

LITERATURE CITED

- Creighton, W. S. 1934. Descriptions of three new North American ants with certain ecological observations on previously described forms. *Psyche*, 41:189-193.
- Creighton, W. S. 1951. Studies of Arizona ants. 2. New data on the ecology of *Aphaenogaster huachucana* and a description of the sexual forms. *Psyche*, 58:89-99.

STUDIES OF NEW MEXICO ANTS. III. THE PONERINES AND DORYLINES (HYMENOPTERA: FORMICIDAE)¹

A. C. COLE

The University of Tennessee, Knoxville

This short paper is the first of a series which will be concerned with the species and subspecies of ants collected by the writer in New Mexico during the summers of 1951 and 1952. The collections include the following forms of the subfamilies Ponerinae and Dorylinae.

SUBFAMILY PONERINAE

Amblyopone pallipes (Haldeman). No colonies of this species were found, but two solitary specimens, one a worker and the other a dealate female, were taken. The worker was collected from the surface soil beneath a large stone at the mouth of Sapello Canyon, at an elevation of 7,500 ft., near Beulah, on a moist, rocky slope with scattered, large yellow pine. The stone was imbedded in dense pine duff. The queen was taken from under a large, flat stone in a moist grassy meadow in Cimarron Canyon, 5½ mi. W. of Cimarron, at an elevation of 6,700 ft.

Ponera trigona opacior Forel. Five small colonies were collected from beneath stones in Cimarron Canyon, 5½ mi. W. of Cimarron, at an elevation of 6,700 ft. Three were in an open, very moist, grassy meadow and two were in a moist, densely shaded area near a stream.

SUBFAMILY DORYLINAE

Ecton opacithorax Emery. Colonies were found under stones at Little Tesuque Canyon, Hyde State Park, 7,600 ft., in a flat, open area with bordering pine and spruce; 7 mi. W. of Socorro, 7,000 ft., in very dry, stony semi-desert; 9 mi. W. of Hope, 5,100 ft., on a dry grassy slope with stony soil; 15 mi. W. of Hope, 5,300 ft. on a very dry level area with bunchgrass and cacti; and 10 mi. S. of Mountainaire, 6,650 ft. in dry desert with juniper, cacti, and Russian thistle. The largest colonies were at the lower elevations.

Ecton nigrescens (Cresson). One nest was beneath a stone 20 mi. W. of Hope, 5150 ft., in a dry, rocky, level area with bunchgrass, cacti, and yucca.

In view of the intensive collecting that was done over most of the state, it seems evident that the ponerines are of uncommon occurrence and may have a very limited distribution in New Mexico. The dorylines, on the other hand, are represented chiefly by *Ecton opacithorax*, which appears to have a rather wide distribution and to occur in considerable numbers in favorable habitats. Several to many colonies of this species were found at the localities listed, and as can be

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noted they had an elevational distribution of from 5,100 to 7,600 feet.

BRACHYLAIMA DOLICHODIRUS

(Concluded from page 42)

- (Leidy, 1847) n. comb. (Trematoda: Brachylaemidae). *Jour. Par.*, 35 (5):513-533.
- Sinitsin, D. T. 1931. Studien über die phylogenie der Trematoden. V. Revision of Harmostominae in the light of new facts from their morphology and life history. *Ztschr. f. Parasitenk.*, 3 (4):786-835.
- Travassos, L. 1928. Fauna helminthologica de Matto Grosso. [Span é French rendition (p. 343-372)] *Mem. Inst. Oswaldo Cruz.*, 21 (2):309-341.
- Witenberg, G. 1925. Versuch einer Monographie der Trematodenunterfamilie Harmostominae Braun. *Zool. Jahrb. abt. Syst.*, 51:167-254.
- Yamaguti, S. 1933. Studies on the Helminth fauna of Japan. Part I. Trematodes of bird, reptiles and mammals. *Japan Jour. Zool., Tokyo*, 5:1-134.

CHECKLIST OF TENNESSEE DIATOMS

(Concluded from page 80)

- Silva, H., and A. J. Sharp. 1944. Some algae of the southern Appalachians. *Jour. Tenn. Acad. Sci.*, 19:337-347.
- Whitford, L. A. 1943. The fresh-water algae of North Carolina. *Jour. Elisha Mitchell Sci. Soc.*, 59:131-170.
- Wolle, F. 1894. *Diatomaceae of North America*. Bethlehem, Pa.