obliteration of the markings, only the spots in the discal cells of both wings being clearly defined as in the ordinary form. However, very faint traces of the rest of the eye spots on the hind wings can be seen and the markings near the inner angle of the fore wings, including the spot between the first and second median nervules, are very faintly indicated, as in the usual type.

This form also is described from a single male specimen collected near Ashland, Nebraska, June 14, 1913. The name inornata very naturally suggests itself as appropriate.

The types of both of these aberrations are in the writer's collection.

DESCRIPTION OF PLATE IV.

Fig. 1. Satyrodes canthus Linn., n. var. fumosus. Male.

Fig. 2. Satyrodes canthus Linn., n. var. fumosus. Female.

Fig. 3. Satyrodes canthus Linn. Male.

Fig. 4. Satyrodes canthus Linn. Female.

Fig. 5. Argynnis alcestis Edw., n. aberr. suffusa. Male.

Fig. 6. Chlorippe celtis Bd.-Lec., n. aberr. inornata. Male. (Photograph by Ralph W. Dawson.)

A new Variety of Satyrodes canthus from Nebraska (Lep.)

By R. A. LEUSSLER, Omaha, Nebr.

(Plate IV, figs. 1-4)

Satyrodes canthus Linn., n. v. fumosus (Plate IV, figs. 1, 2).

This is a variety of *canthus*, very large in size and extremely dark in color, with the spots on the upper surface of secondaries enlarged, elongated and intensified.

3. Measures 27 to 31 mm. from centre of thorax to apex of wing, most of the specimens examined measuring 31 mm.

Upperside: Ground color a very dark smoky grey instead of the pale mouse brown of the typical form, fresh specimens having even a blackish appearance. Number and arrangement of spots the same as in the typical form but the spots on the secondaries larger, blacker and more or less elongated. Submarginal line like that in the typical form. Lighter area in outer half of primaries generally less pronounced than in typical canthus.

Underside: The same darkening of tone prevails, i. e., var. fumosus is as much darker than typical canthus on the under surface as it is on the upper. The spots are large and well ringed with yellow and pupilled

with white, making them stand out prominently. The various other markings are the same as in the typical form.

Q. Measures 28 to 32 mm., in most of the specimens examined 31 or 32.

Upperside: Somewhat lighter in tone than the males, yet of the same smoky grey. Spots larger than in the males but with the same characteristics. Other markings same as in the males. Lighter area on primaries more pronounced.

Underside: Also lighter than in the males and in the limbal area there is a distinct light patch, most pronounced in the spaces on either side of the third median nervule. The spots are prominent, as in the males.

Described from 17 males and 8 females, collected in 1912, 1913, 1914 and 1915, of which one male is designated the type and one female the allotype. The type and allotype are in the collection of R. A. Leussler at Omaha, Neb.

The habitat of this variety is a spring-fed marsh in Sarpy County, Nebraska, a few miles south of Omaha, where wild rice, rushes and tall coarse grasses flourish.

It seems quite probable that this form of *canthus* has been developed as a result of geographical isolation.

A striking character of this variety is its very large size. Holland in his Butterfly Book gives the expanse of *canthus* as from 1.65 to 1.90 inches. A number of Michigan specimens examined vary from 21 mm. to 25 mm. in the dimension corresponding to that given above. Minnesota specimens average slightly larger, and apparently the species tends to become still larger farther west.

Edwards figures a dark canthus in Vol. III of his Butter-flies of North America (fig. 5, Pl. 1, Satyrids) which he designates "var." and in the text refers to some large Colorado examples, which he states exceed any eastern ones, the males being 2.2 in. and the females 2.4 in. in expanse. Then he adds "but they do not differ in other respects from their congeners." The variety here described besides being of very large size differs very materially from its congeners.

For purposes of comparison specimens of typical canthus from Michigan are shown in Figs. 3 and 4 in the plate.