

(petiole + postpetiole).

Plesiomorphic states are given in square brackets following each apomorphy, the plesiomorphy occurring in the alternative group in each case.

1 *Apomyrmini versus Leptanillini + Anomalomyrmini*.

(a) Apomorphies of Apomyrmini.

Antennae clavate (Fig. 15) [filiform in 1b].

Petiole pedunculate (Figs 12, 13) [sessile in 1b].

Tergite of petiole hypertrophied (Figs 12, 13) [of normal size in 1b].

Helcium attached low on anterior face of abdominal segment 3 (Figs 13, 14) [attached at midheight in 1b].

Anterior face of abdominal tergite 3 expanded ventrally, inserted as transverse strip between pre- and poststernites [tergite not expanded ventrally, not inserted between pre- and post-sternites in 1b].

Transverse sulcus present on abdominal sternite 3 (Fig. 14) [sulcus absent in 1b].

(b) Synapomorphies of Leptanillini + Anomalomyrmini.

Spur formula reduced from 1, 2, 2 [formula 1, 2, 2 in 1a].

Petiole tergite and sternite completely fused (Figs 3, 9) [unfused in 1a].

Abdominal segment 3 reduced and isolated from segment 4 by posterior constriction, to form a discrete postpetiole [segment 3 not isolated from segment 4 in 1a].

Abdominal segment 4 tubulate anteriorly (Figs 3, 6, 9, 10) [not tubulate anteriorly in 1a].

2 *Leptanillini versus Anomalomyrmini*.

(a) Apomorphies of Leptanillini.

Median portion of clypeus narrowed and raised (Fig. 11) [broad and flat in 2b].

Metanotal groove absent (Fig. 9) [present in 2b].

Articulatory foramen of petiole in posteroventral alitrunk closed by a floor of thin cuticle (Fig. 8) [foramen open, no cuticular floor in 2b].

Constriction between abdominal segments 3 and 4 almost or quite as narrow as helcium (Figs 9, 10) [much broader than helcium in 2b].

(b) Apomorphies of Anomalomyrmini.

Mandibles with bizarre armament [bizarre

armament lacking in 2a].

Median portion of clypeus sharply marginate laterally (Fig. 4) [immarginate in 2a].

Metapleural gland bulla longitudinal and running forward below propodeal spiracle (Fig. 3) [bulla semicircular and behind spiracle in 2a].

Metapleural trench present (Figs 1, 3; see description of ventral alitrunk) [trench absent in 2a].

Key to tribes and genera (workers)

Note. Keys to males and females which have any real meaning cannot yet be constructed. Apart from the fact that males remain unknown in Anomalomyrmini and insufficiently known in Apomyrmini, too many of those small genera already described in Leptanillini are based only upon the morphological peculiarities of the males of single species. Scanning the available data on males it seems that a number of morphoclines exist in this sex, among which are shortening, broadening and flattening of the head, reduction of venation, elongation and specialization of the genitalia, and location of antennal sockets. Until the mutual relationships of these 'genera' can be examined in detail, and whilst no worker-related males are known, very little can be done. But one point must be stated. I most strongly urge a cessation in the description of vague genera based on isolated males as they tend to increase confusion rather than enlightenment, and create problems that may be decades in the solving. For species-level information on leptanilline males the reader is referred to Petersen (1968), Brown *et al.* (1971) Baroni Urbani (1977), Kugler (1987) and their included references.

- 1 Petiole pedunculate (Figs 12, 13). Differentiated postpetiole absent (Fig. 13) Helcium attached low down on anterior face of abdominal segment 3. (Apomyrmini) *Apomyrma*
- Petiole sessile (Figs 3, 9). Differentiated postpetiole present (Figs 3, 9). Helcium attached at midheight of abdominal segment 3 2
- 2 Mandible with 3–5 teeth, all located on distal half of masticatory margin (Fig. 11). Maxillary palp with 1 segment. Metanotal groove vestigial to absent (Fig. 9). Bulla of metapleural gland rounded, located behind level of spiracle (Fig. 9). Meta-