Vancouver Island and parts of the adjacent mainland, north to Lillooet and west to Fraser Mills.

Ovum. Thirteen white ova were found on a leaf of *Alnus oregona* at Deep Cove, Saanich, Vancouver Island, on July 3, 1954. They were spaced irregularly in a group. Length 1 by .5 mm., elongate, slightly flattened, coarsely ribbed and cross-ribbed. Hatched on July 6. Larvae did not eat egg-shells.

Larva. 1st Instar. Length 2 mm. Colour snow-white throughout. Rests with anterior and posterior ends of body raised, head drawn in. Feeds on *Cornus occidentalis.* At 7 days the colour is white with suffused green showing through body wall owing to ingested food.

2nd Instar. July 16. Length 7 mm. Colour as before.

3rd Instar. Aug. 4. Length 12 mm. Head, pale brown with a black patch on each side of face on which the eyes are situated. Body, T. 1 with 4 black dots on each side of dorsum. Colour off white, broadly suffused with translucent green. Body slightly tapering towards posterior. Growth in early stages very slow. Hides in folded leaf by day, and comes out to feed by night. When disturbed it curls up sideways.

August 18. Length 20 mm.; no moult observed.

4th Instar. Aug. 31. Length 20 mm. Head pale pink. Eyes on a black background. Body, fuscous stippled on a white base, shading into a dull white on the underside; a dark ill-defined dorsal line. Legs and prolegs dull white, matching the underside.

5th Instar. Sept. 12. Length 40 mm. Head, flesh colour, cervical plate dark brown. Body, dull white with fuscous green showing through, heavily sprinkled with white dots. A suffused dark green dorsal line; spiracles orange ringed with black. Larva spun a light cocoon between a leaf and the side of glass container and pupated on Sept. 21.

Pupa. Size 15 by 5 mm. Dull black with a purple tinge, pleura light brown integument finely wrinkled and pitted, except the last two segments which are shiny. Cremaster a stout projection tipped with two thick and several thinner and shorter hooked spines.

Imago. Emerged June 8, 1955.

THE LIFE HISTORY OF *ZENOPHLEPS LIGNICOLORATA VICTORIA* TAYL. (LEPIDOPTERA: GEOMETRIDAE)

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The dainty little geometer *Zenophleps lignicolorata victoria* Tayl. has been considered somewhat of a rarity in the Victoria district, but during the past three years the writer has found it frequently in its haunts, at the right season of the year, in Saanich and west to Goldstream, Vancouver Island. It is associated with open woods of mixed deciduous and coniferous trees. From lack of information on the early stages it was at first thought to feed on trees, especially Garry oak, as it was frequently found resting on the grass at the foot of this species. It lay with the wings partially closed, flat out, not held erect over the body, and quite conspicuously in the open. Only on dull days or early in the day was it thus to be found.

On other occasions this moth was found in similar situations in fir woods, resting on moss rather than grass.

Z. l. victoria measures 30 mm. across the expanded wings, the colour of

which consists of soft shades of creams and light browns; a central darker band across the forewings contrasts with the lighter background colour. It flies in late August and early September, occasionally attracted to light, but is most often found or disturbed by day.

Ovum. An adult from Hudson Bay woods laid 60 ova on August 28, 1954. Another from Mt. Douglas, Saanich, land 15 ova on September 15 to 18, 1954. Egg .9 by .5 mm., elliptical, slightly flattened, broader and thicker at one end, minutely reticulated, white, gradually turning to pink or rusty colour in 15 to 20 days, and finally to lead colour. The following dates refer to the first group.

Larva. 1st Instar. March 17, 1955. Length 2 mm. Head shiny, light brown with a few short hairs. Body brownish olive-green, spiracular line pale beige shading into slightly darker beige beneath. The larva emerges through a neat round hole in the larger end of the egg. It does not eat the shell. It spins a thin silken thread as it moves about. Of the available plants, *Galium aparine* was the only one which it would eat.

2nd Instar. March 27. Length 5 mm. Head grey, dotted with black. Body pale grey to sage green, two white dorsal lines. Two black dots on A 1 to 4, three arranged in a triangular form with apex anteriorly on A 4 and 5, and a black longitudinal dorsal mark on A 7 and 8. Underside beige with three to five dark lines running the length of the body. Spiracles black. An interrupted fuscous line just above the spiracles.

3rd Instar. April 3. Length 10 mm. Head almost transparent bluish-white, finely spotted with black on sides and top of front. Body ochre-green to beige or dead grass colour, or in some, a yellowish-green. The two white dorsals are less noticeable than in the 2nd instar; a black median mark replaces the two spots of the earlier phase. In some cases the triangularly arranged spots on A 4 and 5 merge into a larger or smaller dark patch, varying in individual larvae. Underside with three longitudinal fuscous lines. Anterior edge of prolegs edged with a fuscous line, shorter on the anal pair.

4th Intar. April 8. Length 15 to 20 mm. Colour and markings as before, though the nearly equal width of the light ground colour, and the darker lines, gives a more striped appearance. Underside has at least five of these longitudinal stripes. Each segment has small, white, setae-bearing tubercles, fuscous-ringed at base.

When fully fed the larvae averaged 28 mm. long. They feed at night, hiding among the lower leaves, or resting on the stem or leaf margin by day.

On April 16, some of the larvae started to burrow beneath the sand at the bottom of the jar and made fragile cocoons by fastening sand grains together with silk. On April 19 several had pupated.

Pupa. Length 10 by 3 mm., uniformly fuscous brown. Cremaster of two slender closely approximated spines, slightly divergent and minutely recurved at tip.

Imago. Adults emerged in 1955 as follows:—

May 1. Apparently one larvae escaped and pupated in the room; the higher temperature accelerated its development.

June 12 - August 15, 1955. Emergence in ones and twos, chiefly from July 24 to August 15.