

the petiole and postpetiole are punctate (rugose or rugulose in *L. tricarinatus* and *L. neomexicanus*). It is much lighter in color than either of these 2 species and the propodeal spines are poorly developed, as compared to the latter 2 species. It can be separated from *L. rugulosus* as the hairs on the scape are nearly all closely placed on the surface, those of *L. rugulosus* are partially raised, nearly suberect. The dorsum of the mesosoma is mostly punctate, whereas the sculpture of the top of the mesosoma of *L. rugulosus* has fine rugulae. It is similar to *L. neomexicanus*, but differs in being yellow or orange (*L. neomexicanus* is dark or black), the propodeal spines are usually poorly developed, consisting of tiny angles (small, but well developed spines in *L. neomexicanus*) and the subpeduncular process consists of an elongate lobe (tiny tooth in *L. neomexicanus*). *Leptothorax carinatus* has fine striolae on the dorsum of the head, and has a well-developed subpeduncular tooth, and seems to occur in more mesic sites. *Leptothorax neomexicanus* has at least part of the dorsum of the head finely punctate, the subpeduncular process is poorly developed, and is generally found in more arid sites.

Biology: This species nests beneath stones, with populations ranging between 29-182 workers (Cole, 1958b). Nests are monogynous (Frumhoff and Ward, 1992). All of the nests we have found have been beneath stones. Nests occur in habitats ranging from desert grasslands, to juniper forests with cholla to desert riparian sites up to pine forests. This species is common in the Chisos Mountains, TX (Van Pelt, 1983), and in Wyoming (Wheeler and Wheeler, 1988). Sexu- als were in nests from June to August.

***Leptothorax (Myrafant) chandleri* new species**

Figs. 35 & 99; Map 11

Species complex: *nitens*

Diagnosis: This is a small, light brown species with a 12-segmented antenna, in which the apex of the petiolar node is very sharp. The dorsum of the head is punctate and striate, except for a central strip, which is smooth and shining. The mesosoma, petiole and postpetiole are completely punctate, with a few rugulae on the dorsum of the mesosoma (Fig. 35).

Distribution: Known only from type locality in northern California (Map 11).

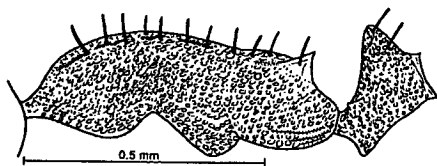


Fig. 99. Mesosoma and petiole of the holotype worker of *Leptothorax chandleri*.