

*Myrmica petita* Radchenko & Elmes, sp. n. (fig 5, 11–15)

Material. Holotype female, [India], Kashmir, Yusmar, 2300–2400 m, 6.07.1976, leg. W. Wittmer (NHMB).

Female. Head relatively long, with very feebly convex sides, straight occipital margins and narrowly rounded occipital corners; anterior clypeal margin narrowly rounded and pointed. Frontal carinae short, weakly curved, curving outwards to merge with rugae which surround antennal sockets. Antennal scape weakly curved at base (not angled) with no trace of lobe. Alitrunk relatively long and wide; propodeal spines projected backwards, relatively long, thin and sharp, and slightly broadened at their bases. Petiole with relatively long anterior peduncle. In profile, its anterior surface concave and node appearing subtriangular with narrowly rounded dorsum. Postpetiole appearing subspherical and somewhat higher than wide.

Head dorsum longitudinally rugose and surfaces between rugae densely but not coarsely punctured, appearing more or less dull; clypeus longitudinally rugose but not punctured; frontal area smooth and shiny; mandibles densely longitudinally striated. Scutum densely longitudinally rugulose and surfaces between rugae (exception for lateral parts) densely but not coarsely punctured; scutellum with finer rugulosity and surfaces between rugae smooth and shiny; sides of alitrunk densely but not coarsely longitudinally rugulose, with no punctures. Petiole with fine punctures and postpetiole with even finer punctures, but they appearing more or less shiny. Ventral and occipital margins of head with no hairs (only microscopic decumbent pilosity) but cheeks with few long setae; alitrunk dorsum with sparse, more or less straight, erect to suberect hairs; petiole and postpetiole with longer hairs; scapes and legs with short decumbent to subdecumbent pilosity. Entire body and appendages very dark reddish-brown colour.

Notes. The workers and males are unknown. The ecology is not known. This female of *M. petita* is unusually small (see table 4); it is probably smaller than the queens of all known free-living *Myrmica* species, and differs in this respect from all the other females of *Myrmica* recorded from the Himalaya. The smallest females of certain parasitic species, for example *M. microrubra* Seifert, can have a similar small stature but these usually appear to be intercastes with workers and seldom have the fully developed thorax and wings of this specimen (Elmes, *unpubl. data*). We can not rule out the possibility that it is a social parasite, but we consider that its general lack of “parasitic” characters (e. g. reduced pectinate spurs, ventral lobes to the petiole and postpetiole, relatively wide postpetiole and general hairiness) suggests that it is a free-living species. In which case, it most resembles morphologically, the workers of *M. wittmeri* (described above) which also has exceptionally small workers and an unknown female caste. It differs from *M. wittmeri* workers only by the punctured surface of its head dorsum, and relatively longer propodeal spines. It is not unusual for the sculpture of the heads of *Myrmica* females to be “coarser” than that of their workers; however, we know of no *Myrmica* species where the epinotal spines of the females are relatively longer than those of their workers. Therefore, we considered it best to describe this female as a new species, *M. petita*, which is probably very close to *M. wittmeri*.

**Acknowledgements**

We sincerely thank Daniel Burckhardt and the Naturhistorisches Museum Basle; Barry Bolton and the Natural History Museum, London; Andreas Schulz, Fabrizio Rigato, Maurizio Mei, Juergen Heinze and especially Philip Ward for so generously loaning the unidentified specimens upon which this study was based; also all the other museums listed in the paper, which so readily loaned the type specimens, without which this study could not have been completed. Our study was supported by the INTAS programme (award 94–2072) and the basic science programmes of our Institutes.