

blackish marks (more conspicuous on the rear segments) on either side of the back. These marks are similar to those on the W-marked Cutworm, but are not so heavy and lack the conspicuous yellow bordering of those of the latter caterpillar. Down the middle of the back, there is a pale line, and between this and the conspicuous whitish, or yellowish, stigmatal band, which connects the spiracles or breathing pores on the sides, there is also a pale line. On each of the abdominal segments there is an oblique blackish dash, very distinct in some specimens, just above each breathing pore. In some caterpillars the stigmatal band is flushed with a reddish tinge, and the whole body is more or less blotched and streaked with brown. The head and shield on the first segments are yellowish-brown. Two brown bands are present on the front of the head, and the sides and top are reticulated with the same colour. The front feet are pale brown and shiny, the back pairs being dull and similarly coloured to the ventral surface of the body.

The adult moth is about one and a half inches in expanse of wings. The general colour of the front wings is of a purplish-brown or reddish-brown, some being much darker than others. Towards the centre of each of these wings is a conspicuous C-like spot, the open part towards the front margin of the wing being filled in with a pale blotch which extends in many specimens to the upper edge of the kidney-shaped mark. The transverse lines are easily traced and the outside margin of the wings is usually darker. The hind wings are pale yellowish-brown, becoming darker near the edges. The thorax is of the same general colour of the front wings but it is crossed in front by a distinct whitish collar; the abdomen is paler.

*Habits and life-history.* This cutworm is also a very general feeder. In 1900, it appeared in destructive numbers in Ontario and attacked almost all kinds of vegetation—tomatoes, carrots, mangels, turnips, peas, etc. In one place (Whitby) where tomatoes were attacked, the cutworms had climbed the vines and as many as a dozen or so were found eating into a single tomato. In another place (Pefferlaw) they devoured the leaves of Canada thistle, gooseberries, chokecherries, etc. This injury in the above year was done by the second brood which appeared in July. In the same season a cluster of eggs found at Niagara, Ont., upon an apple leaf, was sent to the Division. These were reared to maturity on apple, the cutworms becoming full-grown and entering the earth from July 24 to 27, and the moths appearing from August 18 to 25. In another year (1902) we received eggs from Nova Scotia, which hatched on June 26. The caterpillars passed through six stages, and some entered the earth on July 25 turning to pupæ two days later. Ten moths were secured, five emerging on August 22 and the others on August 23. In the same year at Ottawa the writer found a larva which produced a moth on June 17, and another which became mature on August 1, the moth emerging on September 3. In 1903, from larvæ collected in the field we reared the adults on June 8. The overwintering larvæ come out of hibernation early in spring and as soon as food is available, plants are at once attacked and the cutworms become mature and produce moths in the end of May or early June. It will thus be seen that the moths occur at almost any time from late in May till autumn. We have collected them at Ottawa as late as October 10.

#### THE GLASSY CUTWORM, *Hadena devastatrix* BRACE.

*Appearance.* The caterpillar is of a dirty whitish colour, with a greenish tinge. The head is reddish or reddish-brown, the shield on the first segment being conspicuous and brownish. The only markings on the body are the dull brown tubercles, each of which bears a single hair. The front feet are pale brownish, the hind ones being of the same colour as the body. Full-grown specimens are about an inch and a half in length. This cutworm is similar in appearance to the