AN ANTS'-NEST COCCID FROM NEW MEXICO.

BY J. D. TINSLEY, MESILLA PARK, N. M.

Phenacoccus solenopsis, n. sp.

Adult ♀.—Length, 5 mm.; width, 3 mm.; many are smaller than this, but this seems to be the average size of the adult containing eggs. Colour yellowish-gray, although they appear light gray, from the mealy secretion which covers the body.

Shape, ellipsoidal, dorsal surface quite convex, ventral surface flat, extremities rather pointed. Segmentation quite distinct to naked eye. Extremely short lateral appendages, little projections just visible; caudal appendages a little longer.

Legs and antennae pale brown.

Dorsum has no bands, marks or ridges. Antennae (fig. 6) of 9 segments; segment 2 longest, one-third longer than 9, which is next; segment 3 next longest and about three-quarters the length of 2; segment 1 usually next, although it is sometimes longer than 3, and sometimes sub-equal with 5; segment 4 is shorter than 5; 5 is usually shorter than 3, but is always appreciably longer than 4, 6, 7, or 8; 6 and 7 usually sub-equal; 8 often sub-equal with 6 and 7,, but usually shorter.

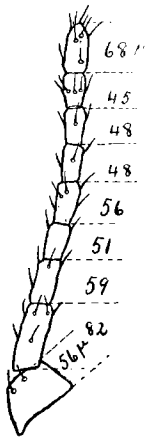

FIG. 6.

Formula 293 (15) 4 (67) 8. Segments of antennae with moderately stout hairs, segments 1, 4, 6, 7 and 8 having one ring and the others two or more rings of hairs. See figure of antenna.

Legs.—Femur fairly stout, being nearly half as wide as long (width 116 μ, length 282 μ), surface bears numerous bristles; tibia fairly stout (width 42 μ, length 282 μ), equal in length to the femur, bears numerous fairly stout spines; tarsus conical, not quite one-half the length of the tibia (length 105 μ), several spines and a pair of long, slender digitules; claw rather small (length 34 μ), a pair of fairly stout, knobbed digitules.

Anal lobes and ring normal.

Ovisac.—The one ovisac which I have found was on the stem of *Kallstroemia brachystylis,* Vail., and was about 7 mm. long, 4 mm. wide, and rather loose in texture.

Eggs and newly-hatched larvae pale yellow; male as yet unknown.

Habitat.—In nests of *Solenopsis geminata,* Fab., about the roots of

Boerhavia spicata, Choisy, and of *Kallstroemia brachystylis,* Vail. These plants grow on the sandy mesa, in the atriplex belt, and on digging around their roots one is apt to find a nest of this ant; and on the roots, either just at the surface or up to the depth of an inch below, the Coccids are found. I have also found a few of them on the stems of *K. brachystylis,* which are prostrate. Found October 15th, 1897, on grounds of the N. M. College of Agriculture and Mechanic Arts.

Remarks.—This Coccid would at first thought be taken for *Phenacoccus helianthi,* Ckll,. which occurs in the same locality and is found quite abundantly in early spring on a *Phacelia,* sp., but they differ in the following respects: *P. helianthi* has the caudal and lateral filaments quite prominent, and there are well-marked dorsal ridges; all these are absent in this species. In *helianthi,* segments 2 and 3 of the antennae are usually longer than in this, 2 being about 90 μ, and 3, 80 μ, which is considerably longer than the third in this species; 9 is about the same length in both species. The formula of *helianthi* is 239 45 16 (78). This species is also broader and thicker in proportion to its length.

The ovisac of *helianthi* is also much more compact in texture than in this one. From *P. Americanae,* King and Ckll., it differs in having the legs and antennae much larger, and in having ninth joint shorter than either 2 or 3.

This is the first Coccid found associated with ants in New Mexico.

BOOK NOTICE.

STORIES OF INSECT LIFE.—By Clarence Moores Weed. Ginn & Company, Publishers, Boston, U. S. A., and London; pp. 54, with many illustrations. Price, 25 cents.

The title indicates the nature of the book, and no one will mistake the figure of the well-known "Mourning Cloak" butterfly on the front cover, even though no attempt was made in the way of colour. This is for the young people, and just the thing for boys and girls who are romping and playing over the fields and meadows, securing that most important element in an education, health. The insects treated of are the most common, and this is a great advantage, because it is usually the things that are the nearest to us that we know the least about. Get the children to observe the common things carefully, and they will be all the better prepared to look after the uncommon, later on in life. I only wish that some philanthropist would buy up the whole edition of this work and present them to the school children of the country. Surely it would help to make better men and women of many boys and girls, and open up to them a world of wonders that are to be seen by any, no matter how lowly. provided they only know how and where to look. F. M. W.

Mailed February 4th, 1898.