

ON THE LIFE HISTORY OF *INCISALIA ERYPHON*
(LYCÆNIDÆ) ON SOUTHERN VANCOUVER ISLAND

by GEORGE A. HARDY

Incisalia eryphon Bdv. is one of the first of the seasonal butterflies to appear in our district, being on the wing from March to May. In the spring of 1957 they were noticed in fair numbers early in April feeding on the catkins of *Salix mackenziana*; later in the month and in early May they were to be seen flitting and darting about the tips of the branches of the Lodgepole Pine *Pinus contorta* where they were busily mating or ovipositing. One or two females were confined over a twig of the pine on May 24, 1957. These had laid several ova at the base of the needles of new shoots by May 29.

The following observations were made: OVUM. Size 0.75 mm. by 0.50 mm.; a somewhat flattened sphere, depressed in the centre, dull due to coarse reticulations, chalky white. The larva escaped by a small hole on the side of the upper margin of the ovum. It did not eat the remaining part of the shell. The first ovum hatched on June 1, 1957, others in succession for the next day or two. 1ST INSTAR. June 1. Length 1.5 mm. Head light brown. Body onisciform, honey colour, lighter on the sides. The larva commenced feeding by eating a small hole through the sheath at the base of the needle and then it burrowed in to feed on the soft and succulent base. 2ND INSTAR. June 12. Length 5 mm. Colour a dark honey-brown, two lighter lines on dorsum, scattered long hairs with minute papillæ between. 3RD INSTAR. June 25. Length 8-10 mm. Head brown. Body apple green, subdorsals and spiracular lines cream colour, segments covered with a fine light brown pile. The larva feeds on the base of the needles, the part above the sheath dropping off as the base is consumed. Having finished one needle the larva moves to the base of the next, always first boring a hole through the hyaline sheath. 4TH INSTAR. July 1. Length 15 mm. Head as before. Body tapering slightly from head to anal segment. Colour a rich velvet green with the four cream stripes clearly indicated; a fine short, brown pile covers the segments. As the larva grows, it feeds openly on young needles, where the green colour broken up by the cream stripes renders it inconspicuous.

On July 20 the larva is now full fed measuring 20 mm. in length. Colour and markings as before. It has left the twig and sought a corner of the cage where first spinning a silken mat it anchored itself by the cremaster and a silken girdle round the thorax. Other larvæ pupated among the debris at the bottom of the cage, without any obvious fixation. PUPA. Size 10 mm. by 4 mm., dumpy, a uniform dark brown colour. A small tuft of short undifferentiated hairs replaces the more definite cremaster of most species of Lepidoptera. Head and abdominal segments covered with fine hairs which are absent on the thorax and wing cases; wing cases finely etched with numerous short feathered lines. Abdominal segments closely and finely punctuate. IMAGO. Emerged, March 26-28, 1958.

Provincial Museum, Victoria, B. C., CANADA