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THE TYPE SPECIES OF THE ANT GENUS *MYRMICA* LATREILLE

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SANTSCHI (1931) drew attention to the unfortunate fact that the genus *Myrmica* Latreille had as type species *Formica rubra* Linnaeus, 1758, an ant whose identity was so obscure that the name could be treated as a *nomen dubium* but for its importance as a generic type. Nylander (1846), Forel (1874) and Emery (1908) in their several dealings with this genus all omitted to include *rubra* Linnaeus as a definite species and Santschi therefore proposed that Nylander's *Myrmica ruginodis* should be synonymised under *rubra* (Linnaeus), the choice having been narrowed down by Emery (1908) to either *ruginodis* or *laevinodis* on account of the statement made by Linnaeus (1767) "*pessime nostratum pungit*" being inapplicable to the other species placed by Nylander in *Myrmica*. Santschi selected *ruginodis* because *laevinodis* was the first named species placed by Nylander in the genus, though, as Stärcke (1951) pointed out, *laevinodis* stings much more fiercely than *ruginodis*; (because of the emphasis on stinging one cannot accept the action of Curtis (1854) who identified *M. rubra* with a species in which the scape of the male antenna was scarcely longer than the terminal segment, i.e. *scabrinodis* Nylander, a species which rarely stings). Now, while Santschi's proposal appeared to put the genus on a firmer footing, it received little attention in Europe and Stitz (1939) retained Nylander's names. In America, however, several authors, including Weber (1947) and Creighton (1950), have followed Santschi, at any rate to the extent of synonymising *ruginodis* under *rubra*, as also have Brian and Brian (1949) in England. For some extraordinary reason no one seems to have considered looking in the Linnean Collection, except Stärcke who informs us (Stärcke, 1951) that some years earlier he had asked Donisthorpe to examine the type of *Formica rubra* for him and had received the reply that it was too dirty for accurate determination but that it was perhaps *scabrinodis*! Stärcke pointed out that under such conditions it would be impossible to distinguish between *scabrinodis* and *sabuleti* Meinert and that if, as generic type, the name *rubra* could not be suppressed, then a neotype should be chosen from Upsala in Sweden which could be readily identified with either *ruginodis* or *laevinodis*. Donisthorpe has my full sympathy, for I tried to examine the specimen myself a year or two ago, presumably under similar conditions of hand-lens and somewhat indifferent lighting! Recently however, conditions regarding the examination of the Linnean specimens have been altered and, through the kindness of the authorities of the Linnean Society, I have been able to have on loan all the specimens of *Myrmica*. These consist of eight individuals mounted on six pins and no specimen carries a label of any kind. I have determined them as follows:—

Pin 1. Winged female = *scabrinodis* Nylander.Pin 2. Winged female (1 wing only) = *scabrinodis* Nylander.Pin 3 (above). Winged female (no head, 1 wing only) = ? *scabrinodis* Nylander.(below). Male = *scabrinodis* Nylander.

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Pin 4 (above). Winged female (3 wings only) = *scabrinodis* Nylander.
(below). Male = *scabrinodis* Nylander.

Pin 5. Male = *laevinodis* Nylander.

Pin 6. Worker (pinned through gaster) = *laevinodis* Nylander.

Which of these, if any, is the specimen of which Linnaeus wrote "*F. testacea, oculis punctoque sub abdomine nigris*" ? Males by their colour are automatically excluded and, judging by Linnaeus's other descriptions, so can be winged females ; the single worker remains the only possibility and it is, I believe, the original specimen, for on the underside of the first gaster segment, immediately in front of the pin (which emerges through the second segment) is a small but sharply defined black spot, insignificant from a taxonomic point of view but sufficiently distinct under a $\times 10$ hand-lens to have caused Linnaeus to draw attention to it in description. (Dark blotches on the gaster are not uncommon in both *ruginodis* and *laevinodis*, but are rarely so black or so sharply defined as the present one.)

A brief description of this specimen will, I think, suffice to show that it cannot be a *ruginodis*, nor in any way intermediate between *ruginodis* and *laevinodis* (except perhaps in colour), however much one may deprecate forming conclusions from single specimens.

Antennal scape gently curved at the base, without lobe or ridge ; epinotal spines short, scarcely projecting further than the postero-lateral lobes, broad at the base, not curved downwards at the tips but directed slightly upward and outward, the distance between the tips considerably greater than the length of a spine, concavity beneath the spine about equal to the postero-lateral epinotal lobe. Sculpture of thorax weak, epinotum transversally striate above the spines, very faintly so between the spines ; petiole angular in profile, curved behind (not flat-topped and abruptly angled behind as in *ruginodis*), very weakly sculptured. Colour testaceous, perhaps a trifle darker in head than average *laevinodis*.

Frontal index = $\frac{\text{max. width of head through eyes}}{\text{min. distance between frontal carinae}} = 2.31$ (*vide* Stårcke, 1927).

Head width/spine length index = 4.25 (*vide* Brian and Brian, 1949) (2.75 for *ruginodis*).

Thus the various speculations as to the identity of *Formica rubra* and the various methods which have been suggested to provide *Myrmica* with a type species prove to have been based on the incorrect assumption that there was no specimen existing which could justifiably be treated as the type. I do not see that any great confusion need arise if this specimen is accepted and I have provisionally labelled it *Formica rubra* Linnaeus, 1758, lectotype. The synonymy of the two species involved is thus :—

1. *Myrmica rubra* (Linnaeus, 1758).
M. laevinodis Nylander, 1846 **syn. n.**
2. *Myrmica ruginodis* Nylander, 1846.
M. rubra auctt, nec Linnaeus, nec Curtis, 1854.

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