

*Lasius (Chthonolasius) mixtus* (Nylander)

(*Formica mixta* Nylander, 1846; *Lasius mixtus* auctt., 1870-1955; *Lasius (Chthonolasius) umbratus* Wilson, 1955 *partim*.)

Wilson (1955) found by a method of examining two or three workers from a large number of collections from America, Europe and Asia that there was no single character or combination of characters by which he could separate Nylander's *L. mixtus* from *L. umbratus* and consequently synonymised it as an intergrading variation of that species. In general the conventional character used to separate the two forms, namely appendage pilosity, appeared to increase with size in North Europe. Collingwood (1957) pointed out that there were contradictions in detail such as the existence of series of small sized workers with profuse appendage hairs. The chief stumbling block to separating the two forms from a taxonomic point of view was the apparent existence of intergrading series with sparse appendage hairs that could not safely be placed either to the one or the other. A critical examina-

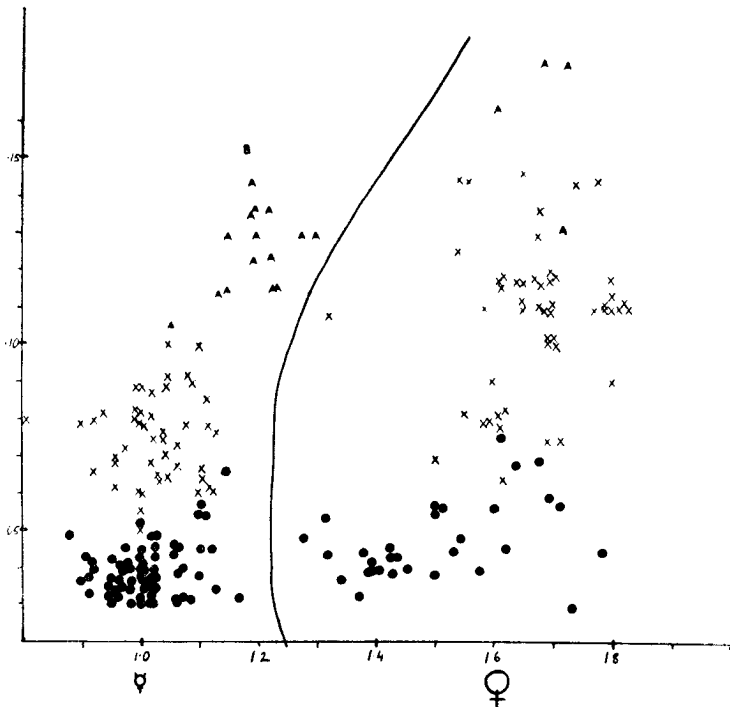


Fig. 1.—Worker gaster hair length (vertical axis) plotted against head width (basal axis).

B=*Lasius bicornis* Foerst.

A=*Lasius affinis* Sch.

X=*Lasius umbratus* Nyl.

●=*Lasius mixtus* Nyl.