

Monomorium pharaonis L.	Myrmica rubra var. sabuleta Meinert.
Solenopsis molesta Say.	“ scabrinodis var. schencki Em.
Pheidole pilifera Rog.	Tetramorium caespitum L.
Stenammina brevicorne Mayr.	Cremastogaster lineolata Say.
Alphaenagaster tennesseensis Mayr.	
“ fulva Rog.	Tribe <i>Cryptoceridae</i> .
Myrmica rubra L., var. sulcinodoides Em.	Strumigenys sp.
“ “ subsp. scabrinodis Nyl.	

LIFE HISTORIES OF NORTH AMERICAN GEOMETRIDÆ.—XXVI.

BY HARRISON G. DYAR, WASHINGTON, D. C.

Alsophila pomataria Harr. (*autumnata* Pack.). This injurious larva has been described in a general way by the principal writers on economic entomology and its habits have been made known. Eggs were received at the Department of Agriculture from W. R. Smith, having evidently passed the winter. They hatched April 18th and were matured in May. Wild larvae have been found by me as late as June 6th at Bellport, N. Y., feeding on oak and hickory. The present larvae were fed on apple.

Egg. Laid in a dense mass twice as long as broad, reaching half way around a twig. Subcylindrical, flattened, basal end a little rounded, slightly annularly bulging; micropylar end truncate, broadly rimmed, the center elliptical, a little depressed with a micropylar depressed dot. Surface slightly shining, obscurely reticulate, the truncate end irregularly shagreened, sometimes doubly ringed. Leaden gray, uniform for a single egg, though the flat topped mass looks a little mottled. Size .6X.55X.4 mm.

Stage I. Head round with full lobes, broadened above, the mouth projecting, the clypeus rather high, held nearly erect; pale luteous, the sutures narrowly and the posterior rim of lobes and mouth brown; ocelli black; width .3 mm. Setae short and pale

with bulbous tips, most distinct on the body. Moderate, rather robust, not elongated, the central segments not longer than thick. Feet normal, moderately developed, but a very short, unused pair on joint 9 marked in black like the plantae of the other abdominal feet. Shields membranous; cervical shield divided into two semicircular parts, the flat side anteriorly, smoky, darker on the edges, bordered by blackish tubercles; anal plate and leg shields unmarked, faintly smoky. Body greenish yellow, striped with smoky blackish in broad dorsal (reaching but not enclosing tubercles i and ii), broad subdorsal and a broad shade below the subventral fold, diffused ventrally. Tubercles distinct, rounded, little elevated, black in pale rings. Thoracic feet pale, faintly smoky. With growth the dark shades become fainter and the larva looks green with obscure paler lines.

Stage II. Head rounded, erect, slightly bilobed, flattened before; very pale green, immaculate or the lobes faintly gray shaded; width about .6 mm. Ocelli black, not large; clypeus rather high. Body cylindrical, normal, not elongated; feet normal with a short, unused pair on joint 9, which, however, bear crochets; claspers pale. Tubercles slightly elevated but concolorous, not contrasted; setae short, pale. Green with scarcely paler

whitish lines, the space between more or less distinctly shaded with blackish. The lines are subdorsal, double, the upper narrow, obscure; lateral; subventral, a shade on the fold. Feet pale; spiracles black.

Stage III. Head rounded, slightly bilobed, a little oblique, whitish, taintly green, immaculate or with gray-green reticulations on the inner sides of the lobes; width 1.1 mm. Body as before, pale green, white lined, subdorsal, lateral and broad substigmatal of pale greenish white, the spaces between, especially the broad dorsal one, more or less darkly shaded with grayish black, the venter not connectedly so. Cervical shield dark, anal plate pale. Tubercles elevated, rounded, distinct but concolorous; setae short, stiff, dusky, i and ii in line, iii rather before the spiracle, iv at the lower corner, v before and vi behind, vii a group of three setae, not scattered; all normal and Noctuidiform, the segment not being elongated.

Abdominal feet of joint 9 well formed but small. Spiracles black ringed; subventral tubercles blackish; thoracic feet pale.

Stage IV. Head whitish green; width 1.8 mm. Body smooth, green, setae small, pale obscure; dorsal vessel dark; a distinct, straight, white subdorsal line, the dorsal space with irregular, crinkled, dotted, white marks; a narrow lateral white line, the space above obscurely white blotched; white mottlings stigmatally and subventrally scarcely segregated into a line above the subventral fold. Spiracles finely black ringed. The larvae rest out straight on the back of a leaf. The feet on joint 9 have five long crochets on the posterior-side, those of 10 have a set of hooks before and behind, broken on the inside by the large planta.

Pupation in the earth, the moths emerging the fall of the same year. Specimens from Lily Lake, Ill., and Bellport, N. Y.

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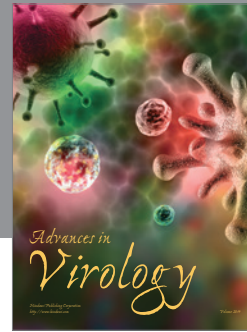
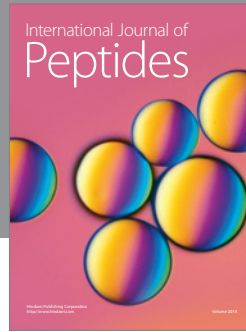
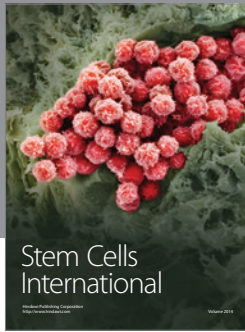
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