

## **A New Species of *Automeris cecrops* (Attacidae: Hemileucinae)**

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This article deals with the description of a subspecies of *Automeris cecrops* (Boisduval) discovered recently in northeastern Mexico. The type material consists of, in addition to the holotype, a female allotype collected by Richard S. Peigler and the offspring of this female reared in France by the author. The two previously known subspecies, the nominate subspecies and *A. cecrops pamina* (Neumoegen), are localized, the first in the vicinity of Mexico City, and the second in Arizona, New Mexico, and Chihuahua; both live at a higher altitude than the new subspecies.

### ***Automeris cecrops peigleri* LeMaire new subspecies**

#### **Types:**

Holotype: ♂ (Fig. 1), Mexico, Nuevo Leon, Laguna de Sanchez, 27-VII-1976 (collection of C. Lemaire < Museum national d'Histoire naturelle, Paris); allotype: ♀, Nuevo Leon, 27 km west of Linares, 500 m, 23-VII-1976, at light, R. S. Peigler; paratypes: 8 ♂♂, 3 ♀♀, *ob ovo* (laid by allotype), reared in France at Gordes (Vaucluse) by C. Lemaire on *Populus alba* L. (10-VIII/XI-1976), emerged 17-VII-12-IX-1977 (all in same collection as holotype, except one pair of paratypes in collection of R. S. Peigler, South Carolina).

#### **Description**

♂ (Fig. 1). Expanse: 71-80 mm; length of forewing: 35-41 mm. Antennae rust-colored, frons and top of thorax brown, with a tuft of bright scales at the base of the forewings; abdomen carmine on the dorsal surface, beige on the ventral surface and at the anal extremity. Legs brown passing to rosy gray on the tarsi.

Forewings rather elongate, not falcate, outer edge weakly oblique. Ground color reddish brown, stripes dark brown, the antemedian with a grayish border, forming a very pronounced open angle on the cubitus, the postmedian preceded by a light gray border, scattered with yellow scales, slightly preapical (ca. 2mm) and a little outwardly



concave. Submarginal band vague. Discocellular spot slightly darker than the ground color, emphasized with black at the center and on the border.

Median-basal area of the hindwings dark yellow, passing to brown rose below the costa and also to rose toward the anal border. Postmedian line black, very slightly undulating, separated by a beige rose space from the brownish violet submarginal band. Marginal zone of the same tint as the forewing. Ocellus (diameter 9-11 mm), formed partly by a sharp white discocellular streak, by a bluish pupil, scattered with white scales, within a brown black iris, continuous with a black ring.

Ventral side beige, with a rosy zone on the internal edge of the forewings; postmedian line brown rose, weakly contrasting; submarginal bands very vague or imperceptible. Discal spot of forewings formed by a white dot, in the center of a large black ring; small discocellular dot of the hindwings white, finely edged by brown rose.

♀ (Fig. 2). Expanse: 85-93 mm; length of forewing: 43-47 mm. Fundamental brown coloration of forewings darker than in the males but with rose or violet paler zones on the hind part of the median area and on all or part of the external area. Dorsal side of abdomen carmine, with the very contrasting beige rose intersegmental rings. Diameter of the ocellus: 10-12 mm.

*Automeris cecrops peigleri* differs principally from the nominate subspecies and from *A. c. pamina* by the much greater diameter (♂ 9-11 mm as opposed to 6-8 mm; ♀ 10-12 mm as opposed to 7-9 mm) of the ocellus which also appears much closer to the postmedian line. The dominant coloration of the upper surface of the wings is much more contrasting than in *A. c. cecrops* in which it varies from light gray to brownish gray and to brown rose or orange, and much darker than in *A. c. pamina* where it passes from light gray to rose gray; yellow area, around the ocellus, darker and zones rose or brown rose, on the subcostal and anal areas of the hindwings, more clearly marked.

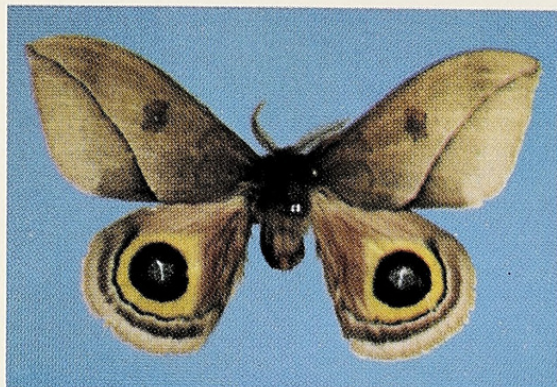
The available material examined is quite homogeneous and the reared specimens do not differ in size or coloration from those which were collected in the wild.

### Early stages

Egg white, micropyle emphasized by a very fine black point.

Larva (Fig. 3), in the seventh (last) stage, yellowish green, with, on abdominal segments 1 to 8, a turquoise blue dorsal band, edged by black and, after these and on each side, three subdorsal bands, yellow,





Figs. 1 & 2. *A. cecrops peigleri* n. subsp., holotype ♂. 2, *id.* paratype ♀.  
Fig. 3. *A. cecrops peigleri* n. subsp., larva, seventh instar, on *Populus* sp.



turquoise blue edged with black, and yellow, respectively, then a white spiracular line, edged by black, and a subspiracular white line. These different lines and bands are interrupted in the middle of each segment by a yellow ring on which are implanted the tubercles. Ventral surface black, with deep red rings and fine dots of light gray. Head capsule green, spiracles orange, thoracic legs reddish brown.

Tubercles spiniferous, composed of numerous green or black branches, these mainly occurring on the dominant tubercles of the thoracic segments and abdominal segments 8 and 9. The scheme of implantation of the tubercles is the same as that which I figured (Lemaire, 1971: 31, fig. 1) in an earlier work but the subspiracular inferiors of the eighth abdominal segment are reduced to a ciliated punctation and the paranal scoli are present.

Cocoon brown, not very thick, papery, fixed to a twig and enveloped in leaves of the host plant.

The behavior of the larvae is normal for Hemileucinae, strictly gregarious through the first four stages, later dispersing to form groups of smaller and smaller numbers and finally living isolated or nearly so. The varieties of poplars, besides *Populus alba* (of which the young pubescent shoots are not acceptable) were either refused, or accepted with reluctance. Duration of the larval stages: 5 and 6 days respectively for the first two, 9 to 10 days for each of the following, in individuals in which growth was most rapid (55 days total). The emergences of the imagines, after a diapause of over nine months, covered a span of eight weeks, suggesting this taxon is univoltin.

### Geographical distribution

The discovery of the new subspecies considerably extends the known range of *A. cecrops*. The nominate subspecies lives in central Mexico and more especially in the vicinity of Mexico City, at altitudes of around 1800 to 2200 m; I have not seen any specimens from further south Mexico nor from Central America where this species was cited as occurring (probably incorrectly) by Ferguson (1972: 168). *Automeris cecrops pamina* has been collected at numerous places in Arizona, at altitudes of between 1300 and 2200 m, and in a locality at 2300 m in New Mexico. It has recently been discovered in Chihuahua, Mexico (Creel, ca. 2134 m) where the larva has been found on *Quercus grisea* Liebm by R. O. and C. A. Kendall in September 1978. *Automeris cecrops peigleri* represents the species in the eastern part of northern Mexico and occurs at low altitudes.



**Acknowledgment:** It is with particular pleasure that I dedicate this new subspecies to my correspondent and friend, Richard S. Peigler, who is responsible for most of the type material.

### Literature Cited

- FERGUSON, D. C., 1977. in DOMINICK, R. B. *et al.*, The Moths of America North of Mexico, fasc. 20.2B, Bombycoidea (in part.), pp. 155-275+XV-XXI, text fig. 20-30, pls., 12-22. E. W. Classey Ltd. and R. B. D. Publications, London.
- LeMAIRE, C., 1973. Revision du genre *Automeris* Huebner et des genres voisins. Biogéographie, Ethologie, Morphologie, Taxonomie (suite). (*Mem. Mus. natl. Hist. nat.*, N. S., Ser. A, Zool., 79, pp. 233-422, fig. 133-278, pl. phot. h.-t. 31-49).



Lemaire, C. 1981. "A new species of *Automeris cecrops* (Attacidae: Hemileucinae)." *The Journal of Research on the Lepidoptera* 18(4), 236–240.  
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