

Article XXIX.—THE EARLIER STAGES OF SOME
MOTHS.

BY WILLIAM BEUTENMÜLLER.

Deidamia inscripta (Harris).

Egg. — Globular, smooth, somewhat flattened below, bright green. Hatched June 4.

Stage I. — Head and body uniform yellowish green, the latter with three rows of very minute warts on each side, each bearing a very short hair. Caudal horn almost as long as the body, black, covered with short hairs. Length, 3.5 mm.; caudal horn 2.5 mm. As the larva grows older there appears on each side a subdorsal, pale yellowish longitudinal line. Length, 7 mm.

Getting ready to moult June 6; moulted June 7.

Stage II. — Head globular, yellowish green, with very short hairs. Body green with a narrow yellowish subdorsal line and seven oblique lateral bands. Numerous rows of granular dots across the body, Dorsal region darker than the sides. Caudal horn black, with a green base. Underside, including the thoracic, abdominal, and anal legs, yellowish green. Length, 14 mm.; caudal horn, 3 mm.

Getting ready to moult June 10; moulted June 11.

Stage III. — Head globular, finely granulate. Body slightly darker, with transverse rows of yellow dots on the dorsal region, between the subdorsal yellow lines. Numerous yellow dots also along the sides. Oblique lateral stripes very distinct. The subdorsal line runs from the anterior edge of the first segment to the base of the caudal horn, which is black, green at the sides to about the middle. Spiracles black. Underside and legs uniform green. Thoracic feet yellowish green. Length, 18 mm.

Getting ready to moult June 12; moulted June 13.

Stage IV. — Head green with a yellow vertical stripe on each side of the face. Body, with the rows of transverse wrinkles, subdorsal line, and oblique lateral bands, bright yellow. Length, 30 mm.

Getting ready to moult June 16 and 17; moulted June 17 and 18.

Stage V. — Head and body green with seven oblique lateral bands, subdorsal lines, and a medio-dorsal line bright yellow. The transverse wrinkles on the dorsal region are broken by the medio-dorsal line, and the lateral bands are broken by the green ground color. Underside uniform green. Thoracic feet yellow. Caudal horn yellowish green. Length, 58 mm.

Food-plants. — Grape, Virginia creeper (*Ampelopsis quinquefolia*), and Japanese ivy (*Ampelopsis velchii*).

Sphinx eremitus *Drury*.

Egg. — Pale milky white, longer than broad or high, smooth, shining. Length, 1.33 mm.; width, 1.2 mm.; height, 1 mm.; Hatched July 15.

Stage I. — Wholly pale whitish green. Caudal horn black with two fine, short setæ at the tip. On the second segment is a short, pointed process directed forwards, pale whitish green with the tip black. Length, 9 mm.

Stage II. — Head small, granulate. Body whitish green, covered with fine granulations above, darker beneath. There are also traces of a subdorsal line. Sides with seven rather broad oblique bands. Second segment with the process more developed than in the last stage. Caudal horn black, covered with very short spines. Tips of thoracic feet brown. Length, 14 mm.

Moulted July 22.

Stage III. — Whitish green, granulated. Oblique lateral bands very broad, and hardly visible on the pale ground color. Caudal horn black. Process on second segment black with whitish spines towards the tip. Length, 18 mm.

The succeeding stages were not observed.

Lepisesia gauræ (.A. ♂ S.).

Mature Larva. — Head yellowish green, with a small black dot at the lower part of each side. Mouth-parts pitchy brown. Body smooth, yellowish green, with a row of black spots along the middle of the dorsum, absent on the second and third segments. On each side of the dorsum is a very broad reddish band, composed of elongate marks, broadest on the anterior parts of the segments, and disconnected on the junctions of the segments; especially so on the first to fifth. A series of reddish brown, oblique, elongate marks along each side, one to each segment, and behind each two small blackish spots. On each side below is a similar series of reddish brown marks, forming a band on the last three segments; on the fore part of each mark is a black spot. Along the middle, below, a row of large reddish brown patches. Abdominal legs reddish at tips. Thoracic feet yellow, tips black. Caudal horn black, base yellowish green. Length, 60 mm.

Food-plant. — *Epilobium*.

Described from inflated specimens collected in Harris Co., Texas.

Lepisesia juanita (*Strecker*).

Mature Larva. — Head reddish, smooth. Body reddish brown with a pale yellowish line on each side along the subdorsum, crossed on the anterior part of each segment by an oblique mark composed of dots of the same color. This line runs from the anterior part of the second segment to the end of the tenth segment. Along each side

below the spiracles is a broad yellowish white longitudinal band, running from the head to the end of the eleventh segment. On the anterior and posterior parts of each segment are transverse rows of black dots, and rows of dots at the sides but not extending to the top of the segments, thus leaving a somewhat rounded area on top of each segment. Last two segments without black dots. Eleventh segment with a glassy, eye-like spot, containing a short tubercle in the middle and ringed with yellowish white and black. Spiracles in a small black spot. Underside and feet wholly reddish. Length, 60 mm.

Food-plant. — *Epilobium*.

Described from an inflated specimen collected in Harris Co., Texas.

***Pseudanthroëcia coracias* (Guen.).**

Stage I. — Head and cervical shield very pale testaceous, shining; ocelli black. Body shining, greenish dorsally, especially so on the first to sixth segments inclusive, and with rather indistinct, whitish, longitudinal lines; intervening spaces pale greenish testaceous. Warts black. First pair of abdominal legs absent; second pair rudimentary; third and fourth pairs well developed. Underside similar to the upper. Length, 5 mm. Moulded June 19 and 20.

Stage II. — Head pale testaceous with whitish vertical lines. Body greenish on the fourth and fifth segments; remaining segments pale testaceous, with narrow whitish lines. The first pair of abdominal legs now present but rudimentary; the second pair slightly more developed; third and fourth pairs well developed. Warts and setæ black. Underside with a large brown patch on each segment. Length 10 mm.

Moulded July 21 and 22.

Stage III. — Head white with broken brown lines in front and reticulations of the same color at the sides. The body is now darker brown along the sides and pale yellow-brown on the second and sixth to last segments; greenish on the third, fourth, and fifth segments. The white stripes are more distinct, equidistant at the sides; the space on the dorsum broadest. Warts and setæ black. First and second pairs of abdominal legs more developed than in the preceding stage. A black line along the venter, expanding into patches on the sixth and seventh segments. Thoracic feet and abdominal legs pale yellowish. Length, 15 mm.

Moulded June 23 and 24.

Stage IV. — Head similar to that of the last stage. Body yellowish with white lines; lateral parts below spiracles deep brown. Second to fifth segments inclusive greenish dorsally. First pair of abdominal legs short; second pair well developed, but shorter than the third and fourth pairs. Underside same as before. Length, 20 mm.

Moulted June 25 and 26.

Stage V. — Very much like the last stage, but the body is somewhat variable in color, yellow or yellowish along the dorsal region, with white lines and dark irrorations on the yellow intervening spaces. The line on the subdorsum limited above with a more or less perfect brown line. Sides thickly speckled with white on a dark ground, and along which runs a whitish and brown line. Eleventh segment with an oblique elevation directed backwards. First pair of abdominal legs short; the remaining ones well developed. Length, 31 mm.

Moulted June 28 and 29.

Stage VI. — Head brown with sordid white spots, and two more or less distinct dark brown streaks on each side in front. Body narrow, tapering, varying from green to brown and black, more or less covered with black dots and irrorations. The narrow lines are not distinct; the two on the dorsum most conspicuous, those on the subdorsum and sides quite indistinct. Warts small, white. Eleventh segment elevated, but not prominently, with two blunt tubercles. Spiracles black. Underside dirty yellowish with a very broad band along the middle. Thoracic feet dirty whitish. Length, 40 mm.

Food-plant. — Locust (*Robinia pseudacacia*).

When at rest the fore part of the body is raised upward, with the head and first and second segments curled downward.