

NOTES ON THE DODDER GALL WEEVIL, *SMICRONYX SCULPTICOLLIS* CASEY

HARRY B. WEISS AND ERDMAN WEST

New Jersey Department of Agriculture

Numerous galls were noted on dodder, *Cuscuta cephalanthi* Eng., at Monmouth Junction, N. J., during the first part of August. Upon collecting and cutting some of the swellings open, several beetles were obtained. At this time most of the galls contained larvæ and a few pupæ. The adult was identified as *Smicronyx sculpticollis* which identification was confirmed later by Mr. C. W. Leng. During the last of August quite a few of the galls contain adults nearly ready to emerge; in fact a few beetles will have emerged by this time. However, most of them leave the galls during the first half of September and later in central New Jersey, emergence taking place through a circular opening in the side.

Each gall is single celled and consists usually of a broadly fusiform or subglobular enlargement of the peduncle of the flower cluster, which normally is comparatively thick and fleshy. (Text figure 1.) Many galls were noted which appeared to be enlarged nodes. The completed galls were for the most part subglobular in shape and about four to six millimeters in diameter, while the younger ones were broadly fusiform as a rule. In a few cases the galls were quite irregular due to having been pressed out of shape by contact with the host of the dodder or to having been constricted by the dodder itself. The galls are light yellow to orange in color, a few being somewhat greenish.

LARVA. Length about 2.25 mm. Form subcylindrical, slightly curved, tapering slightly at both ends; sparsely hairy, hairs short; color light yellow, head light brown. Head small, subcircular, slightly depressed; collum absent; epicranial halves separated dorsally by a very faint median suture; front triangular; gula indistinct, membranous; ventral mouth parts fleshy; clypeus and labrum distinct, former transverse; antennæ minute almost obsolete; ocelli absent. Mandibles of biting type, broad across base, bifid at tip with a comparatively minute tooth below the two terminal ones. Maxilla fused with labium to near apex; lacinia simple, fringed with chitinous hairs on inner surface; galea absent; maxillary palpi two-jointed, labium fleshy with

mentum and submentum fused, indistinct; labial palpi one jointed. True legs absent indicated by ambulatory tubercles. Thoracic and abdominal segments each with three dorsal plicæ. Cerci absent. Anal segment wart-like.

PUPA. Length about 2.25 mm. Light yellow, oval. Head and beak bearing several minute hairs. Prothorax dorsally bears a row of about twelve distantly placed chitinous hairs on anterior, lateral, and part of posterior edges; a pair of similar hairs on middle dorsal portion of prothorax; mesothorax with a pair of shorter chitinous hairs arising near posterior lateral edge; metathorax with a similar pair arising from middle lateral portion; each abdominal segment with a transverse dorsal row of distantly placed chitinous hairs; abdomen terminated by a pair of outwardly directed chitinous spines. All hairs arising from tuberculate bases.



Galls on the Dodder, *Cuscuta cephalanthi*

ADULT. *Smicronyx sculpticollis*. This was described by Casey from Indiana, Virginia and Texas. (Ann. N. Y. Ac. Sci. VI, p. 403, 1892). According to Blatchley and Leng (Rhynch N. E. Amer., p. 218) it is known to occur in New Jersey, Long Island, District of Columbia, Illinois, Kansas and Iowa. In Smith's Insects of New Jersey it is recorded from Clementon, August 9, and Sea Isle City, June 11. Blatchley and Leng state that this species is distinguished from its nearest allies by the small densely punctured thorax, narrow hair-like scales

and almost wholly dull red elytra. Many of our specimens had black elytra except for a pale, reddish-brown, broad stripe extending from humerus to apex. The extent of the black or reddish-brown areas appears to vary slightly. It was noted that immature beetles were almost wholly reddish-brown, the black first appearing along the suture and later spreading laterally.

In Rhynchophora of North Eastern America under the species *Smicronyx tychoides* Lec., (p. 218) there appears the statement, "said to have been bred from galls on dodder, *Cuscuta gronovii*, by Zabriskie" and it is quite probable that this record refers to *sculpticollis* especially as "specimens named *tychoides* in the Leng collection from Long Island proved to be *sculpticollis*."

OHIO ACADEMY OF SCIENCE

ANNUAL MEETING

At a meeting of the Executive Committee, held on December 17th, it was decided to hold the next Annual Meeting of the Ohio Academy in Columbus, April 14th and 15th, 1922. The preliminary notice of the meeting will be mailed by the Secretary about the first of March.

EDWARD L. RICE,

Secretary of the Academy.