

*Two new African Species of Telenomus (Hym., Proctotrupoidea).* By G. E. J. NIXON, B.A., Department of Entomology, British Museum (Natural History).

THE two species which I am describing as new were received from Dr. Ch. Ferrière, of the Imperial Institute of Entomology, for identification. Both belong to the section of *Telenomus* in which the females have only ten segments in the antennæ. The number of African species now falling within this section is five; all of them are very distinct on account of the male genitalia alone, and, indeed, in one of the species which I am now bringing forward, this structure surpasses, in its exaggerated form, any male copulatory apparatus that I have so far examined in *Telenomus* in its widest sense.

The females, as usual, are much less easy to separate, but I give below a short key to include those of all five species.

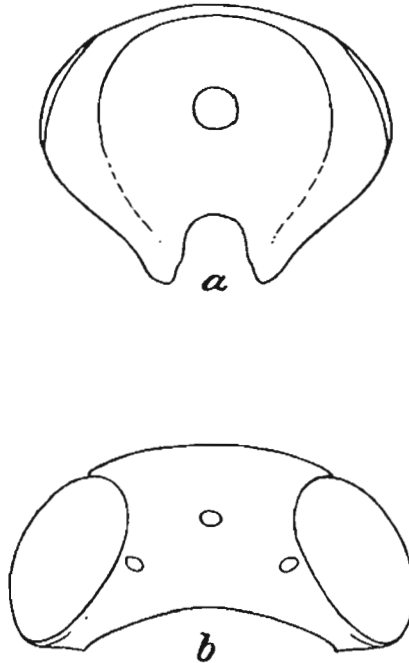
*Telenomus* (♀♀ with 10-segmented antennæ).

1. Segment 4 of the funicle more or less equal in size and width to 5, so that the club is sharply 5-segmented ..... 2.
- Segment 4 of the funicle clearly smaller and narrower than 5, so that the club is not at all sharply 5-segmented. (Spp. with the hind wing very narrow, its fringe at widest part of wing being distinctly greater than half the width of the wing there.) ..... 3.
2. Large sp., 1.5 mm.; legs markedly yellowish; stigmalis markedly long, sharply defined throughout, but pale yellowish. (Sp. with the hind wing broad, its fringe at widest part of wing very distinctly less than half the width of the wing there.) ..... *cybele* Nixon.
- Smaller sp., 1 mm.; legs predominately brownish; stigmalis only rather long, more or less pale brownish ..... *thoas* Nixon.
3. Segment 2 of the funicle markedly elongate, about  $1\frac{1}{4}$  times as long as wide. (Sp. with the vertex falling away very sharply, more or less perpendicularly, to the occipital margin.) ..... *narolus*, sp. n.
- Segment 2 of the funicle not at all, or hardly, longer than wide. (Small spp., at most .7 mm., with the stigmalis of normal length.) ..... 4.
4. Occipital margin having a very wide circumference, so that the vertex behind the posterior ocelli has only a very short declivous surface ..... *anates*, sp. n.
- Occipital margin having a much smaller circumference, so that the vertex has quite a long declivous surface (this is the usual condition in *Telenomus*), especially immediately behind each posterior ocellus. .... *brimo* Nixon.

*Telenomus anates*, sp. n.

In my earlier key (Trans. R. Ent. Soc. Lond. 1935, p. 75) this species comes nearest to *brimo* Nixon, largely because of size and the short stigmal vein. Actually the two species have also the same type of antennæ, i. e., club more or less 4-segmented, though my key contradicts this, for, through error, I describe the antennæ

Fig. 1.



a. Head of *Telenomus anates*, sp. n. (from behind).  
 b. Head of *Telenomus narotus*, sp. n. (from above).

of *brimo* as having a distinctly 5-segmented club. This applies, however, only to *cybele* Nixon and *thoas* Nixon. I give below a figure of the antenna of both sexes of *brimo* (fig. 2, d, e).

*T. anates*, sp. n., appears to differ from *brimo* only in a few details, but these are quite determinative.

♂♀. Antennæ blackish brown (slightly paler in the ♂, and with the scape yellowish). Legs with at least all

the femora predominantly brownish (sometimes paler in the ♂).

♀. *Head* almost exactly as wide as the thorax (measurement includes tegulæ) and, seen along a line perpendicular to a line between the posterior ocelli, almost exactly twice as wide as its greatest length. Head seen from behind different from *brimo* (see key and fig. 1, a). Shortest distance between the eyes fully  $1\frac{1}{2}$  times as great as the width of an eye, as seen from above; the eyes are a little smaller than in *brimo* and the head is smaller in proportion to the size of the thorax. Antennæ (fig. 2, a).

*Thorax* less convex than in *brimo*, more shining, so as to be markedly shining, its sculpture very weak. Fore wings hyaline with a smoky-grey tinge; stigmalis a trifle shorter than in *brimo*.

*Abdomen*: tergite 2 entirely unsculptured except for a row of extremely short costæ at its extreme base; in *brimo* these costæ are slightly longer and medially tend to extend as feeble striations beyond the basal furrow.

♂. Antennæ not at all thickened towards the apex (fig. 2, b). Genitalia (fig. 2, c).

Length, ♂♀, .65 mm. approx.

Type in B.M.

TANGANYIKA TERR. (Moshi) (*A. H. Ritchie*): a large series, comprising both sexes, bred v. 1933 from eggs of a Geometrid moth on *Vangueria* sp.

*Telenomus brimo* Nixon.

1935. Trans. R. Ent. Soc. Lond. p. 78 (genitalia of ♂ and fore wing of ♀ figured).

See also fig. 2, d & e, ♂♀ antenna.

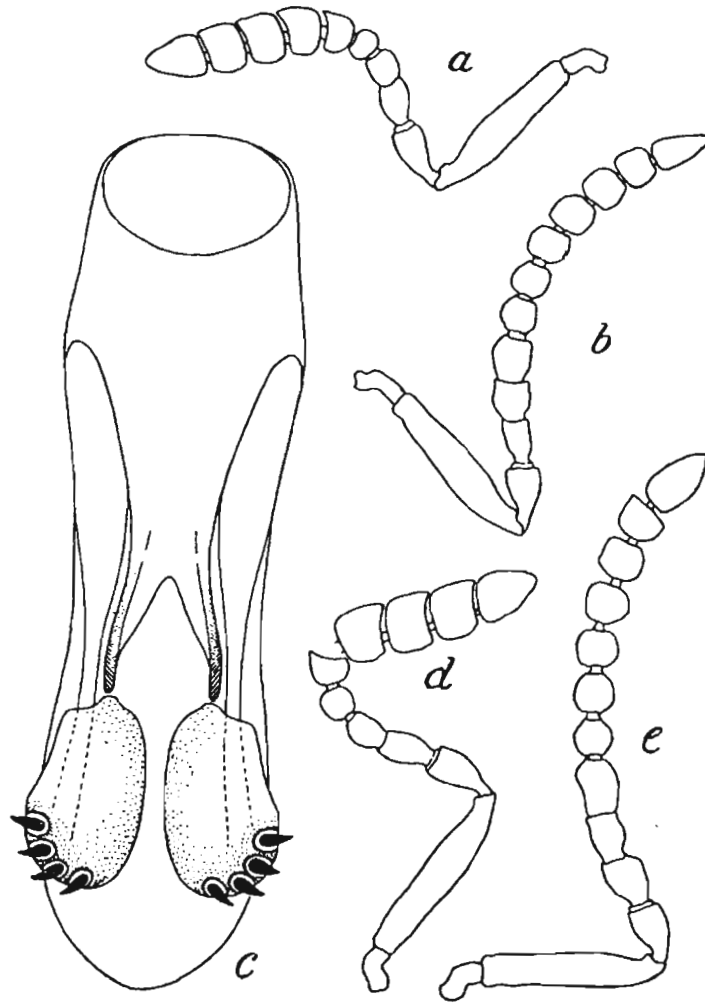
*Telenomus cybele* Nixon.

1935. Trans. R. Ent. Soc. Lond. p. 77 (genitalia of ♂, fore wing and antenna of ♀ figured).

*Telenomus narolus*, sp. n.

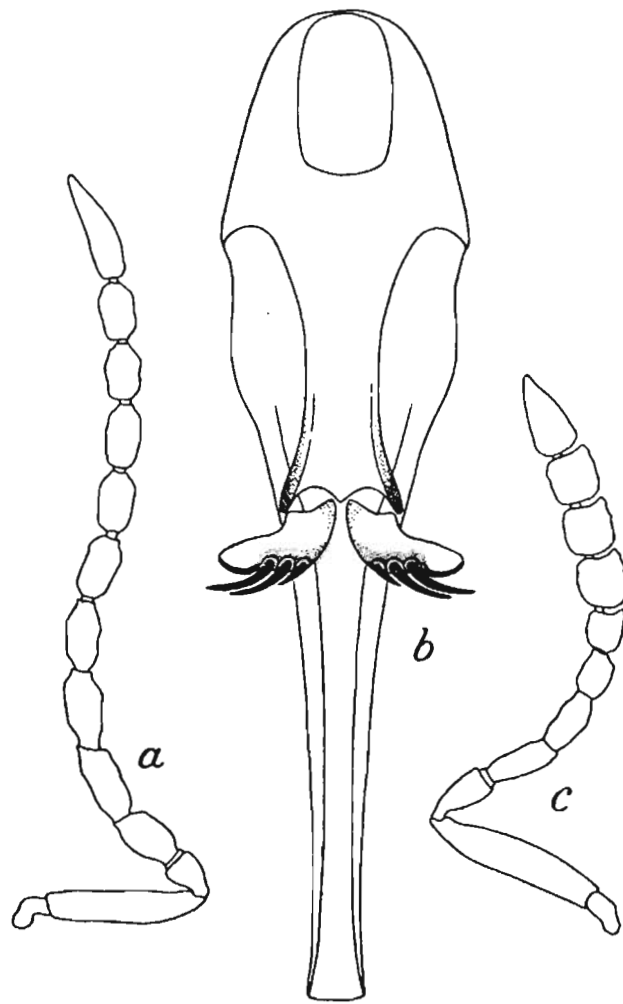
♂♀. Legs obscure honey-yellow, with the femora and tibiæ slightly darkened. Antennæ more or less dark brown with a faint yellowish tinge, the scape paler.

Fig. 2.



*a*, ♀ antenna ; *b*, ♂ antenna ; *c*, ♂ genitalia : all of *Telenomus anates*,  
sp. n.  
*d*, ♀ antenna ; *e*, ♂ antenna of *Telenomus brimo* Nixon.

Fig. 3.



*Telenomus narolus*, sp. n. : a, ♂ antenna ; b, ♂ genitalia ; c, ♀ antenna.

♀. *Head* not at all wider than the thorax (fig. 1, *b*). Frons entirely smooth except for an irregular row of sharply defined punctures along, and close to, the inner eye-margin. Vertex with scattered ill-defined punctures on a vaguely scaly-reticulate ground sculpture; further, the vertex is more prolonged *horizontally* backwards behind the posterior ocelli than usual, then falling away more or less perpendicularly to the occipital margin. Eyes large, the shortest distance between them, on the frons, not at all greater than the width of an eye, as seen from above; further, the eyes occupy virtually the whole lateral surface of the head, so that the surface between the posterior eye-margin and the occipital margin forms, when seen from above, more or less a straight edge almost at right angles to the long axis of the head. Antennæ (fig. 3 *e*): segment 2 of the funicle considerably longer than wide.

*Thorax*: mesonotum markedly flattened, shining and sharply but irregularly scaly-reticulate, the meshes of the reticulation larger and more oblong than in *cybele*, for example. Scutellum almost entirely smooth and shining. Fore wings with the venation almost colourless; stigma decidedly long.

*Abdomen* not much longer than wide, about 3:2; tergite 1 longitudinally costate almost to the apical margin; 2 not longer than its apical width, striate on about basal quarter.

♂. Antennæ (fig. 3, *a*). Genitalia very remarkable (fig. 3, *b*), quite unlike that of any other African *Telenomus* I have so far described.

Length, ♂♀, .9 mm. approx.

Type in B.M.

UGANDA (Kampala) (*C. C. Gowdey*): 17. x. 1915, series of 11 ♀♀, 9 ♂♂.

This species is largely characterized by the shape of the head, and further, in the female, by the slender funicle. The extraordinary genitalia of the male provide, until shown to be peculiar to a species-group, a certain clue to its identification.

*Telenomus thoas* Nixon.

1935. *Trans. R. Ent. Soc. Lond.* p. 78 (genitalia of ♂ and antenna of ♀ figured).