THE CANADIAN ENTOMOLOGIST

Besides the three rows of bristleless tubercles, there are four additional rows of very small tubercles: (1.) Each tubercle of the dorso-lateral row may be accompanied (but often is not) by a minute brown tubercle. (2.) Each tubercle of the lateral row is apparently always accompanied by a tubercle behind and above it. (3.) Between the lateral row of tubercles and the spiracles is a third row, while (4.) behind each spiracle is a tiny tubercle. Some of these tubercles bear tiny bristles.

The bristles of the inner dorsal row of tubercles are somewhat longer than the transverse diameter of the first thoracic segment at birth, and project in a curve that is upward, backward and a little outward; the brisiles of the outer row are less than half the length of those of the inner row, are only slightly curved, and set so as to project upward, but more directly backward crossing the bristles of the inner row; on the seventh abdominal segment the bristle of the outer row is lacking.

The substigmatal row of outwardly directed bristles unites with the row of the opposite side in a continuous fringe around both cephalic and caudal extremities of the caterpillar ; in length these bristles are somewhat shorter than those of the outer dorsal row; the number and relative lengths of the bristles in the row apparently are constant, excepting the first thoracic and last (ninth) abdominal segments. The number of bristles is as follows : second and third thoracic segments four each, first to eighth abdominal segments three each ; not considering the cephalic bristle on the second and third thoracic segments. The relative lengths of these bristles on the second thoracic to eighth abdominal, inclusive, are : Middle bristle longest, caudal shortest, cephalic between these two, while the cephalic bristle on the second and third thoracic is slightly shorter than any of the others.

Each half of the first thoracic segment bears nine long bristles ; these are placed in two irregular rows, the four bristles in the upper row being longer than the five of the lower row, except the most caudal one.

Each half of the ninth abdominal segment bears seven bristles, of which the uppermost dorsal bristle is longest, the others of shorter lengths.

The bristles of the dorsal and substigmatal rows are imbricated.

The prolegs are provided with tiny bristles.

Two small branched spines project caudad from the last segment, just below the anal opening.

Spiracles brown, which colour is retained throughout the instars.

The thoracic shield is triangular, base caudad, apex cephalad and truncated, pale brown, clearer within.

Length, 1.3 mm. to 1.5 mm.