Tempora short. Distance between eyes about two fifth of greatest width of eye. Frons and vertex weakly convex, without interocular carina. Antennae extending to apical third of elytral length; segment 3 of half length of 1, segments 8-10 about 1.4-1.5 times longer than wide, segment 11 about twice longer than wide.

Pronotum about 1.4 times wider than long, double punctured, coarse punctures less dense at middle of disc. Lateral margin in lateral view convex. Scutellum small, triangular.

Elytra about 1.8 times longer than pronotum, about as long as their combined width, with maximum width at end of apical third. Humeral calli moderately distinct. Elytral striae distinctly punctured, intervals with dense micropunctuation and with indistinct irregular row of large punctures.

Sternites without impression or tubercles. Hind legs without sexual characters. Hind tibia with smooth dorsolateral carina, lateral carina not serrate; apical spines sharp, somewhat longer than greatest width of tibia, mesal spine feebly longer than lateral spine. Claws with distinct basal tooth.

Pygidium double punctured.

Male. Ventral margin of antennal segments without erected setae. Abdomen simple, sternite V weakly emarginate to base, pygidium with maximum convexity at apical two third. Median lobe oblonge, ventral valve subpentagonal, dorsal valve subtriangular, both of valves with apex acute. Internal sac without sclerites (fig. 4). Lateral lobes strongly elongate, acute apically, tape-like, with about 50 long setae at mesal margin (fig. 5). Basal plate triangular, with maximum width at apex. Basal strut oblonge, with median carina. Spiculum gastrale Y-like (fig. 6)

Female. Unknown.

Host plant unknown.

TYPES

Holotype male: NW Thailand, Mae hong Son, Ban Huai Po, 1600-2000 m, 30.IV.-4.V.1991, J. HORAK (CKWA).

Spermophagus similis n. sp.

(figs. 7-9)

ETYMOLOGY

The name refers to the similarity of the male genitalia to those of *S. aeneipennis* PIC, 1917.

DIAGNOSIS

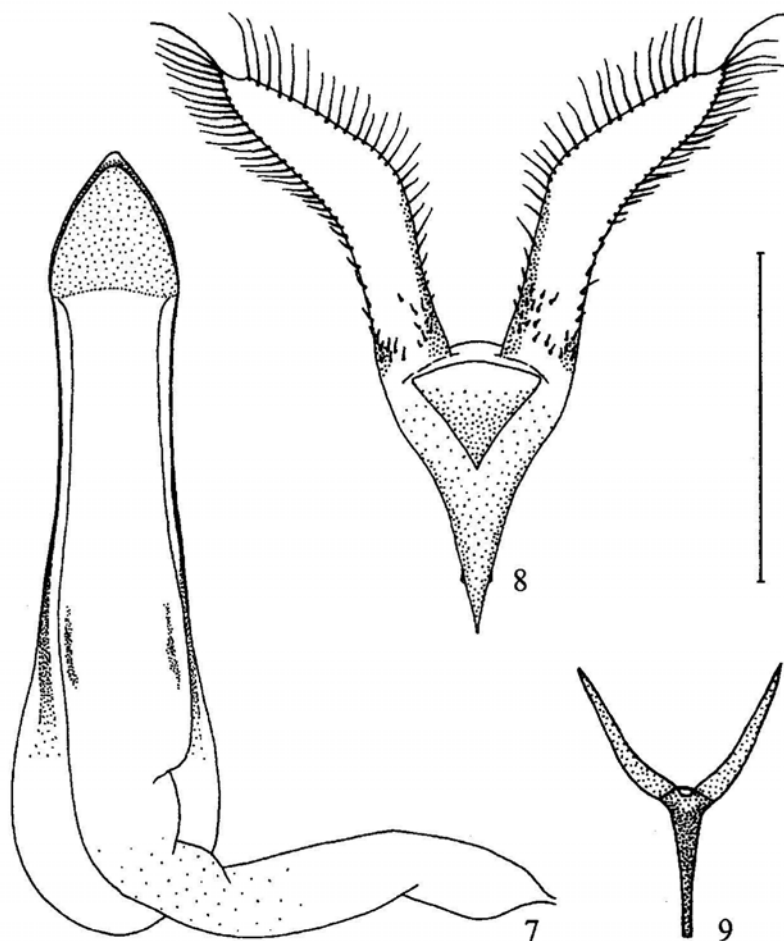
It is a member of the *S. niger* group and closely related to *S. aeneipennis*. Externally *S. aeneipennis* is very similar, but differs in the elytral pattern distinct,

antennal segments 8-10 slender, internal sac with a smaller and slender band of granule-like sclerites, and the lateral lobes with different setation (see figs. 157-158 in BOROWIEC 1991).

DESCRIPTION

Length (pronotum-elytra): 2.2 mm, width: 1.6 mm. Body of moderate length, oblong-oval.

Black; hind tibial spines red, claws darkened. Vestiture moderately dense, not covering body surface completely; ventrally greyish-yellowish; dorsally brownish, partially mixed with greyish setae, elytra with greyish pattern, pygidium at base greyish-yellowish.



7-9. *Sperrophagus similis* n. sp.: 7 - median lobe; 8 - lateral lobes; 9 - spiculum gastrale. Scale bar = 0.5 mm

Head short. Eyes emarginate to two thirds of their length, with 4 rows of facets beyond incision of antenna. Tempora very short. Distance between eyes about two fifth of greatest width of eye. Frons and vertex weakly convex, without interocular carina. Antennae extending to middle of elytral length; segment 3 of less than half length of 1, segments 8-10 about 1.2-1.3 times longer than wide, segment 11 about 1.7 times longer than wide.

Pronotum about 1.6 times wider than long, double punctured, coarse punctures less dense at middle of disc. Lateral margin in lateral view feebly convex. Scutellum small, triangular.

Elytra 2.1 times longer than pronotum, somewhat longer than their combined width, with maximum width at end of apical third. Humeral calli moderately distinct. Elytral striae distinctly punctured, intervals with dense micropunctuation and with distinct ireegular row of large punctures.

Sternites without impression or tubercles. Hind legs without sexual characters. Hind tibia with smooth dorsolateral carina, lateral carina not serrate; apical spines sharp, as long as greatest width of tibia, mesal spine somewhat longer than lateral spine. Claws with distinct basal tooth.

Pygidium double punctured.

Male. Ventral margin of antennal segments without erected setae. Abdomen simple, sternite V weakly emarginate to base; pygidium with maximum convexity at apical half. Median lobe oblonge, ventral valve and dorsal valve subtriangular. Internal sac laterally at mid part with pair of bands of minute granules-like sclerites (fig. 7). Lateral lobes strongly elongate, acute apically, tape-like, with about 20 long setae at each margin (fig. 8). Basal plate subtriangular, with maximum width at apex. Basal strut oblonge, with median carina. Spiculum gastrale Y-like (fig. 9)

Female. Unknown.

Host plant unknown.

TYPES

Holotype male: NW Thailand, Mae Hong Son, Ban Huai Po, 1600-2000 m, 30.IV.-4.V.1991, J. HORAK (CKWA).

Spermophagus perpastus (LEA, 1899)

Bruchus perpastus LEA, 1899: 638.

Spermophagus perpastus: BRIDWELL, 1946: 57.

Spermophagus pfaffenbergeri BOROWIEC, 1986: 786, syn. nov.

MATERIAL EXAMINED: Type (male) and cotype (male) of *B. perpastus*: "perpastus / Lea TYPE / Behn R" (SAMA). INDIA: Radjasthan, Udaipur 15 km road to Ranakpur, 24.II.1984, W. WITTMER (NHMB). INDONESIA: Java, Tengger Range, F. C. DRESCHER (CKWA); Kendeng Range, X.1919, H. LUCHT (ZMAN); Sumatra,

Medan, 9.II.1921, J. B. CORPORAAL (ZMAN). THAILAND: Chiang Dao, 19°25'N 98°52'E, 1000 m, 17.-24.V.1991, V. KUBAN (CKWA, NHMB); Chiang Dao, 19°22'N 98°57'E, 350 m, 9.-14.V.1991, D. KRAL (CKWA); Fang, 19°55'N 99°12'E, 300 m, 25.V.1991, D. KRAL (NHMB); Langsang N.P., 16°48'N 98°57'E, 500 m, 18.-24.IV.1991, V. KUBAN (NHMB); Mae Hong Son, Ban Huai PO, 800-1600 m, 1.-15.V.1991, S. BILY (CKWA, NHMB); same data, but 1600-2000 m, 8.-18.V.1992, J. HORAK (CKWA); Nakon, Sithammarat, Khanom MF, 19.-28.II.1991, RISCH (SMNS); Soppong-pai, 1800 m, 1.-6.V.1991, PACHOLATKO (NHMB); Soppong-pai, 19°27'N 98°20'E, 1500 m, 7.-12.V.1996, J. HORAK (CKWA); same data, S. BECVAR (CKWA); Yata, Betong, Gunung Candun Vill., 25.III.-22.IV.1993, J. HORAK (CKWA).

HOST PLANT

Unknown.

DISTRIBUTION: Australia (Northern Territory), India, Indonesia, Philippines, Sri Lanka, Thailand.

REMARK: The precise original description shows, that *S. pfaffenbergeri* is a junior synonym of *S. perpastus*.

ACKNOWLEDGEMENT

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