

PARTIAL PREPARATORY STAGES OF SMERINTHUS
OPHTHALMICUS, BD.

BY G. H. FRENCH, CARBONDALE, ILL.

After First Moulting.—Length .45 inch. Cylindrical, head with an elevated point upwards, in a subpyramidal point, the top in two points and about a third higher than the body; when at rest the jaws under back part of head with the point obliquely forward. Eight transverse wrinkles to each joint; green studded with pale green points; a subdorsal pale line, as usual converging to caudal horn; on sides, oblique pale lines that nearly coincide with a series on the dorsum; the pale parts yellowish-green; caudal horn reddish tinted; head with a pale stripe on each side of face, the two coming together above. Previous to the next moult, smooth, the oblique lines showing very pale; the oblique stripe and caudal horn creamy-white; the anterior base of horn reddish. Duration of this period 5 days.

After Second Moulting.—Length .90 inch. Colour green, a little dull and rather blue-tinted; each joint with 8 transverse folds that are studded with yellowish-green points that are but little lighter than the ground, a subdorsal line made of these points; a dorsal line and oblique stripe of the darker green without points, these lines defined by the points, on the sides below subdorsal line a similar stripe defined posteriorly by a row of these points more yellowish than the dorsal, the stripe that runs to the caudal horn creamy-white, as is also the caudal horn; the latter short hairy. Head pointed above as before and also the side of the face with a line of points more yellow than the last oblique stripe; thoracic feet red-tinted. Duration of this period 5 days.

After Third Moulting.—Length 1.25 inches. Green, slightly bluish; head still pointed but not quite so prominent as in preceding stages, the stripe rounding at the top; bluish-green, stripes yellow; stripes on back and sides as before; caudal horn pale bluish purple, more blue at base, the stripe from this down the sides very pale lemon yellow; prolegs concolorous; thoracic legs paler, red tipped, stigmata black ringed, centre creamy. Duration of this period 5 days.

After Fourth Moulting.—Length 1.40 inches. Bright green of a yellowish tint; head blue-green; granulations more white; side stripes yellowish-green, the one that extends to the caudal horn creamy, with a