

***STRABOCEPHALIUM MROCZKOWSKII* SP. NOV. AND *S. KISTNERI*  
SP. NOV. FROM THE PHILIPPINES  
(COLEOPTERA: STAPHYLINIDAE: ALEOCHARINAE)**

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**Abstract.** — Two new Philippine species of the aleocharine genus *Strabocephalum* are described. Members of *Strabocephalum*, previously known from Borneo only, resemble ant soldiers by the shape of the large head with geniculate antennae, in combination with a small pronotum. The three constituent species may be distinguished by numerous features, particularly by the respective body size, the length of the antennal segments, the size of the eyes, the elytral punctuation and the characters of the abdominal tergites 7 and 8.



**Key words.** — Coleoptera, Staphylinidae, Aleocharinae, *Strabocephalum*, taxonomy, Philippines.

## INTRODUCTION

On a recent trip to Luzon, Philippines, I found a single specimen of an odd aleocharine, possessing a large, robust, posteriorly bilobed head (Figs 1, 3), very narrow neck (Fig. 2) short and robust mandibles, and geniculate antennae with a long scape. It is surprisingly similar, in general appearance, to a soldier of *Pheidole* and some other ants. The only known aleocharine having such characters is *Strabocephalum mirabile* Bernhauer, whose description is based on a single male from Sarawak.

*Strabocephalum mirabile* has been placed close to *Orphnebius* Motschulsky (Fenyès 1918) within the Myrmedoniae (Bernhauer *et al.* 1926), the present Myrmedoniina, Lomechusini (Newton & Thayer 1992), which include a large number of myrmecophilous taxa. It was redescribed in detail by Sawada (1980), and illustrated and recorded from Sabah (Pace 1986). The shape of the head, characterized as monstrous by Fenyès (1918), and the mouthparts indicate unusual biology for the group. Members of *Strabocephalum* may indeed be myrmecophilous, yet to date nothing is known about their natural history. The fact that all known specimens, including one from Sandakan, Sabah (FMNH, unpublished), are males may indicate sexually linked habitat requirements or behavior differences between the sexes.

An examination of the holotype of *S. mirabile* showed that it is congeneric with the Philippine species. An additional undescribed species of *Strabocephalum*, which was recognized as new by Bernhauer, is preserved in the collection of the FMNH. As both new species of *Strabocephalum* are represented each by a single specimen, I prefer not to dissect their mouthparts. Thus, some

character sets used in Sawada (1980) have not been examined. However, the three species of *Strabocephalum* may be defined and readily distinguished by other characters.

## TAXONOMY

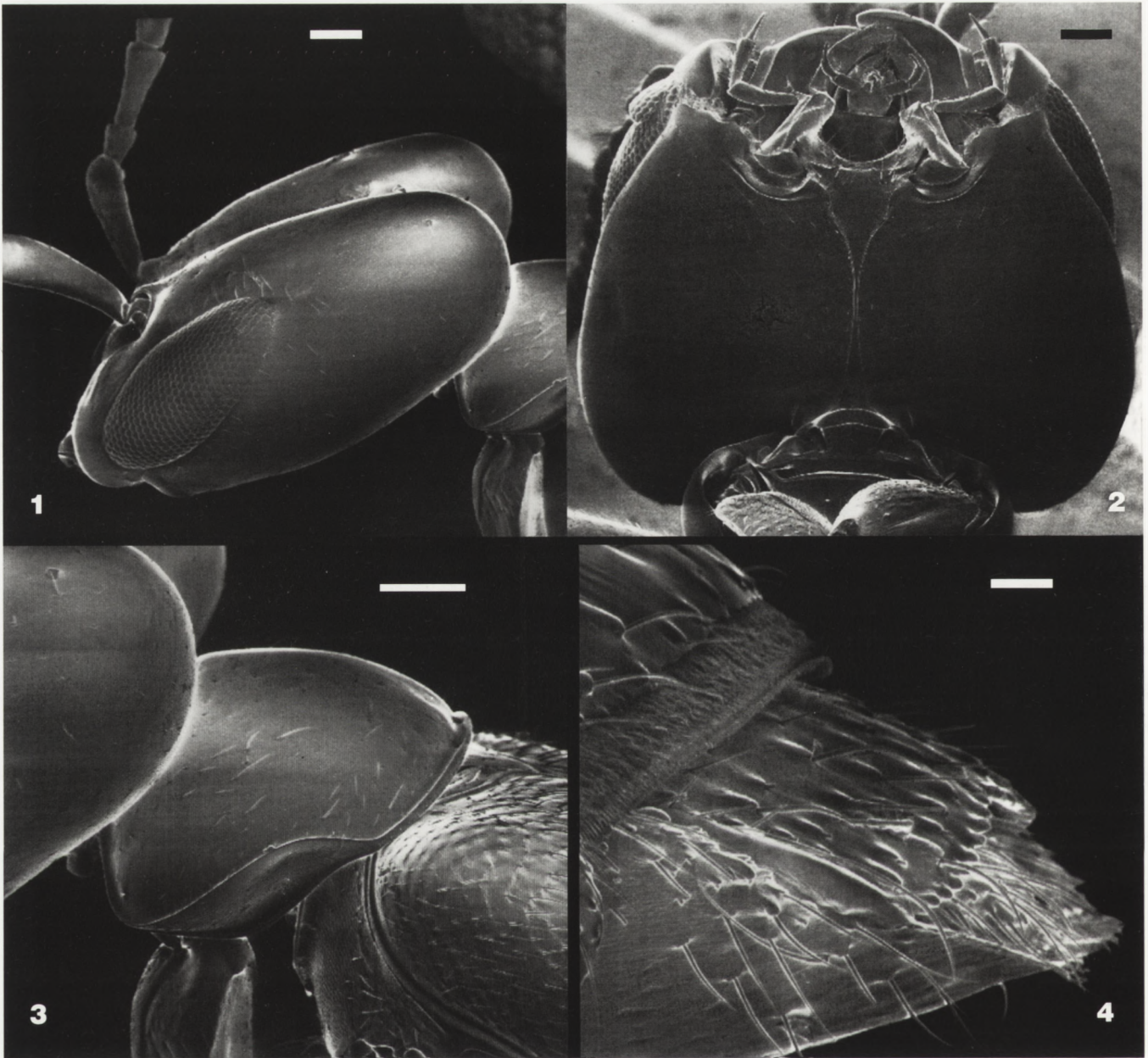
*Strabocephalum* may be easily distinguished from other Zyrasini by the large head with posteriorly bilobed vertex, short, stout asymmetrical mandibles, geniculate antennae with long scape, small prothorax and strongly raised parasternites.

### Key to the species

1. Head with two small posterior lobes. Antennal segments 4–10 wider than long . . . . . 2
- Head with two large posterior lobes. Antennal segments 4–11 longer than wide . . . . . *S. mroczkowskii* sp. nov.
2. Length about 5 mm. Eyes much shorter than tempora . . . . . *S. mirabile* Bernhauer
- Length about 2.5 mm. Eyes about 2 times as long as tempora . . . . . *S. kistneri* sp. nov.

*Strabocephalum mroczkowskii* sp. nov.  
(Figs 1–6)

**Diagnosis.** This species is notable by the shape of the head with strongly prominent vertex and occipital area which form two very large lobes. In addition, it may be easily distinguished from the congeners by the larger size of the body, the elongate antennal segments 4 to 11, the shape



Figures 1–4. *Strabocephalum mroczkowskii* sp. nov.: (1) head, lateral view; scale bar = 200  $\mu$ m; (2) pronotum and elytral base, lateral view; scale bar = 200  $\mu$ m; (3) head and anterior part of prothorax, ventral view; scale bar = 200  $\mu$ m; (4) apical portion of abdomen, lateral view; scale bar = 50  $\mu$ m.

of the frons and genal area, and the dense and coarse elytral punctation.

**Etymology.** Noun in genitive case, honoring Dr. M. Mroczkowski who supported my work many years ago.

**Description.** Length about 7.5 mm. Measurements (in mm): Head mid-length (frontal view, without mandibles) 1.57, maximum length 1.80; maximum width 2.0; pronotal mid-length 0.78, maximum width 1.16; elytral sutural length 0.90, maximum length 1.20, combined width 1.80; length of median lobe of aedeagus 0.67.

Head dark reddish-brown, body blackish, with thoracic and abdominal venter dark brown, abdominal sternite 7

black, except near apical edge, sternite 8 reddish-brown. Femora yellowish with darker tip, tibiae and tarsi dark reddish-brown. Head strongly inflexed. Frons and vertex (Fig. 1) impressed medially, convex, vertex evenly rounded between median impression and lateral edge. Frons impressed and microsculptured between antennal insertion and eye margin. Vertex and occiput strongly prominent posteriorly, forming two very large lobes. Tempora rounded, about as long as eyes. Genae prominent, not lobed, abruptly truncate to form an angle with a conspicuous flat area at each side of mouthparts. Most of frons and vertex lacking microsculpture. Tempora with distinct

microsculpture consisting of longitudinal striae. Genae with indistinct microsculpture. Punctuation on vertex and frons fine and sparse, pubescence oriented toward mid-line. Frons with two pairs of medio-anterior erect setae. Clypeus subangulate, with two pairs of setae oriented anteriorly. Eyes large, slightly prominent, slightly more than 2 times as long as wide (lateral view).

Antennae geniculate. Antennal segments 1 to 3 with medium-sized curved setae oriented apically and large erect setae, following segments with additional extremely short recumbent secondary setae. Scape curved, about 3 times as long as wide, flattened laterally, becoming stouter apically. Segment 2 slightly longer than wide, segment 3 about twice as long as wide. Segments 4 to 11 longer than wide.

Pronotum (Fig. 2) convex, widest anteriorly, narrowed toward basal third, in basal third almost parallel-sided. Anterior and posterior edges arcuate. Lateral edges subangulate. Lateral edges narrowly margined, anterior and basal edges more widely margined. Anterior angles obtuse, not prominent. Disc almost smooth, punctuation irregular, fine and sparse. Pubescence recumbent, oblique. Four evenly large erect setae situated near lateral edge. Mesosternal process truncate, touching metasternum.

Scutellum triangular, slightly vaulted, microsculptured.

Elytra widened apically, with rounded angles, arcuate lateral edges, truncate apical edges. Each elytron with fine adsutural stria extending along scutellum toward base and along apical edge. Humeral area not raised, with a single dark, rather inconspicuous macroseta. Disc rugose, with fine and dense punctuation. Microsculpture absent. Pubescence semi-recumbent, oriented apically.

Abdominal tergites 3 to 6 smooth, without microsculpture. Tergite 3 with numerous very short setae near apical edge. Tergites 4 and 5 each with a pair of erect setae near apical angle. Tergite 6 with two pairs of erect setae near apical edge. Tergite 7 finely rugose, with dense punctuation consisting of coarse, partly elongate punctures, and numerous erect subapical setae; apical rim wide. Paratergites and parastenites with mash-like microsculpture, very finely punctate, bearing extremely short pubescence. Tergite 8 (Figs 4, 5) with crenulate apical edge, numerous subapical setiferous tubercles, and two pore patches. Sternites without conspicuous dark erect setae. Lateral edge of sternite 3 raising above level of parasternite, with angulate, not prominent apical angle. Lateral edge of sternite 4 slightly raised apically, with apical angle extended and acute. Lateral edge of sternite 5 hardly raised, acute, not extended. Sternite 7 with punctuation in shallow, sharply delimited longitudinal grooves. Femora and tibiae with conspicuous, stout erect setae. Aedeagus with median lobe as in Fig. 6.

**Types.** Holotype ♂: Philippines, Luzon, Lagunas, Mt. Makiling, 500m, summit trail, 20. XI. 1995, bamboo leaf litter, leg. I. Löbl (MHNG).

*Strabocephalum kistneri* sp. nov.  
(Figs 7, 8)

**Diagnosis.** This species may be readily distinguished from *S. mirabile* by the smaller size of the body, the much larger eyes, the pattern of the dark setae on the body, the wrinkled abdominal tergite 7, and the shape of the abdominal tergite 8.

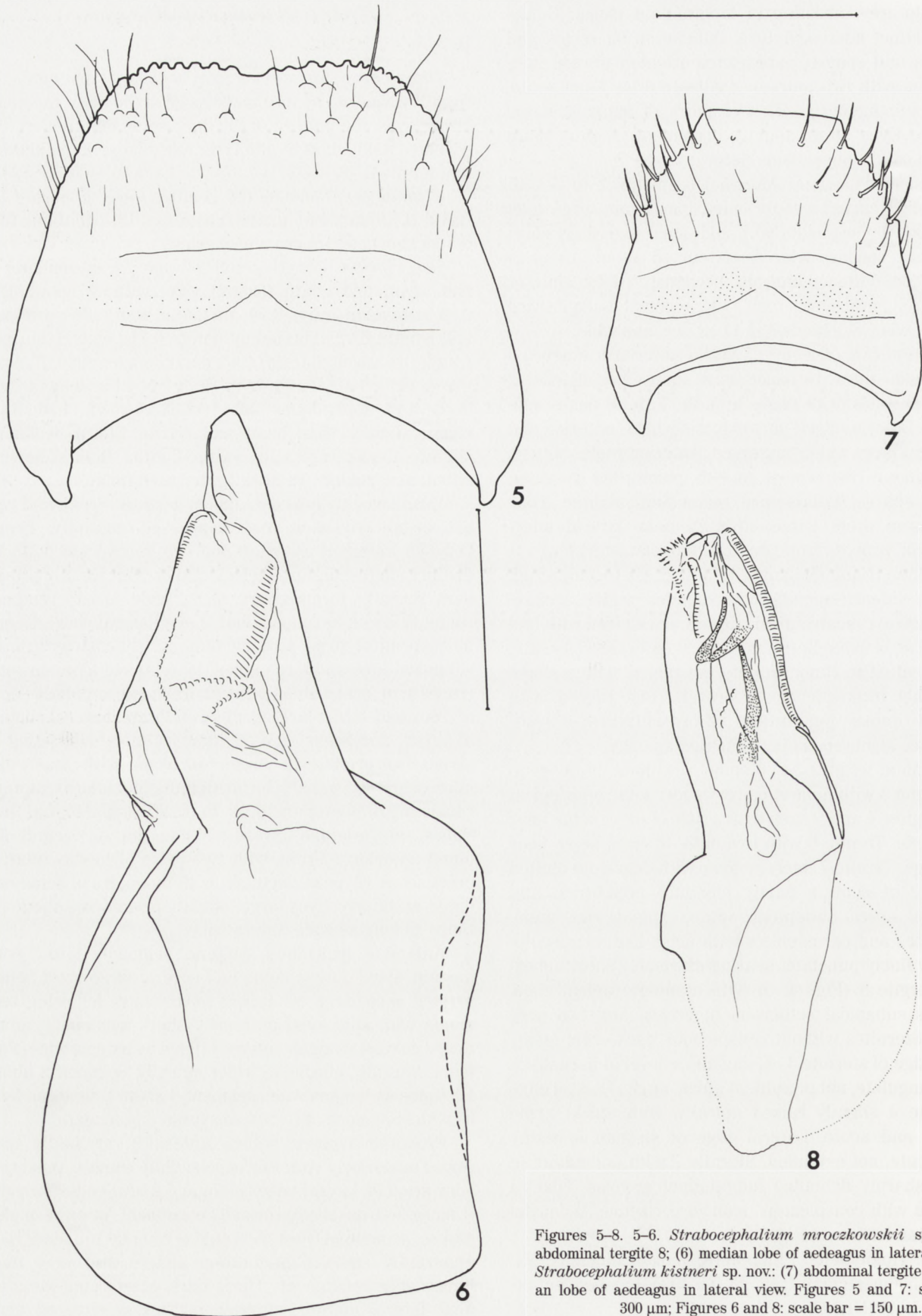
**Etymology.** Noun in the genitive case, honoring Dr. David H. Kistner, who made substantial contributions to a better knowledge of the aleocharines.

**Description.** Length about 2.5 mm. Measurements in mm: Head mid-length (frontal view, without mandibles) 0.63, maximum length 0.70, maximum width 0.97; pronotal mid-length 0.42, maximum width 0.71; elytral sutural length (from scutellar tip) 0.53, maximum length 0.67, combined width 1.18; length of median lobe of aedeagus 0.47. Body and appendages light reddish-brown. Pronotum slightly lighter than head and elytra. Elytra becoming slightly darker apically. Scape lighter than following antennal segments. Femora lighter than tibiae.

Head strongly inflexed, almost vertical. Frons and vertex evenly rounded, not impressed medially. Frons between antennal insertion and eye margin flat, without distinct microsculpture. Vertex and occiput weakly prominent apically, forming two short wide lobes. Tempora rounded, about as long as half of eye (lateral view). Genae in level with clypeus, prominent anteriorly, each with small subapical lobe and large apical lobe. Apical lobe abruptly truncate to form a small vertical area near mandible. Most of frons and vertex lacking microsculpture. Lateral portions of vertex and tempora with microsculpture consisting of striae. Anteriolateral areas of frons with mash-like microsculpture, genal lobes with indistinct microsculpture consisting of micropunctures. Punctuation sparse and fine. Pubescence oriented toward mid-line, that on occiput oriented anteriorly. Frons with two pairs of medio-anterior erect setae. Clypeus angulate, with two pairs of setae oriented anteriorly. Eyes large, slightly prominent, about 1.6 times as long as wide (lateral view).

Antennae geniculate. Antennal segments 1 to 3 with medium-sized curved setae and several large erect setae, without secondary recumbent pubescence, following segments with additional extremely short recumbent setae. Scape curved, elongate, about 3 times as long as wide, flattened laterally, becoming wider apically. Segment 2 about 1.5 times as long as wide, segment 3 about 2 times as long as wide. Segments 4 to 10 transverse, 11 elongate.

Pronotum convex, widest anteriorly, gradually narrowed posteriorly. Anterior edge slightly sinuate, posterior edge arcuate, lateral edges oblique. Lateral edges narrowly margined, basal edge broadly margined. Anterior angles obtuse, prominent. Posterior angles broadly rounded. Disc apparently smooth, punctuation sparse and very fine. Pubescence recumbent. Three dark erect setae situated near lateral margin, anterior macroseta situated near



Figures 5–8. 5–6. *Strabocephalum mroczkowskii* sp. nov.: (5) abdominal tergite 8; (6) median lobe of aedeagus in lateral view. 7–8. *Strabocephalum kistneri* sp. nov.: (7) abdominal tergite 8; (8) median lobe of aedeagus in lateral view. Figures 5 and 7: scale bar = 300  $\mu$ m; Figures 6 and 8: scale bar = 150  $\mu$ m.

anterior pronotal angle notably longer and stouter than posterior setae.

Mesosternal process truncate, touching metasternum. Scutellum subtriangular, flat, smooth.

Elytra widened apically, with rounded angles, arcuate lateral edges, truncate apical edges. Each elytron with fine adsutural stria extending along scutellum toward base, and extending along apical edge. Humeral area not raised, with single dark erect macroseta. Punctuation sparse, very fine. Microsculpture absent. Pubescence semi-recumbent, oriented apically.

Abdominal tergites 3 to 6 smooth. Tergites 3 to 5 with few scattered short erect setae, tergite 5 with an additional pair of long and stout latero-subapical setae. Tergite 6 with four long, stout, dark, erect subapical setae and one pair of much shorter erect latero-subbasal setae. Tergite 7 covered by longitudinal wrinkles, with wide apical rim, four subbasal and six subapical dark stout erect setae arising from elongate tubercles, and with additional fine subapical setae. Tergite 8 (Fig. 7) step-like narrowed apically, with slightly sinuate, not crenulate apical edge, and numerous stout dark setae. Paratergites and parasternites microsculptured. Sternites with dark erect setae conspicuously longer and stouter than other abdominal setae. Sternite 3 raising above level of parasternite, with rounded apical angle. Sternites 4 and 5 not raising above level of respective parasternites, with apical angles almost rectangular.

Meso and metafemora with stout dark erect setae, in addition to normal pubescence. Median lobe of aedeagus as in Fig. 8.

**Types.** Holotype ♂: Pitunan/Philippinen Coll. Boettcher on Staudinger / *Strabocephalum philippinum* Bernh.

Typ (handwritten) / Chicago NH Museum M. Bernhauer Collection (FMNH).

## ACKNOWLEDGEMENTS

My thanks are due to D. H. Kistner, California State University, Chico, and A. F. Newton, Jr., Field Museum of Natural History, Chicago (FMNH), for information which helped me to assign the specimens of *S. mroczkowski*. I thank A. F. Newton, Jr. for the loan of the material of *Strabocephalum* from the FMNH. The SEM micrographs were provided by J. Wüest, Geneva.

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Received: February 5, 1997

Accepted: April 18, 1997

Corresponding Editor: D. Iwan  
Issue Editor: S. A. Ślipiński