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New Data on the Genus *Stiliderus* MOTSCH.

(Coleoptera, Staphylinidae, Paederinae)

18th Contribution to the Knowledge of Staphylinidae

With 8 Figures

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Abstract. Four new species of *Stiliderus* (sensu lato: BLACKWELDER, 1939), *S. sharpi* n. sp., *S. wallacei* n. sp., *S. leai* n. sp., and *S. expectatus* n. sp. from the collections of the BMNH and of the author are described, and the male sexual characters of *S. strigellus* CAM. illustrated for the first time.

Stiliderus (*Stilicoderus* SHARP) *hieroglyphicus* FV was only known to me, at the time I wrote the first part of the revision of this genus, by a male from the FAUVEL collection (in I.r.Sc.N.B.), designated lectotype of the species, and by another male, designated paralectotype, in the BMNH. Both these specimens come from the original series collected by A. R. WALLACE at Dorey Bay, on the northern coast of the "bird's head" peninsula of New Guinea. Since completeing the final draft of my ms. a number of specimens in the BMNH, which I had overlooked because they stood in the collection under the label *Stilicus*, have been examined with the result that three new species have come to light and are described below.

Two short sojourns in Indonesia in 1984 enabled me to collect a series of *S. strigellus* CAM., hitherto known only by two female exx., and a new species belonging to the *cicatricosus* group. The male of the former, and the new species are also described in this paper.

The ten species now known from New Guinea fall into three monophyletic groups; the *funebris* group, the *aerosus* group and the *hieroglyphicus* group. Rapid speciation in New Guinea, doubtless under ecological conditions very different from those operating elsewhere in the genus' range, has produced some unusual evolutionary trends, comparable with those described by PUTHZ in his revision of the New Guinea Steninae. The *funebris* group is highly aberrant within the genus, and includes two known species which are easily distinguishable both by external characters and by those of the aedeagus. The *aerosus* group includes three known species with scarcely differentiated aedeagi, but which are readily separable by differences in facies, colour, puncturation and pubescence. Conversely, the five species discussed in this paper, and comprising the *hieroglyphicus* group, have followed the more usual course in speciation in these insects, whereby the aedeagus differentiates at an earlier stage than do other characters. Within the *hieroglyphicus* group only *S. hornabrooki* ROUGEMONT can be determined using the external characters; *S. hieroglyphicus* and the three new species described below are so similar that they can only be separated by examination of the aedeagus. For this reason only the essential proportions of each and figures of the aedeagi are given: detailed descriptions would be otiose.

Following the system used in my revision, the units of measurements, other than those of the body length of insects, are equal to 0,0125 mm.

Stiliderus hieroglyphicus FV.

Stilicus hieroglyphicus FAUVEL, 1879, Ann. Mus. Civ. Genova 15: 86.
Stiliderus hieroglyphicus ROUGEMONT, 1986, Ent. Abh. Mus. Tierk. Dresden 49, Nr. 8, 139–187.

♂ Paralectotype: New Guinea, Dorey, WALLACE; 1 ♂: Dorey, Bowring 63–47 2 ♂♂: New Guinea, SHARP Coll. 1905–313 (one of these bears an additional label "Papua"). (in BMNH)

The following female exx. have been labelled by me "*Stiliderus hieroglyphicus* group" because they might also belong to either of the two following, sympatric species: 4 exx. Papua, New Guinea, SHARP Coll., 1905–313; 2 exx.: 59–58, Dory, New Guinea; 2 exx.: Port Dorey, New Guinea, SHARP Coll. 1905–313; 1 ex. New Guinea, SHARP Coll. 1905–313. (all in BMNH).

A diagnosis with a figure of the forebody is given in my revision. The species is distinguished from the other members of the group by the shape of the parameroid lobes, which are compressed into a broad bilobed blade at their apices. The apex of the paramere is simple, symmetrical, recurved towards the ventral face of the median lobe

Stiliderus sharpi n. sp.

♂ Holotype Papua, New Guinea, SHARP Coll., 1905–313. (in BMNH)

Facies, colour, puncturation and male abdominal sternites as in *S. hieroglyphicus* FV This new species only differs externally from *S. hieroglyphicus* by its slightly lesser size, with proportionately slightly longer antennae, but the proportions scarcely lie outside the range of variability of the latter. Proportions of holotype: length of head: 68; breadth of head (excluding eyes): 74; length of antennae: 134; length of pronotum: 66; breadth of pronotum: 60; maximum length of elytra: 80; maximum breadth of elytra: 73.

The aedeagus (Fig. 2) is proportionately smaller than that of *S. hieroglyphicus* or than those of the other related species. The parameroid lobes are scarcely broadened at their apices, and the shape of their bases characteristic. The paramere is symmetrical, similar to that of *S. hieroglyphicus*, but its apex less strongly recurved. The heavily sclerotised, subtriangular paired anterior internal processes of the median lobe of *S. hieroglyphicus* is represented in this new species by broadly lamellate structures.

Stiliderus wallacei n. sp.

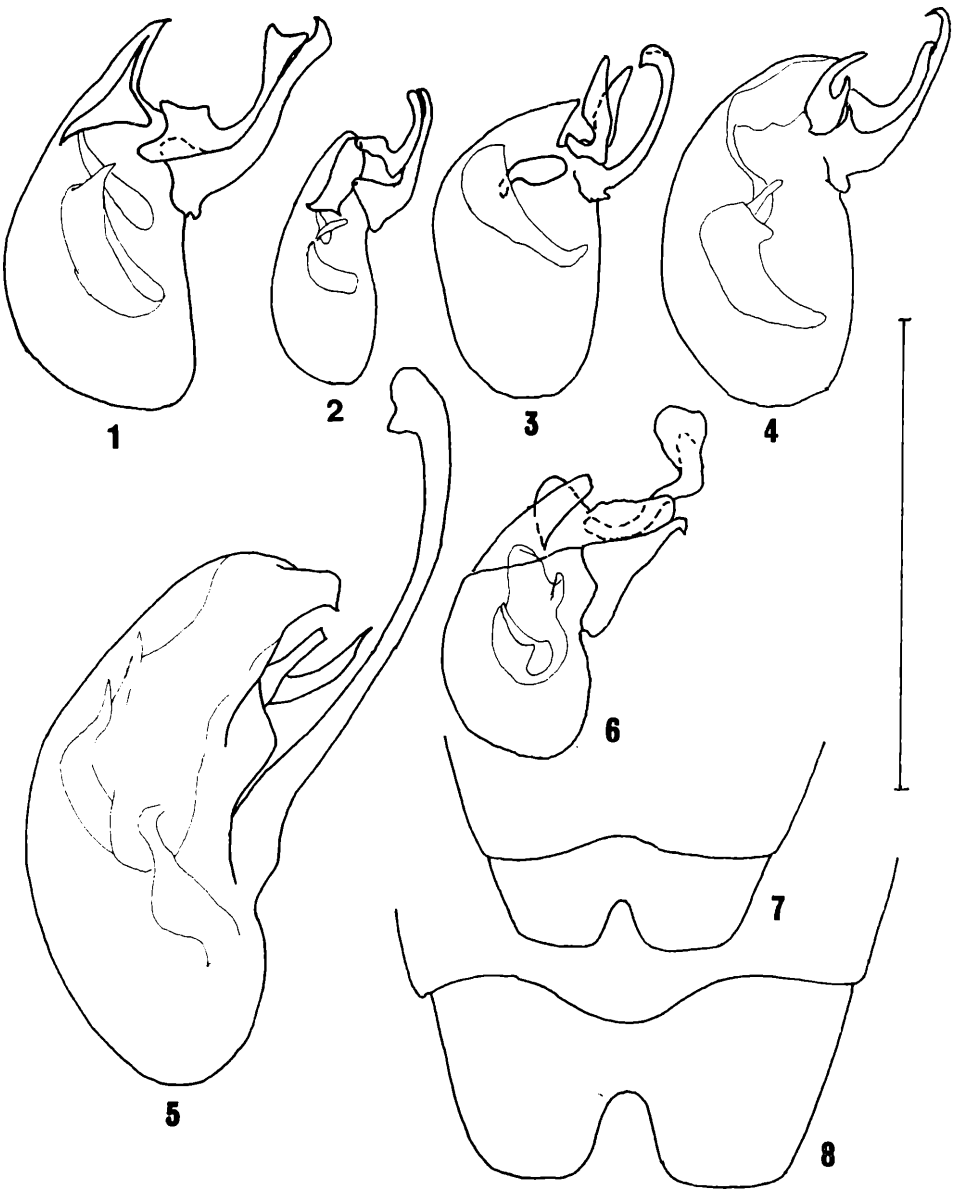
♂ Holotype Papua, New Guinea, SHARP Coll. 1905–313; 1 ♂ paratype 59–58, Dory, New Guinea. (both in BMNH)

Facies, colour, puncturation and male abdominal sternites as in *S. hieroglyphicus* FV This new species is smaller than *S. hieroglyphicus* and *S. sharpi* n. sp., outside the range of variability of the former. Proportions of holotype: length of head: 64; breadth of head: 71; length of antennae: 127; length of pronotum: 67 breadth of pronotum: 59; length of elytra: 80; breadth of elytra: 74.

S. wallacei n. sp. is immediately recognisable by the blade-shaped parameroid lobes (aedeagus: Fig. 3). The apex of the paramere is cloven, in lateral view club-shaped. The paired internal processes enclosing the distal duct are small and of characteristic shape

Stiliderus leai n. sp.

♂ Holotype Mt. Lamington, 1300 to 1500 feet, C. T. McNAMARA. *Stilicus hieroglyphicus* FVL., Id. by A. M. LEA after CAMERON. M. CAMERON Bequest, B. M. 1936–271. *Stilicoderus hieroglyphicus* FAUV (in CAMERON's handwriting). (in BMNH)



Figs. 1–6. Aedeagi in lateral view of: 1: *S. hieroglyphicus* FV., paralectotype – 2: *S. sharpi* n. sp., holotype – 3: *S. wallacei* n. sp., paratype – 4: *S. leai* n. sp., holotype – 5: *S. strigellus* CAM. from Brastagi – 6: *S. expectatus* n. sp., holotype. – Figs. 7+8. Outlines of male sternites VII+VIII of: 7 *S. expectatus* n. sp. – 8: *S. strigellus* CAM.

Facies, colour, puncturation and male abdominal sternites as in *S. hieroglyphicus* Fv. The proportions of the holotype show that it is slightly larger than the latter or than the three other members of the group: length of head: 73; breadth of head: 82; length of antennae: 146; length of pronotum: 79; breadth of pronotum: 69; length of elytra: 90; breadth of elytra: 73.

The aedeagus (Fig. 4) is similar to that of *S. hieroglyphicus*, but the apices of the parameroid lobes are not broadened, the apex of the paramere is longer, extending well beyond the apices of the parameroid lobes, and twisted to the left as well as towards the ventral face of the median lobe. The paired anterior internal processes of the median lobe each bear a laterally projecting branch which conceals the bases of the parameroid lobes in lateral view.

The conformation of these latter structures, as well as the slightly asymmetrical paramere, suggest a transitional stage between the *hieroglyphicus* and *aerosus* groups, but the shape of the parameroid lobes retains the new species firmly within the former group.

Stiliderus cf. **hornabrooki** ROUGEMONT

Stiliderus hornabrooki ROUGEMONT, 1986, Ent. Abh. Mus. Tierk. Dresden 49, Nr. 8, 139–187

1 ♀: Dutch New Guinea: Cyclops Mts., Sabron, Camp 1: 1200 ft., 15. V 1936, L. E. CHEESMAN, B. M. 1936–271. *Stilicoderus hieroglyphicus* FAUV (in CAMERON's handwriting). (in BMNH)

This specimen agrees well with my diagnosis of *S. hornabrooki*, but the close similarity of species of the hieroglyphicus group, and the distance between this and the type localities make it just as probable that it belongs to a new species.

Stiliderus strigellus CAM.

Stilicoderus strigellus CAMERON, 1930, Tijdschr. Ent. 73: 336.
Stiliderus strigellus ROUGEMONT, 1986, Ent. Abh. Mus. Tierk. Dresden 49, Nr. 8, 139–187

3 ♂♂ & 2 ♀♀: N. Sumatra, Brastagi, 6. VI. 1984, ROUGEMONT (in coll. ROUGEMONT).
The male primary and secondary sexual characters cofirm this species' phylogenetic position in the *feae* group.

Apical border of 7th sternite produced in the median area; 8th sternite rather narrowly and deeply emarginate (Fig. 8). Aedeagus (Fig. 5) very large, with parameroid lobes unequal, the right straight and apically truncate, the left longer, slightly curved, and apically acute; paramere very long, the apex dilated in characteristic fashion.

Stiliderus expectatus n. sp.

♂ Holotype, 1 ♂ & 1 ♀ paratypes Bali, Batukaru, ca. 1000 m, sifted from damp vegetable detrita, 18. VI. 1984, ROUGEMONT (in coll. ROUGEMONT).

This new member of the *cicatricosus* group (*Stiliderus* s. str.) most closely resembles *S. crassus* KR.

Length: 5.8 mm. Head, thorax and elytra black, shiny, without microsculpture; abdomen pitchy brown; palpi rufotestaceous; labrum, antennae and legs reddish brown, the femora darker.

Head transverse (77 : 67), with a strong infra orbital ridge, the eyes large (diameter: 23) and prominent, forming the broadest part of head (79); the upper surface is uniformly and densely punctate, the diameter of the slightly elongate punctures moderate (ca. 1.5–2), the shiny interstices narrow, less than half the diameter of punctures, the whole upper surface clothed in short erect pubescence. Labrum 5-dentate, the median tooth very small and keeled to base, flanked by a pair of broad, prominent, slightly divergent teeth; the additional pair are rudimentary, triangular, and still lie within the broad anterior emargination of labrum. Antennae moderately long (125), the third segment slightly longer than the second (12:10); segments IV–VI progressively shorter than the third but still elongate, segments VII–X globose.

Pronotum slightly elongate (78:75), its broadest point a little behind the anterior angles, one third from neck. The surface is covered in uniformly dense prominent setiferous granules, their diameter about equal to that of cephalic punctures, but dense, the interstices very narrow but nevertheless distinct and shiny. The midlongitudinal impunctate band is restricted to the basal third, the median axis in anterior two thirds homogenously granulose, only indicated by a slight narrow elevation. The transverse basal furrow is deep, narrow, not separated from the granulose surface of disc by a shiny callus or connate with the base of the midlongitudinal impunctate band.

Elytra transverse (98:75), the sculpture consisting of the usual serially aligned large foveate punctures on a backgound of dense prominent setiferous granules, the latter sparser and much smaller than those of pronotum, but very evident on the entire surface. The pubescence is longer and paler than that of head and pronotum.

Legs rather short, with all tarsal segments deeply furrowed dorsally and all fourth tarsal segments deeply and broadly bilobed. Length of metatibia: 74; metatarsi: 44; metatarsal segments: I: 17 II: 9; III 6; IV (including lobes): 11; V 10.

M a l e Sternite VII with a broad shallow apical emargination; sternite VIII (Fig. 7) with a deeper, narrow emargination; aedeagus: Fig. 6.

S. expectatus n. sp. may be separated from the other 26 known species of the *cicatricosus* group by noting the following differences:

— From *S. magniceps* CAM. by the presence of an infraorbital carina.

— From *S. praecellens* BNH., *S. flavomarginatus* BNH. and *S. pulchripennis* BNH. by its uniformly black elytra, without yellow markings or a metallic tinge.

— From *S. micropterus* BNH., *S. latericarinatus* BNH., *S. nigerrimus* BNH., *S. fortepunctatus* BNH., *S. nitidipennis* BNH., *S. longipennis* BNH., *S. ancora* BNH., *S. longicollis* BNH., *S. longiceps* BNH., *S. splendidipennis* BNH., *S. geniculatus* CAM., *S. sculptipennis* KR., *S. cicatricosus* MOTSCH., *S. mussardi* ROUGEMONT, *S. loebli* ROUGEMONT, *S. celebensis* ROUGEMONT and *S. brendelli* ROUGEMONT by the absence of an entire midlongitudinal impunctate band on the pronotum.

— From *S. brevipennis* BNH. by the homogenously granulose anterior part of the pronotum (in *S. brevipennis* the midlongitudinal impunctate band is interrupted in the middle, but evident in both anterior and posterior portions).

— From *S. densissimus* BNH. by its greater size, less transverse head and elytra, and denser granulose puncturation of elytra.

— From *S. bakerianus* BNH., *S. kamarupensis* ROUGEMONT and *S. crassus* KR., which it most closely resembles, by its smaller head, less elongate pronotum, and by the male secondary sexual characters.

From all of these by the aedeagus.

S. expectatus n. sp. is the only member of the *cicatricosus* group so far known from Bali.

A c k n o w l e d g e m e n t s

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