One frequently reads suggestions that winter cold has caused the evolution of the diapause; writers in temperate climes are apt to forget the equally important role of arid heat.

References

- Andres, A., & A. Seitz, 1923-25. Die Lepidopteren-fauna Ägyptens. Senkenbergiana, vol.5: pp.1-54, 229-238, 1 pl. (1923); vol.6: pp. 13-83 (1924); vol.7: pp.54-61 (1925).
- Wiltshire, E. P., 1938. Notes on the winter flight in mild climates of vernal and autumnal moths. *Ent. Rec.*, vol.50: pp.144-146.
- ... , 1941a. The summer flight in cold climates of vernal and autumnal Lepidoptera. *Ent. Rec.*, vol.53: pp.4-7.
- .. , 1941b. The phenological classification of Palearctic Lepidoptera. Ent. Rec., vol.53: pp.101-106.

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THE LARVA OF HYPERÆSCHRA GEORGICA (NOTODONTIDÆ)

by Alexander B. Klots

Thrice during the last two years I have found at Putnam, Connecticut, on *Quercus* larvæ of a Notodontid which corresponded to nothing recorded in the literature. A larva found in August, 1955 pupated but died during the winter; another found in July, 1956 was parasitized; but the third, also found in July, 1956, transformed the same year to the adult. This proved to be *Hyperæschra georgica* (Herrich-Schaeffer). These larvæ were nothing like the description of the larva of *georgica* given by FORBES (1948, p.220). FORBES, however, took his information from PACKARD (1895, p. 153), the only available source; and PACKARD merely quoted a MS of RILEY's based on southern larvæ. The following description therefore corrects a mixup of long standing. It is doubly important to do so since it will bear importantly on the question whether *georgica* really belongs in *Hyperæschra*.

Length of mature larva 45 mm. Color very light gray green, almost whitish dorsally, deepening and darkening to olive green just above the immediately subspiracular lateral line, below that olive green. Lateral line yellow, slightly brighter on head; on body fading dorsally to whitish, finely edged both ventrally and dorsally with dark, the ventral edging reddish and the dorsal edging blackish; continuous from outer edge of mandible and antenna, below stemmata, almost to posterior (median) end of anal plate where it fades out.

Head light gray-blue-green, reticulated with darker and lighter shades of the same hue; edges of epicranial suture lighter; stemmata black. Thoracic segments lighter than those of abdomen. Body with a pair of narrow, indistinct, whitish subdorsal lines very close together. Laterad of these, on each segment, 3 small whitish warts, longitudinally arranged; laterad of these an irregular, longitudinal line of 8-11 small whitish dots; laterad of these a similar, irregular longitudinal line of 7-9 small whitish dots; laterad of these the line of the spiracles and the longitudinal line. Spiracles oval, whitish, narrowly

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rimmed with black. Ventrad of lateral line a number of small whitish tubercles and dots. On each of abdominal segments 1-8 a short, dark, somewhat indistinct longitudinal line in a narrow groove.

Head held more at a right angle to body axis than parallel to it (as in *Gluphisia*), but not as pronouncedly at a right angle as in *Nadata gibbosa* (J. E. Smith). Skin very smooth and waxy looking, but definitely not shiny as in larva of *Pheosia rimosa* Packard. Setæ and hairs very fine and short, whitish. No enlarged warts except a pair of small ones on dorsum of abdominal segment 8 which nearly touch mid-dorsally; these are bright orange and surrounded by a narrow, slightly irregular, bright yellow area. Anal prolegs definitely smaller than the others, but fully used and not carried up in the air.

Described from a larva found at Putnam on *Quercus rubra* L. when fully grown. This larva entered the soil to pupate on 18 July 1956; the adult emerged on 1 or 2 August 1956. The larval and pupal exuviæ and the adult are in the collection of the American Museum of Natural History. This and the other two larvæ, which were also on *Q. rubra*, fed chiefly along the midribs of mature leaves, progressively eating away one side of the leaf outward from the base. They fed and rested along the midrib with their dorsal surfaces down. In this position they were not easily discerned even when in plain sight, largely due to their reversed countershading.

In FORBES' key (*loc. cit.*, p. 209) this larva would probably run to couplet 9, since its markings other than the lateral stripe are inconspicuous. In couplet 10, however, it would agree with neither of the alternatives. In any event it would not run to the Riley-Packard *Hyperæschra*.

References

Forbes, W. T. M., 1948. Lepidoptera of New York and neighboring states, part III. Cornell University Agricultural Experiment Station, Memoir 274.

Packard, A. S., 1895. Monograph of the Bombycine moths of America north of Mexico, part 1, Notodontidæ. National Academy of Science, Memoirs, volume 7.

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EUREMA DAIRA DAIRA IN MISSISSIPPI

by BRYANT MATHER

The name, Eurema daira daira Latreille, is used here, as it was by KLOTS (1951), to include the material previously referred to as two species: E. jucunda Boisduval & Leconte and E. delia Cramer (= E. daira), following his view that "there is little doubt that "jucunda" is the summer form and "daira" the winter one of a single species."

Both published lists of Mississippi butterflies included *E. jucunda*. WEED (1894) commented that it is rarer than *lisa* or *nicippe*: HUTCHINS (1933) listed it as common in late summer. Neither list mentioned *E. daira* or *E. delia*.