

Clypeus longitudinally rugose with finely punctured surface; frontal smooth and shiny; mandibles densely striated. Promesonotal dorsum coarsely reticulate and very finely punctured; sides of pronotum sinuously rugulose; remainder of alitrunk, petiole and postpetiole with no rugae but densely punctured. Body generally with sparse, straight, thick erect hairs; those of lateral margins of head very short and decumbent; legs and scapes with abundant, decumbent hairs. Whole body appearing brownish-black; appendages dark brown.

Notes. Females and males are unknown. The ecology is not known. *M. williamsi* differs from all *Myrmica* species that have antennal scapes weakly curved at their bases and frontal carinae slightly curved outwards to merge with the rugae which surround their antennal sockets, by a combination of very short propodeal spines and an unusual sculpture of alitrunk.

Myrmica nitida Radchenko & Elmes, sp. n. (fig 3, 1–10)

Material. Holotype worker. Kashmir [India], 1 km NE Yehmer Pass, 34°13' N, 75°10' E, 3600 m, 06.08.1978, leg. P. Ward, acc. No 3044; alpine vegetation, under stone (NHML). Paratypes: 9 workers, from the same nest as holotype; 17 workers, 4 females (alate), 2 males, Kashmir, Sanang, 2600–2750 m, leg. W. Wittmer (NHML, NHMB, WARD, SIZK, ELMES).

Workers. Head long with parallel or slightly convex sides, straight occipital margins and rounded occipital corners. Anterior clypeal margin pointed. Frontal carinae short, almost straight and do not curve outwards to merge with rugae which surround antennal sockets. 3rd–5th funicular joints particularly short, only slightly longer than broad. In profile, promesonotum very feebly convex and mesonotum curved down abruptly to propodeum to form distinct, wide and deep mesopropodeal furrow. Propodeal spines extremely short (dentiform in some specimens) and project upwards (but < 45°); they have sharp points and relatively wide bases. Petiole in profile, low with long anterior peduncle; distinctly concave anterior surface meets convex posterodorsal surface to form 90° (or even more acute) anterior edge to petiolar node which nevertheless distinct.

Head dorsum longitudinally rugulose and surfaces between rugae appearing shiny although they finely, superficially punctured. Mandibles finely longitudinally rugulose; clypeus very finely striated but appearing shiny; frontal area smooth and shiny. Surface of alitrunk appearing smooth with superficial punctures on dorsum and short fine striations on sides. Petiole, postpetiole and gaster appearing smooth and shiny. Entire body with straight coarse golden hairs, those of legs and antennal scape decumbent, and those of lateral margins of head short and decumbent. Colour of alitrunk, peduncle, scapes and legs yellowish-red and head dorsum and gaster brownish-red.

Females. Generally like the workers except: Head subrectangular (more square than that of worker), with parallel sides, straight occipital margins and broadly rounded occipital corners; anterior clypeal margin convex (not distinctly pointed); frontal carinae very gently curved outwards and merging into rugae which surround antennal sockets; antennal scapes relatively shorter than those of workers. Alitrunk high and relatively narrow and propodeal spines very short, dentiform, blunt and relatively very broad at their bases. General shape of petiole similar to that of workers, but dorsal surface more broadly rounded. In profile, postpetiole appearing more rectangular than that of workers, with antero-dorsal surface forming an arch with an apex posterior to mid point. Sculpture of head resembles that of workers except for clypeus which more coarsely rugulose. Scutum with longitudinal rugae, scutellum with arched rugae and sides of alitrunk with dense, fine longitudinal striation. Pilosity generally like worker except hairs of body less erect and slightly curved, and those of antennal scape more decumbent. Body colour generally yellowish-red, with reddish-yellow appendages and patches of brownish-red on head dorsum, scutum and scutellum.