

species. One of the few of interest to British students is the form described by Bondroit as var. *pilosiscapus* which he recognised in specimens from Britain as well as from European mountain areas. Sadil (1951) gives this form full specific status, redescribing it from examples found in mountain areas and peat bogs in Czechoslovakia. This author distinguishes it from *scabrinodis* by the darker colour, deeper sculpture, higher more angled petiole and the presence, in typical examples, of a semicircular extension at the bend of the scape in the female castes; in the male the petiole is stated to be thicker and more rounded than in *scabrinodis* and has a slight anterior concavity. Many British examples, especially from the Scottish Highlands, would qualify for inclusion in this description. Probably the colony tentatively referred to as var. *scabrinodolobicornis* Forel by Donisthorpe (1927) would refer to this form. All the features enumerated above are of the general trend exhibited by *Myrmica* from N. Britain. They are too indistinctly differentiated from the typical form in Britain and too variable even among members of the same nest series to justify separation in the writer's opinion. Named examples from Europe have not been available so that this view can only be regarded as tentative. Sadil's head index measurements, however, fall well within the range he himself gives for *scabrinodis*, while all the differences enumerated are those of degree rather than of kind.

Sadil (1951) has described other *scabrinodis*-like species, including *balcanina* and *slovaca*, both of which have a more or less rectilinear petiole outline from above, approaching that of *rugulosa*. Some of the writer's specimens taken in Worcestershire would approximate to the description of one of these forms but both are, by Sadil's own admission, variable and not consistently different from *scabrinodis*. The males are differentiated by what appear to be small variations in petiole shape. It is not unlikely that one of Sadil's species may be the same as *puerilis* Stärcke (1942) which differs in the male by pilosity characters. Since these authors have concentrated on a different set of diagnostic characters, it is not possible to link their descriptions. According to Wolf's excellent key (1954) to the male castes only of certain West German species *puerilis* is clearly distinguishable from either *scabrinodis* or *rugulosa*.

The variation in scape characters of both *scabrinodis* and *sabuleti* so that there appear to be linking forms has made the distinction between these species more controversial than between other pairs of similar species. Dr. W. L. Brown, in a personal communication to the writer, referred examples of both *scabrinodis* and *sabuleti* sent him from Scotland to the one species *scabrinodis*, stating that in the collections in the Museum of Comparative Zoology the scape characters from most European localities intergraded. In Britain, however, just as Holgersen found in Norway, clear differences in form and behaviour are to be seen wherever the two species occur.

The males are not only distinguished by the size of the scape but also by a consistent difference in pilosity. In *sabuleti* the hairs on the scape and legs are much shorter than in *scabrinodis*. The more massive scape in *sabuleti* females is associated with a narrower frons and the regression lines for frons width on head width in the two species do not overlap. The various differences already indicated in the keys do not appear to vary allometrically and are as apparent in small individuals as in large.