LIFE-HISTORY OF LYDA FASCIATA (NORTON), FAM. TENTHREDINIDÆ.

BY RICHARD F. PEARSALL, BROOKLYN, N. Y.

Full-grown larvæ were taken on wild cherry (Prunus) in the latter part of September, 1901. Placed in a box over earth, they fed but a day or two, turned a deep green, and, entering the earth two to three inches, formed rounded cells, in which they remained as larvæ all winter, transforming to pupe just before emergence. They are gregarious, remaining in their web, filled with its mass of exuvia, until full-grown, when, as their growth is completed, individually they drop from it and enter the ground. One which was kept under observation formed a pupa on April 28th, and emerged eight days thereafter. The pupal skin is very thin, showing distinctly the parts of the enclosed imago. This broad commenced emerging April 25th, and a few individuals are still coming out, May 31st. In the earlier days the males predominated, later the Altogether, 134 males and 123 females have appeared. Copulation took place at once, the pair remaining in coitu from three to five hours. One female (the first observed) was furnished with a spray of wild cherry, and on the night of the 13th of May deposited 76 eggs on the under side of a leaf, extending from the tip half its length. They were laid side by side, in rows of five to seven, from midrib to margin, and in little slits cut in the epidermis of the leaf, being attached by a gummy secretion.

 $\it Egg.-Size 1.5 x.5 \, mm.$ Sordid white, glossy, and apparently smooth, opaque.

Hatched May 22nd, turning to a bright yellow the day before. The young larvæ do not eat the egg shells.

First Stage.—Head round, shining, black at vertex, face and mouth-parts paler, eyes black. Body dull orange, deeper along an enlarged substigmatal wrinkled fold, which extends the entire length, giving the body a flattened appearance. Thoracic feet and anal plates black. Above the eyes are movable 3-jointed antennal-like processes, already mentioned by Packard (5th Report U. S. Entom. Commission), his figure, without doubt, referring to this species. Attached to the sides of the upper anal plate are two similar processes, but apparently 5-jointed. The young larve immediately congregate and begin to spin a web, attaching another leaf, if possible, to form their domicile, and attack the edges of the leaf, consuming all parts of it. Length, 112.