

- Postpetiole low and thick; workers with shallow meso-epinotal impression; frons quarter head width (F.I. 25.5, range 24-27); scape longer (S.I. 93); ridge at bend flange-like, less pointed in profile; larger reddish species, rare **schencki** Emery
- 6 Scape at bend simply angled, slightly dilated or with short semi-circular extension; frons wider (F.I. 38); petiole in profile angled and anteriorly concave; subspinal area about as large as that occupied by postero-lateral epinotal lobes; length of worker 4-4.8 mm. **scabrinodis** Nylander
- Scape at bend with more or less extensive lateral development, often massive with a longitudinal ridge running forward from the bend; frons narrower (F.I. 34.3); petiole thicker, more rounded in profile; subspinal area larger than that occupied by postero-lateral lobes; length of worker 4.2-5.5 mm. **sabuleti** Meinert

NOTES ON THE SPECIES

Myrmica rubra Linnaeus, 1758(Syn. *laevinodis* Nylander, 1846 (Yarrow, 1955))

This species is widely distributed throughout Britain and Ireland but does not range so far north or to such high altitudes as *M. ruginodis*. In N. Britain it is confined to river valleys, as in Oyckell, E. Sutherland and in Garve, E. Ross-shire and coastal areas, where it may be abundant as in Galloway (Collingwood, 1953). It is not found on bleak moorland and ascends to 300 m. or more only on limestone pasture, as in the Ingleborough district of NW. Yorks. It is scarce or absent on dry sandy heathland even in S. England and evidently flourishes best in alluvial or moisture retentive soils in sheltered areas. In such places *rubra* may become a dominant species with colonies proliferating freely by nest splitting of queens and workers.

This is one of the more aggressive of the *Myrmica* species and uses its sting freely. Neighbouring colonies will combine to destroy an introduced nest of another species but may also fight among themselves on disturbance. This ant attends both root-feeding aphids and those on the aerial parts of plants, including trees, more consistently than do the other members of the genus. Colonies are normally polygynous with 5-30 or more queens according to the size of the nest, and fresh colonies are usually formed by splitting of the parent nest. Single queens may also found their colonies unaided but seldom do so.

Microgynes sometimes occur. These are queens of normal form but small stature. They occur normally in a form of the allied species *ruginodis*, to be discussed below, but are not known in the writer's experience among the other British species. Tomlin (*in* Donisthorpe, 1927) discovered a microgyne acting as sole queen in a nest at Mathon, Herefordshire. The writer found a colony in a tree stump near Ross-on-Wye in the same county in April, 1953, from which seven microgynes and a number of normal workers were taken. A dealate microgyne was found in September of the same year wandering on the ground near Badsey (Worcs.). These examples measured between 4.3 and 5.0 mm. in length, and at Ross-on-Wye were smaller than the larger workers in the same nest. On the Continent similar microgynes have been recorded by Forel in Switzerland and by Wasmann in Holland (Donisthorpe, 1927), by Sadil (1945) in Czechoslovakia, and by Bibikoff (*personal commun.*) in Switzerland. These