

REARING THE LARVAE OF *LONOMIA CYNIRA* (SATURNIIDAE)

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The genus *Lonomia* consists of six variable and often confusing species of Neotropical moths whose range extends north to Mexico. Dr. A. D. Blest (*personal communication*) reports that on Barro Colorado Island, Canal Zone, Panama, the larvae are found feeding on a species of *Quassia*. The early instar larvae rest on the under surface of the leaves, while the later instars are found resting in a tight group of 4 to 10 larvae on the trunks, some 18 inches to 4 feet from the ground, returning to the same place each day after feeding. When disturbed they fall to the ground and bury themselves in litter.

On September 5, 1961 I received by airmail 153 ova of *Lonomia cynira* Cramer, which had been laid by a female obtained in a light-trap operated by Dr. Blest at Barro Colorado. These eggs started to hatch after seven days and about 75 larvae emerged by the eighth day following receipt. No further emergence took place. Assuming that the eggs had been laid a week before receipt, a period of 14 days was required for the eggs to hatch, about average for a saturniid.

The natural foodplant being unknown, the larvae were offered a choice of *Robinia pseudo-acacia*; *Fagus sylvaticus*; *Ligustrum ovalifolium*; *Prunus* sp.; and *Ulmus campestris*. After 24 hours they had commenced to feed on the first of these trees and were maintained on this plant in small plastic boxes until the end of the third instar. The larvae were then transferred from the boxes to a well ventilated larval rearing cage 18" × 12" × 12". By this time the *Robinia* leaves had yellowed and fallen and *Fagus* was again offered and was accepted. This food was continued until about half the larvae had pupated. The *Fagus* supply then also failed and the last of the larvae finished their development on a mixture of *Carpinus betulus* and *Quercus ilex*. The last half dozen larvae failed to pupate on this diet, but it is possible they might have failed in any case, as they were very much retarded.

The development times of the various larval instars, which were kept at 25°C. ± 5° was as follows: 1st instar, 7 days; 2nd instar, 5 days; 3rd instar, 6 days; 4th instar, 10 days; 5th instar, 9 days, 6th instar, variably from 18 to 44 days. The mean larval duration of the 40 which pupated

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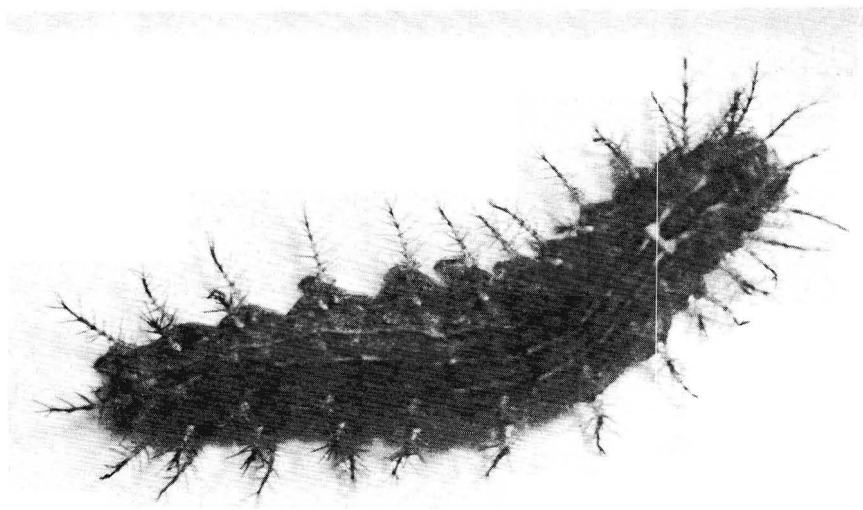


Fig. 1. Mature larva of *Lonomia cynira* Cramer, dorsal aspect.

was 68 days. The pupae were used for physiological experiments and it was not therefore possible to determine the duration of this stage or to obtain pairings and so complete the life-cycle.

When small the larvae are gregarious. When large they still retain this habit when resting, but scatter widely when feeding. The larvae fed only at night and during the day rested in a cluster off the food-plant. Beginning with the fourth instar the larvae sought shelter underneath the paper with which the floor of their cage was lined. There was a tendency for the larvae to drop and wriggle violently when disturbed. After a few seconds of this behaviour they would rapidly crawl away. This species is the most active saturniid larva I know and is equal in speed to some of the better known Arctiid larvae, such as *Spilosoma lubricipeda* (Linnaeus).

The first pupae were found on the floor of the cage underneath some lining paper. A layer of peat, overlaid by a thin covering of moss was then supplied. All subsequent pupae were found naked on the top of the peat. No trace of a cocoon was found, nor did the larvae appear to spin silk at any stage.

Egg. Distinctly box-like (rather than ovoid or spherical), 1.5 mm \times 1.1 mm \times 2.0 mm high. When received, varying from pale to dark green, with a 1.0 mm

wide whitish band completely encircling each egg. Micropyle minute, almost invisible.

First instar larva. No description was made. A few specimens preserved in alcohol were sent to Yale University.

Final instar larva. Length about 3.75 cm, thickest at middle, tapering toward each extremity. Ground color brownish-black, overlaid by a series of lighter longitudinal lines, edged with black; each segment with up to six chalazae each bearing rather short, sparse urticaceous spines brown to black. Dorsum of thoracic segments with a conspicuous white mark with black-ringed brownish centre (see Figure 1), characteristic beginning with the second instar.

The author's skin did not react strongly to the 'sting' of this larva; the 'sting' being about equal to that of an *Automeris io* Fabricius.

NEW SOCIETY AND NEW JOURNAL

With the publication of its first issue in November, 1966, a new journal has begun: the *Newsletter of the Association of Minnesota Entomologists*. The Association and its *Newsletter* are primarily concerned with Minnesota entomology (especially Lepidoptera), but they welcome members from anywhere, and articles on any aspect of entomology and any part of the world.

The *Newsletter*, under the editorship of John H. Masters, is printed by silk-screen mimeograph and appears (quarterly) in an octavo format with a card cover enclosing 24 pages. The first number has the following contents: constitution and by-laws; publication announcements; the Rhopalocera of Minnesota, Part I Hesperidae Hesperinae (by R. L. Huber); Rhopalocera of Fort Snelling (by J. T. Sorensen); Minnesota life zone map; the Coleoptera of Minnesota, Part I Cicindelidae (by R. L. Huber). There is also a Field Collectors' Section (this one includes an account of a collecting trip to the Black Hills and of an encounter with an *Agrias* in Venezuela), and an exchange column.

The prime-movers of the new organization, John H. Masters, John T. Sorensen, Ronald L. Huber and Patrick J. Conway among them, are enthusiastic and capable. Wisely they have chosen to begin modestly. The low cost of membership (which includes subscription to the *Newsletter*) should encourage many lepidopterists, both amateur and professional, both in and out of Minnesota, to join and thus provide moral and financial support to a budding concern.

There are two classes of paying membership: *active* members (\$2.00 a year) have voting privileges; *corresponding* members (\$1.00 a year) do not. Both receive the *Newsletter*. Membership applications should be addressed to the secretary-treasurer, Patrick J. Conway, Apt. 306, 7544 Cedar Avenue South, Richfield, Minnesota 55423. Editorial correspondence should go to John H. Masters, P. O. Box 7511, St. Paul, Minnesota 55119.—HARRY K. CLENCH, *Carnegie Museum, Pittsburgh, Pennsylvania 15213*.