

None of my examples of *Christina* have any trace of such a spot.

In *Eurytheme* the discal spot on underside of secondaries is nearly always double.

In *Christina* it is very rarely so, two specimens only out of fifteen having a very minute brownish dot without any silver alongside of the discal spot.

Eurytheme is heavily shaded with black scales at the base of both wings above, and also on both sides of the median nervure of secondaries and between it and the sub-median nervure, while in *Christina* there are generally only a few black scales at the base of each wing just around the thorax, the space between the median nervure and the abdominal margin being yellow. These points of difference may not be sufficient, and it is quite possible that *Christina* may prove to be a northern form of *Eurytheme*, though the occurrence of the true type of *Eurytheme* in this northern district, if a fact, as reported by Mr. Strecker on page 132 of his work referred to above, would militate against such a conclusion. However, at present the intergrades are lacking, and I hold that until these are forthcoming, or these two forms are proved by breeding to belong to the same species, we are entitled to regard them as distinct and to retain the name *Christina*.

I may add that the only other specimen of *Colias* in the collection made by Dr. Bell last summer, was a single male of *Philodice*, taken at Fort Carlton, 52° 51' N. 106° 13' W., which, while differing from the general type of that species in having a decidedly broader marginal band, is pronounced by Mr. Henry Edwards similar to some specimens of that species from the Rocky Mountains.

ENTOMOLOGY FOR BEGINNERS.

SMERINTHUS EXÆCATUS AND MYOPS.

BY THE EDITOR.

Among the most beautiful of all the night-flying moths may be placed those belonging to the genus *Smerinthus*, one of the genera included in the *Sphingidae*, or Sphinx moths, a name derived from a fancied resem-

blance some of the caterpillars bear in certain attitudes to the famous Egyptian Sphinx. This family comprises some of the most robust and powerful among moths. Dr. Harris thus speaks of them: "In the winged state the true Sphinges are known by the name of Humming-bird Moths, from the sound which they make in flying, and Hawk Moths from their habit of hovering in the air while taking their food. These Humming-bird or Hawk Moths may be seen during the morning and evening twilight flying with great swiftness from flower to flower. Their wings are long, narrow and pointed, and are moved by powerful muscles. Their tongues when uncoiled are for the most part excessively long, and with them they extract the honey from the blossoms of the honeysuckle and other tubular flowers while on the wing."

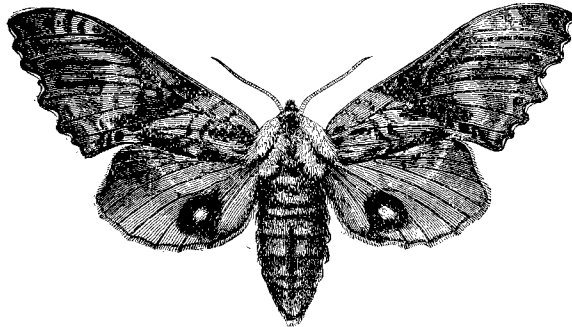


Fig. 1.

The Blind-eyed Sphinx, *Smerinthus exacatus*, which is well shown in Fig. 1, is a lovely creature which measures when its wings are spread nearly three inches across. Its body is fawn colored, with a chestnut colored stripe on the thorax and a dark brown line on the abdomen. The front wings are fawn colored, clouded and striped with a rich velvety brown. The hind wings are rose colored in the middle, crossed by two or three short whitish lines, having a brownish patch at the tip and a black spot with a pale blue centre near the inner angle. The moth is on the wing in June and July; the eggs are laid on apple, plum and wild cherry trees, and the larva, Fig. 2, becomes full grown in September. It then measures about two and a half inches long, has a green triangular head bordered with white, and an apple green body, paler on the back, deeper in color along the sides, with seven oblique stripes on each side of a pale yellow color, the last one, of a brighter yellow than the others, extending

to the base of the horn. The skin of the body is roughened with numerous white-tipped granulations, and the stout horn on the hinder part of the body is of a bluish green color. This larva when irritated emits a peculiar musical chirping sound.

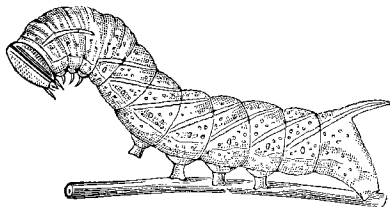


Fig. 2.

When full grown it buries itself in the earth, where it changes to a chestnut brown chrysalis, which is smooth, with a short, rough terminal spine. In this condition it remains during the winter, escaping as a moth early the following summer.

The life history of the Purlind Sphinx, *Smerinthus myops*, Fig. 3, is very similar to that of the species just described. It appears in the perfect state also in June and July. The moth is very handsome. The head and thorax are chocolate brown with a purplish tinge, the thorax is striped with yellow and the abdomen brown marked with yellowish spots. The fore wings are angulated

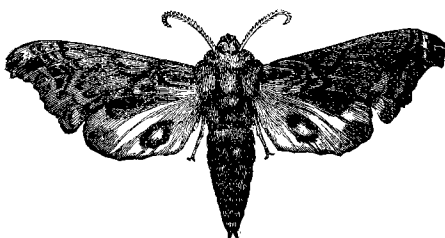


Fig. 3.

and excavated on the hind margin, and are ornamented with bands and patches of black on a chocolate-brown ground. The hind wings are dull yellow with the outer half a rich brown, and have an eye-like spot towards the inner margin, black with a pale blue centre.

The caterpillar much resembles Fig. 2. It is green with two rows of reddish brown spots on each side and six oblique yellow lines, with two shorter lines of the same color on the anterior segments. The head is bluish green, margined with yellow, and the curved horn at the tail green, tinged with yellow at the sides. When full grown it measures about two inches in length, and is nearly cylindrical in form. It feeds on the leaves of the cherry tree, both the wild and cultivated varieties.

The insect passes the winter in the pupa state under the earth; the chrysalis is smooth and of a dark brown color. Both these insects are comparatively rare, and have never, as far as we know, appeared in sufficient numbers to prove injurious to the trees on which they feed.