A NEW SUBSPECIES OF LIMENITIS ARCHIPPUS
(LEPIDOPTERA, NYMPHALIDAE)

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In 1940, Carlos C. Hoffmann noted specimens of Limenitis archippus occurring in Vera Cruz which, at the time, he compared with L. archippus halli (Watson and Comstock) (1920, p. 449). These specimens were received at the American Museum of Natural History with the Hoffmann collection. One male had a type label with an unpublished manuscript name. Two other males were marked with paratype labels. Apparently Hoffmann had recognized these specimens as constituting a distinct subspecies of Limenitis archippus, but the description was never published. I take pleasure in naming this new subspecies in honor of its original discoverer, the late C. C. Hoffmann.

Limenitis archippus hoffmanni, new subspecies

Basilarchia archippus halli Hoffmann (nec Watson and Comstock), 1940a, pp. 279–280.
Basilarchia archippus halli Hoffmann, 1940b, p. 689.

The length of the forewing, measured from the base to the apex, varies from 32 to 34 mm. in the male, with the average length being 32.5 mm. The holotype measures 33 mm.

On the upper surface the color and maculation suggest an intergradation between L. archippus archippus (Cramer) (1775, vol. 1, p. 24, pl. 16) and L. archippus obsoleta Edwards (1882, p. 22). The ground color of the limbal area is similar to that of L. archippus archippus, while the discal and basal areas suggest the color of L. archippus obsoleta. The narrow black maculation along the veins and the narrowing of the black marginal band of both wings approach L. archippus obsoleta.

The diagonal black band across the apex of the primaries is reduced, but possesses the characteristic white spots in cell R₅ and cell M₁. In cell M₂, however, this band is reduced to a minute black spot which may or may not be ocellated with white. In cell M₃, a pinpoint black spot may be present or absent. This diagonal band is well developed in L. archippus archippus, L. archippus floridensis (Strecker) (1878, p. 143), and L. archippus watsoni (dos Passos) (1938, p. 243) and meets the marginal black border. In L. archippus obsoleta this band is reduced to a series of four large subequal white spots, thinly bordered with black, but never reaching the outer margin.

On the secondaries the transverse discal black band characteristic of L. archippus and its subspecies is completely lacking, although faintly showing through the wing from the lower surface. The white intracell lar lunules of the outer margin tend to become obscured in L. a. hoffmanni.

The lower surface is very similar to L. a. archippus, however; the black bands across the middle of the wings are reduced in width. The discal and basal areas of the primaries tend to have the darker brown color of L. a. obsoleta.

The valves of the male genitalia have a large, terminal, ventrally directed hook characteristic of L. archippus and its subspecies. The small pointed process dorsal to the hook, which frequently occurs in L. archippus archippus and is best developed in L. a. obsoleta, is lacking. This latter character is variable in this species and is not of subspecific diagnostic value.

TYPE SERIES: The type male is from Misantla, Vera Cruz, Mexico, July, 1909 (C. C. Hoffmann). Five paratypes: one male, Misantla, Vera Cruz, Mexico, July, 1909 (C. C. Hoffmann); one male, Pa-
pantla, Vera Cruz, Mexico, July 12, 1925 (C. C. Hoffmann); three males, Tamasunchale, Hidalgo, Mexico (D. Romanoff). The type and paratypes are in the American Museum of Natural History.

*Limenitis a. hoffmanni* is the southernmost representative of its genus in the Western Hemisphere, occurring in Vera Cruz and Hidalgo. At present its known distribution appears to be discontinuous with the other subspecies of *L. archippus*. However, more thorough collecting in northern Mexico may extend its range. It is possible that this subspecies will intergrade with *L. a. watsoni* along the coastal areas and with *L. a. obsoleta* in north central Mexico.

The resemblance of *L. archippus* to *Danaus menippe menippe* (Hubner) (1816, p. 16) is well known. It is interesting to note that the subspecific variation of *L. archippus* corresponds to the prevalent species of *Danaus* found in the region. In southern Canada and northern United States, *L. a. archippus* closely resembles *D. m. menippe*. In the Gulf states, *L. a. watsoni* and *L. a. floridensis* occur, which closely resemble the common *Danaus gilippus berenice* (Cramer) (1779, vol. 3, p. 22). In southwestern United States, where *Danaus gilippus strigosa* (Bates) (1864, p. 32) abounds, it is mimicked by *L. a. obsoleta*. *L. a. hoffmanni*, on the upper side, most closely resembles *Danaus eresimus montezuma* Talbot (1943, p. 120), a common danaid in Central America.

**BIBLIOGRAPHY**

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