

nied by a thick appressed pubescence. In contrast, *Formica* has an additional double row of bristles on the sides of the ventral surface of the hind tibiae (Fig. 9).

The bristles are distinctly separated and thicker than the underlying pubescence and often of the same shape and colour as the terminal bristles. Sometimes their number is reduced, but in such cases the loss is from basal to apical. An entire loss of the bristles is only recognized in some species of the *F. exsecta*-group, but in such cases there is no thick decumbent or appressed pubescence developed.

This character is very reliable. Except for the above mentioned species of the *F. exsecta*-group there are no other exceptions known.

The systematic use of this character also applies above genus-level. Within the Formicinae, this particular *Formica*-like arrangement of bristles is only found in some *Melophorus* spp., many *Camponotus* spp., few *Myrmecocystus* spp. and in most of the Formicini.

*Frontal carinae* (Figs 11–14). The frontal carinae form the lateral limits of the frons. In *Formica* they begin at the level of the anterior portions of the toruli, run backwards past the toruli and frontal triangle, and end near the level of the anterior margin of the eye. They are either parallel or slightly divergent posteriorly (Fig. 11), and sometimes somewhat curved. They always form distinct, sharp crests which are angular and prominent in section (Fig. 12). In contrast, the frontal carinae in *Lasius* are bluntly rounded in section (Fig. 14). In *Lasius* they emerge medially to the toruli where the two toruli are closest set (Fig. 13). They are hardly ever longer than 3× torulus diameter and form only a smooth ridge, without a distinct crest (Fig. 14).

This character is possibly variable at genus-group level. Within *Formica* and *Lasius* there is slight variation present. Nevertheless, within *Formica* there is always a crest on each frontal carina present, whereas this never occurs in *Lasius*.

*Propodeal spiracles* (Figs 15–18). The shape and the position of the propodeal spiracles differ in both genera. The general form of the spiracle in *Formica* shows an oval to somewhat slit-shaped outline, and the inner margin of the annular sclerite is never parallel to the outer (Fig. 15). The spiracles in *Lasius* are round, the inner and outer margins of the annular sclerite always being parallel (Fig. 16). Sometimes spiracles in *Formica* approach a round form, and spiracles in *Lasius* may be slightly oval, but even in these cases they are separable by the configuration of the annular sclerite.

The spiracles are set close to the anterior margin of the propodeum in *Formica* (Fig. 17). In *Lasius* the spiracle almost touches the declivitous face of the propodeum (Fig. 18).