

examination of these characters is indispensable in order to identify most species of the group adequately. It is sometimes necessary to count the number of longitudinal rugae between the frontal carinae or on the mesosomal dorsum. In addition, the mandibular sculpturation appears to be a valuable character, too, that is relatively constant at species level. However, it is advisable to be careful with this character since one species showed a much higher variability in mandibular sculpturation than all the other species.

Another important diagnostic character is the shape of the petiolar node. Though it is never blocky nodiform, there is a high variability from strongly squamiform (e. g. Figs. 52, 53, 61, 62, 67, 68, 73, 74, 82, 83) to high nodiform (e. g. Figs. 25, 26, 28, 29, 31, 32, 37, 38) observable in the species group. This character is quite helpful to separate species groups, species complexes, and often even species. The postpetiole is also relatively variable from species to species, and can vary from squamiform (e. g. Figs. 73, 74, 82, 83, 94, 95) to cuneiform (e. g. Figs. 52, 53, 64, 65, 67, 68) or rounded (e. g. Figs. 37, 38, 40, 41, 55, 56). Sculpturation of both waist segments proved to be of less diagnostic use since they are unsculptured and shiny in most species.

Also the clypeus is regularly useful since it possesses a pair of good diagnostic characters, as already noted by Bolton (1980). First, the anterior median clypeal margin can be entire and convex (e. g. Figs. 54, 57, 63, 69) or with a moderately to strongly developed median impression (e. g. Figs. 30, 42, 66, 78). Although the latter condition is present in most species it is absent in several smaller species or reduced in a few others. The second important character is the clypeal sculpturation. Most species possess a median longitudinal ruga and some weaker rugae laterally (e. g. Figs. 27, 42, 51, 93), while some other species show an irregular rugulation (e. g. Figs. 72, 84), and rarely the median portion is completely smooth (Fig. 39).

Although it is known that several species of *Tetramorium* show a great intraspecific variability in propodeal spine length (Bolton 1980), surprisingly, it could not be confirmed for most of the *T. weitzackeri* group. In nearly all the examined species it was observed that the length of the propodeal spines in relation to the body size was remarkably stable within a species-specific range and therefore a good diagnostic tool. However, the propodeal spines are strongly developed in most species and only in few cases useful in discriminating between species.

The last important diagnostic character to mention is pilosity. Within the species group it can be observed that most species possess simple, long, erect to suberect hairs (e. g. Figs. 31, 37, 55, 76). However, some species show bizarre modifications in having clavate, pectinate or pinnate (Figs. 34, 35), or flattened and appressed pilosity (Figs. 46, 47), and in some species with simple pilosity standing hairs are absent from one or more body parts (e. g. Figs. 28, 73, 82).

Diagnosis of the *T. weitzackeri* species group

The species of the *T. weitzackeri* species group can be defined by the following combination of characters that separate them distinctly from all other Afrotropical *Tetramorium* species groups:

1. 11-segmented antennae
2. anterior clypeal margin generally with median impression, reduced in some smaller species
3. petiolar node generally squamiform, distinctly antero-posteriorly compressed, in profile much higher than long, and in dorsal view much wider than long; if not squamiform then petiolar node high nodiform but still higher and wider than long, never blocky nodiform with sharply defined angles
4. postpetiole squamiform, cuneiform, or rounded, never nodiform
5. petiole and postpetiole unsculptured in most species, in a few species distinct sculpturation present, gaster always smooth and shiny
6. body hairs usually simple, but distinctly modified in *Tetramorium pinnipilum* (pectinate / pinnate), *Tetramorium rogatum* (clavate), and *Tetramorium zonacaciae* (broad, flattened, and appressed); never regularly branched bifid, trifid nor quadrifid;