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[From *Lowne's Anatomy, etc., of the blow-fly*, p. 190. London, 1891.]

FULL-GROWN LARVA AND PUPA OF DEIDAMIA INSCRIPTA.—On July 13, 1890, I found on *Ampelopsis veitchii*, in Brookline, Mass., a larva a trifle over two inches in length.

The head was round, green, with a faint white line on each side of the median suture. The body tapered from the fourth segment to the head, and was clear, bright green, without obliques. Two pale yellow lines extended from the head over the dorsum of the first three segments. A brighter yellow-white line extended up each side of the caudal horn, and a little way down on the sides of the body—like the "last pair of obliques" of many sphingid larvae, only extending by no means so far down on the body. There was a thick wavy stigmatal edge from 1st segment to the tip of anal flap. The body was not rough, but striated transversely. The caudal horn was green except on the sides where the yellowish lines came. Feet and prolegs green, spiracles unnoticeable.

On July fifteenth it stopped eating, and, on the seventeenth pupated. The pupa was 1.3-1.6 inches (20 mm.) long, slender, brown mottled with greenish on the back. The abdominal segments were "honey-combed" with tiny

darker brown depressions. The tongue-case was a sharp ridge extending to the apex of the wing-cases. At its base, on each side, was a dark, rough tubercle; on each eye-cover was another; and on the apex of the head another. The anal hook was long and pointed, with a little spur near the tip.

Caroline G. Soule.

ON THE FOOD-HABIT OF *TELEA POLYPHEMUS*.—On June 10th emerged in one of my boxes a ♀ *Telea polyphemus* of normal size and specially brilliant coloring. Its larval history was an experiment in food. The larva was found just before the third moult, on a small oak tree. Its food was varied every day, and consisted of the following leaves, given in the following order:—

Oak, maple, willow, pine, white birch, apple, chestnut, moosewood, wild grape, poplar, walnut, elm, cherry, and then began with oak again. 'The only leaf it refused was sassafras.

Chestnut, pine, and wild grape were new to me as food-plants of *T. polyphemus* and were suggested by finding larvae on them several times last summer.

The larvae on pine were especially large and clear in color; those on wild grape, markedly smaller.

Caroline G. Soule.

RECENT LITERATURE. — Mr. J. W. Tutt, who edits a journal whose special function is to record all sorts of variation in insects has just published the first volume (16, 164 pp.) of "The **British Noctuae** and their varieties" in which over 100 species and an enormous number of varietal forms are described and named; scarcely a single species escapes division, and some show ten or fifteen varieties (*Apamea didyma* for instance), while a distinction is further made between varieties and subvarieties. Only the imago is considered. A large amount of the material is new, but the author has carefully collated all fragmentary notes in the literature of the subject. In the introduction,

which treats of variation in Lepidoptera generally, its nature, extent and probable causes, no reference is made to the claim the author elsewhere refers to (Ent. rec., 1, 55-56) that melanism has in some instances become a prevailing feature in those parts of England where manufacturing plants have given a grimy aspect to nature. If this be really true, and it would seem to be difficult to prove incontestably, then natural selection by elimination of the unfittest has certainly produced a sensible degree of protective mimicry within recent historic times.

A painstaking, detailed account of the **postembryonal development, habits, and anatomy of Encyrtus fuscicollis** has just been given by Dr. E. Bugnion in the *Recueil zoologique suisse*, accompanied by half a dozen folding plates. The species investigated is claimed to be parasitic on different caterpillars, and among others on a Hyponomeuta attacking the spindle tree in which the author studied them. He raised 21 different lots, and they usually yielded males or females exclusively, and in half the other times one sex was in excessive abundance. This Encyrtus appears to lay its eggs (50-129) at one thrust in the form of a single chain which floats in the perivisceral cavity. At the end of the embryonal period, or rather after the first moult, the larvae pierce this tube, and live on the lymph of the host till they are ready for their change, when they devour the viscera, form separate cocoons which pack the body of the host to the utmost, and appear in the imago state in about three weeks; they at once pair. Whether they are double brooded and in the second generation infest some other insect is still a question; if not, the maintenance of the species depends on the life of fertilized females from early in August to sometime in April or May of the succeeding year.

The most considerable and valuable work that has appeared for fifteen years on the tertiary insects of Europe, has just been published at Strassburg as part of the *Abhand-*