

Yellow-headed Cutworm, but from the colour of the heads, it is usually an easy matter to distinguish them.



Fig. 8—Glassy Cutworm: moth and caterpillar.

The fore-wings of the moth vary in colour from pale ashy-gray to dark brownish-gray. The transverse lines are usually distinct, the subterminal one near the outer margin being the most conspicuous and in some specimens almost whitish. On the inner side of this line are a series of short arrow-like dashes. The usual round and kidney-shaped spots are large, the former being the paler. The hind wings are brownish, the inner half being paler.

Habits and life-history. Unlike most of our other cutworms, this species seldom comes above the surface of the ground, even during the night. It feeds chiefly upon the roots and lower stems of various kinds of grasses, such as wheat, oats, corn and grass in meadows, and, as a rule, is only troublesome in grain fields sown on grass lands which have recently been ploughed up. In addition, however, to grasses, this cutworm also attacks garden plants such as cabbages, beans, lettuce, etc. In Ontario it has injured seriously fields of oats 15 to 20 acres in size, between May 10 and 25, and also has been troublesome in fields of corn. Fields of fall wheat have also been damaged in May and early June, to such an extent, that it was necessary to plough them up. In Manitoba, also, much injury has been done in wheat fields.

The insect is widely distributed in North America, and in Canada the moths have been found commonly from Nova Scotia across to British Columbia. It flies from late June until the middle of September. Eggs are laid in the latter part of the season; the young larvæ emerge soon afterwards and hibernate in a partly grown condition. Larvæ found in Ontario in May (1906) became full-grown and pupated on May 19, the moths emerging on July 19—two months later. The pupa is rather large, nearly an inch in length by about a quarter of an inch in width, and of a reddish-brown colour.

THE YELLOW-HEADED CUTWORM, *Hadena arctica* Bdv.

Appearance. This cutworm is very similar in appearance to the Glassy Cutworm; but, as its popular name indicates, it has a yellowish head. The shield behind the head is of a tawny-yellow and the body is of a smoky-gray colour, without markings. When mature it is about an inch and a half long.

The moth is a fairly large species, expanding when the wings are spread from an inch and three-quarters to slightly more than two inches. The front wings are reddish-brown, shaded towards the base and the outer space with bluish-gray. In some specimens the cross lines are distinct being of a pale yellowish colour; in others they are darker and not so conspicuous. The same applies to the round and kidney-shaped marks. The latter one is large and more or less filled with a whitish or pale yellowish colour. At the apex of each of these wings is a pale blotch. The hind wings are brownish, the outer third being darkest; in the centre