

I append my notes on the larvæ and pupæ of all four species as they serve to amplify in some instances Dr. Dyar's notes; the figures of the pupæ show the very characteristic arrangement of tubercular setæ and secondary hairs, a feature quite constant in each species.

***Trichoptilus lobidactylus* Fitch.**

Larva (full-grown).—Head ochreous. Body cylindrical, green, with slightly darker mediodorsal line, due to the dorsal vessel showing through the integument, and containing on each segment centrally a minute black dot; several other similar black points are scattered with more or less regularity over the integument, the most constant being a single one midway between tubercles II and III and another, rather linear in shape, before the spiracle. Subdorsally there is a series of large, brownish, rectangular, chitinous patches extending across the major portion of each segment and containing tubercles I and II which are represented by two long brownish setæ, arising from the centre of each patch, very glutinous, swollen irregularly several times during their length and club-shaped at their tips; the posterior portion of each patch contains two minute, whitish, club-shaped setæ. Tubercle III is represented on the abdominal segments by a single long brownish seta, a short anterior whitish one and a minute posterior hair (?IIIa of Dyar). Tubercle IV+V, directly below the spiracle, consists of an anterior shorter and a posterior longer clubbed white seta arising from a brownish base; there are usually also two further minute white clubbed hairs situated respectively on the ventral and on the posterior margins of this dark base. Ventral to the tubercles and on the posterior margin of each segment are generally several minute white clubbed hairs. A single white unclubbed hair arising from a dark base and surrounded by other minute hairs probably represents tubercle VI and two or three small hairs at the base of the prolegs constitute tubercle VII.

On the thoracic segments the dorsal setæ show some variation from that normally found on the abdominal segments; on the mesothorax tubercle I+II consists of two long setæ and one minute white one whilst on the metathorax only a single long dorsal hair is found. On both segments tubercle III shows two long setæ. The prothorax has a row of six long hairs along the anterior margin with a second row of six immediately behind these; the dorsal area corresponding to the prothoracic plate is covered with fine, minute, white, clubbed hairs. Ventrad and anterior to the spiracle is a tubercle bearing three hairs. All spiracles pale, brown-ringed. Length 10 mm.

The arrangement of tubercular hairs as listed above differs in several points from Dr. Dyar's figure of the fifth abdominal segment of this species (1899, Ent. Rec. XI, pl. 1, Fig. 1) but this is in the main due, I believe, to slight inconstancy in the number of small white secondary hairs which may occur on each primary tubercle; Dr. Dyar's figure accentuates these secondary hairs, giving the impression that they are nearly as long as the primary, dark ones, which was far from the actual case in all specimens examined by me.

Pupa (Fig. 1).—Rather bluntly truncate at apex with four short horns arising from the base of the antennal and eye-sheaths and a distinct sub-dorsal ridge extending as far as fourth abdominal segment. Colour green, with the horns and surrounding area extending over the prothorax vinous pink; a large,

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