

stand on the dorsal surface. Also on the dorsal surface, near the tip, a row of several very small spines. A row of setae at the lateral edge of the clasper from near the tip to the basal third. These setae are short near the tip and longest in the middle. A large seta dorsally near the base. Basal arc triangular. Aedeagus 0.35 mm. long, similar to that of *E. hyrtlilii*, but broader, 6 to 7 times as long as wide at the base. Parameres long and narrow, triangular, with a single small hair at the ventral edge. Teeth of the connecting membrane rather short.

*Abdomen female* (Figs. 15, 16). Tergite 1 + 2 as in *E. hyrtlilii*, but only with a single row of short setae close to the marginal row. The anterior group of long setae is represented by 8 to 10 fine hairs behind the middle of tergite 1 + 2 arranged in two transverse rows. Two groups of 3 to 5 long setae in the middle of the dorsum which sometimes form diagonal rows. Short spines between and behind these setae. Tergite 6 very narrow, bare, with a row of 10 to 12 long setae at the hindmargin, sometimes with a small gap in the middle. Anal segment short, with 3 to 6 setae at the sides of the anus. Sternite 1 + 2 with 3 rows of short setae on the surface, of which those of the anterior row are longest, and a ctenidium of 36 teeth. The short spines of the ventral side of the abdomen rather strong. The marginal rows of sternites 3 to 5 consist of longer setae than the short spines of the surface. The arrangement of longer setae similar to that of *E. africanum*. Sternite 6 divided into two triangular plates, each of which bears 4 to 5 long setae alternating with 4 to 5 short setae at the hindmargin and a row of 4 to 5 rather strong, moderately long setae in a transverse row in the middle of the surface.

*Genital plates* (Fig. 17). Ventral plates broad, rectangular or broadly triangular, with a row of 5 to 7 pegs at the inner dorsal corner. Sometimes an ordinary spine instead of a lateral peg. The two rows of pegs form an obtuse angle and are visible externally, as the lip which covers the genital opening is reduced to two lateral flaps which do not cover the ventral plates. Dorsal plate broad, nearly square. Anal sclerite absent.

*E. latisternum* differs in the male from *E. hyrtlilii* by the form of the claspers. In the female by the arrangement of the long setae on the dorsum of the abdomen, the form of tergite 6, the form of the genital plates and the absence of the anal sclerite. The specimens from Ceylon described and figured by Scott (1914) as *E. hyrtlilii* are *E. latisternum*. This appears also from the description of the claspers of the male which, as Scott states, have 'short thorn bristles along the outer margin towards the apex'. The specimens from Ceylon which were used by Ferris for comparison with *E. philippinensis* and considered by him as *E. hyrtlilii* were also *E. latisternum*, which is the only species known with long spines and hairs on the claspers.

HOSTS AND DISTRIBUTION. JAVA (*R. amplexicaudatus*). Farm caves, Tenasserim, Burma (*Pteropus* sp.). CEYLON (*R. seminudus*).

5. *Eucampsipoda madagascarensis* n.sp.

Length 2.5–3 mm.

*Head and thorax* similar to *E. hyrtlilii*.

*Abdomen* of the male as in *E. hyrtlilii*, except that the short setae of the surface of the tergites are more numerous and tend to form a double row in the middle.

The row of short setae on sternite 4 is continuous and double at the sides in some specimens. The anterior margin of sternite 4 is straight.

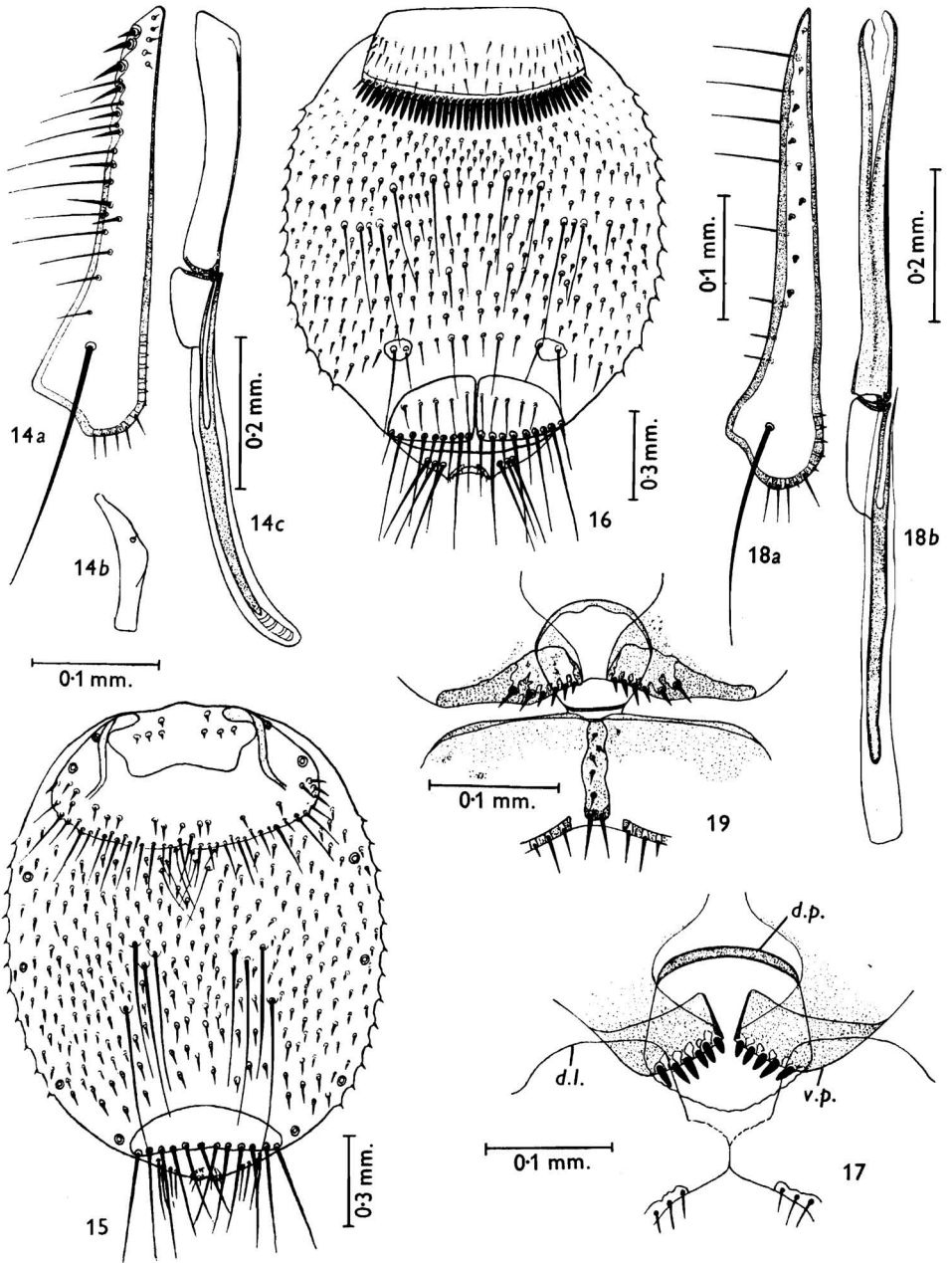
*Genitalia* (Fig. 18). Claspers slightly shorter than in *E. hyrtlvi* (0.38 mm.) and tapering more uniformly. An irregular row of 7 to 9 very small spines and pegs from the tip to the basal third of the clasper on the dorsal side. The first 2 or 3 near the tip are ordinary spines and the others are pegs which become larger towards the base. The pegs are about half as large as those of *E. hyrtlvi*. A row of hairs laterally on the ventral surface which are longer near the tip and shorter basally. A long seta dorsally near the base. Phallobase narrow. Aedeagus very long and narrow, 0.52 mm. long, 12–14 times as long as wide at the base, straight or slightly curved and with a rounded tip. Sleeve around the base of the apodeme long and narrow, not much wider than the apodeme, which is only slightly longer than the aedeagus. Endophallus with only a few narrow teeth. Teeth of connecting membrane rather short. Parameres small, pointed, narrowly triangular.

*Abdomen female*. Tergite 1 + 2 with a row of long setae posteriorly and a single irregular row of short setae, which is interrupted in the middle, close to the marginal row. There are two groups of long setae on the dorsum of the abdomen. Both these groups are not divided into lateral parts as in *E. hyrtlvi*. The anterior group consists of about 22 long thin hairs arranged in 2 or 3 transverse rows. The posterior group consists of 7 to 10 long setae. There are 2 long setae between the anterior group of hairs and the posterior group of setae. The spines of the dorsum are markedly longer posteriorly and the posterior row consists of spines longer than the others. Tergite 6 small, elliptical with 6 to 8 long setae at the hindmargin of which those in the middle are shorter than the others. The arrangement of short spines and long setae on the ventral surface similar to that of *E. africanum*, i.e. the 4 setae on sternite 3 stand close together in the longitudinal direction and the setae of the marginal row of sternite 4 are longer than the short spines of the surface. Anal segment rounded, longer and more projecting than in *E. hyrtlvi* with a few long setae at the sides of the anus. Sternite 6 consisting of two rather small triangular or rounded plates with 4 long setae alternating with 4 shorter setae a short distance before the hindmargin and a transverse row of 2 to 3 short setae in the middle of the surface.

*Genital plates* (Fig. 19). Ventral genital plates triangular with a row of about 6 short spines (not pegs) at the dorsal margin. Dorsal plate broadly rounded, as broad as long. Anal sclerite long, narrow, parallel sided with two longer setae at the end and several short spines on the surface. Dorsal lip narrow, smoothly rounded.

*E. madagascarensis* is closely related to *E. hyrtlvi* from which it differs mainly in the structure of the genitalia and the smaller number of setae on tergite 6 of the female. Speiser (1908) recorded *E. hyrtlvi* from the Comoro Islands. In view of the occurrence of the above new species in Madagascar, it is likely that his specimens also belong to this species and his material should be re-examined.

**HOST AND DISTRIBUTION.** Fort Dauphin, Mananteira, Madagascar, 28 November 1948. 4 ♂♂, 4 ♀♀ on *Rousettus madagascarensis*. (coll. H. Hoogstraal). Type and paratypes in the U.S. National Museum. Paratypes in the Chicago Natural History Museum and the Hebrew University, Jerusalem.



Figs. 14–17. *Eucampsipoda latisternum*. 14, male, genitalia: (a) clasper; (b) paramere; (c) aedeagus. 15, female, abdomen, dorsal. 16, female, abdomen, ventral. 17, female, genital plates. Letters as in Fig. 6.

Figs. 18, 19. *Eucampsipoda madagascarensis* n.sp. 18, male, genitalia: (a) clasper; (b) aedeagus. 19, female, genital plates.