WILLIAM L. BROWN



STUDIES OF NEVADA ANTS. I. NOTES ON VEROMESSOR LARIVERSI M. R. SMITH AND A DESCRIPTION OF THE QUEEN (HYMENOPTERA:FORMICIDAE).

A. C. Cole

Department of Zoology and Entomology The University of Tennessee, Knoxville

Veromessor lariversi M. R. Smith was described recently from workers collected in Washoe County, Nevada (Smith, 1951). The type nest was in sand. Inasmuch as other data pertaining to nest characteristics and habitat have not been published and may be unknown, the writer wishes to make available the following notes as well as to describe the female caste.

While studying Nevada ants during the summer of 1954,1 I discovered colonies of lariversi in two localities of the state. In a sandy, semidesert area of Churchill County, along the first unimproved road south of Silver Springs Junction and 0.9 mi. SE. of federal highway Alt. 95, more than fifty nests were observed. Large series of workers were taken from twenty-seven nests in one of which a queen was found. Males and alate females were not present. Each nest was marked by a small (5.0 cm.), shallow, sand crater which consisted largely of very fine, dry sand but with some coarse sand (or small pebbles) surrounding and covering the nest entrance. There was no activity of the ants apparent outside of the nest during the afternoon period of study. Workers were estivating in brood chambers approximately eighteen inches beneath the soil surface. When dug from their nests, the workers were sluggish of movement.

The other area at which nests were observed was near Round Mountain, Nye County, at a point 60 mi. N. of Tonopah, on state route 8 A, at an elevation of 5,900 feet. One very populous colony, comprising more than 1,000 workers, was studied. The nest was on a slight slope, covered an area of about four square meters, and was marked by nine, small, uncovered entrances without surrounding craters. The galleries formed a labyrinth in the very hot, dry, compact sand and extended to chambers approximately twenty-two inches from the soil surface. From a study of 800 workers collected from the nest, the size range of total length of dried alcoholic specimens varies from 3.9 mm. to 8.5 mm.

 $^{^1\}mathrm{With}$ the aid of a grant from the Penrose Fund of the American Philosophical Society.

The nests contained no seeds and there was no circlet or scattering of chaff around the entrance. From this evidence, one may conclude that *lariversi* is probably not a seed-feeding species, at least in the localities at which the nests were found. Bits of dead, dried ants of other species were in several nest chambers.

Living workers of *lariversi* are soft-bodied² and easily damaged by other than careful handling. They can be recognized readily in the field by the light tan head and thorax and darker gaster and by their slow gait which reminds one of that of *Myrmica*. They are inoffensive ants and apparently make no defense of their colonies.

There follows a description of a nest queen.

Veromessor lariversi M. R. Smith

Female (nest queen, Cole Coll. Nev- 352)

Length, 9.4 mm.

Head, similar to that of worker, but tip of scape just reaching posterior corner of head, hairs on scape less erect, rugae especially on frons and vertex coarser, posterior border with prominent foveae, and frontal triangle and median lobe of clypcus less shining.

Thorax with the entire dorsum strongly shining, smooth, and finely shagreened; sides longitudinally rugose, except for mesothoracic sternites which are largely smooth and shining; basal face of epinotum with a few transverse rugulae which are not prominent; declivity of epinotum smooth and shining. Dorsum with numerous, long, sharp-pointed hairs of uneven length; hairs on sides very few except for the anterior border of sides of pronotum where they are more numerous; hairs on legs abundant and suberect except on the flexor surface of femora where they are erect and longer. Epinotal spines robust, broad at base, blunt at tip. Petiolar node rather low, its superior border rounded, its apex and posterior face with very long, coarse, backwardly directed hairs. Postpetiole more than half again as broad as petiole and irregularly covered with long hairs of uneven length, those along the posterior margin being longer, broadly curved, and backwardly directed. Petiole faintly shining and shagreened, the apex and posterior face of node coarsely granulate and rough, the sides of the posterior surface of node with a few vertical rugules. Postpetiole shagreened, smooth, and faintly shining.

Gaster subopaque; with abundant, evenly spaced, rather coarse, blunt hairs of medium length on most of the first segment, longer and sharper along posterior margin of first segment and on all of remaining segments.

Color of head a dark ferrugineus, the frons, vertex, and clypeal carinae darker, the antennal funiculi, clypeus, mandibles (except teeth), and entire venter of head lighter; mandibular teeth a very dark, reddish brown; thorax, petiole, and postpetiole a dark reddish brown, the scutum infuscated anterioventrally and dorsolaterally; legs a light tan; gaster a dark tan except for the basal third of the first segment which is much lighter.

Differs from the female of *V. pergandei* (Mayr) in the lighter color, the shorter antennal scapes, the untoothed median lobe of the clypeus, the lack of prominent anteriventral tooth on the peduncle of the petiole, and the subopaque (instead of shining) gaster.

LITERATURE CITED

Smith, M. R. 1951. Two new ants from western Nevada (Hymenoptera, Formicidae). Great Basin Naturalist, xi:91-96.

²This is especially true of the gaster.