

DESCRIPTIONS OF SAWFLY LARVÆ.

BY CHESTER YOUNG, ELLENVILLE, N. Y.

Macroxyela ferruginea.—Larva is about 1.5 cm. long and caterpillar-like, green with yellowish-white markings, prolegs on every abdominal segment, anal area smooth and concolorous with the body, antennæ six jointed. Feeds on *Ulmus americana*.

Head green; antennæ green, except three brown distal joints and a brown ring around the middle of the second and third joints; mandibles rufous at the tips; ocelli black. Body green, with the following parts yellowish-white: two dorsal stripes, a substigmatal line extending along the substigmatal fold of skin from the head to about the third or fourth abdominal segment, and the tubercles; a ventral line of pearly white extending from head to 4th abdominal segment. Segments four annulated, with the tubercles on the normal abdominal segments arranged as follows: none on the first annulation, three on the second annulation, four on the third annulation, and three on the fourth annulation. They are arranged in three general transverse rows. The substigmatal fold of skin with many rudimentary tubercles; dorsal tubercles with many and lateral ones with few to no setæ; setæ very short; two conical projections, with many setæ just above the anus. Legs greenish-white, except for basal joint, which is concolorous with the body.

Cocoon a light shell of sand held together by a few strands of silk.

Larvæ sit curled around the young leaves or terminal buds with the front part of their body free. They feed by eating a line across the bunch of leaves, thus truncating them all. A single brood each year, the adults appearing in April. A few days before the appearance of the adult the larva which has lain in the larval state in its cocoon until this time changes to an active pupa, which bursts its cocoon and comes forth without shedding its skin and exists then as an active pupa at the surface of the ground from twenty-four to forty-eight hours. It then sheds its skin and becomes the true imago. These breedings have proven the, hitherto considered, distinct species of *Macroxyela ferruginea* and *Macroxyela infuscata* to be identical. The former has consisted of the females, while the latter has consisted of the males. Larvæ enter the ground about June 1st.

Pteronus fulvricus.—Young larva jet black and possessing a lateral row of yellow spots; anal area black.

Intermediate stage has head black and body green with yellow spots and a dorsal band of black; venter light with black tubercles; prolegs