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## 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 One male had a type label with an unpublished manuscript name.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 pos-

sesses the characteristic white spots in cell  $R_5$  and cell  $M_1$ . In cell  $M_2$ , however, this band is reduced to a minute black spot which may or may not be ocellated with white. In cell  $M_3$ , 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 intracellular 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, Tamazunchale, 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 danainid in Central America.

#### BIBLIOGRAPHY

##### BATES, HENRY WALTER

1864. New species of butterflies from Guatemala and Panama. *Ent. Month. Mag.*, vol. 1, pp. 31-35.

##### CRAMER, PIERRE, AND (IN PART) CASPAR STOLL

- (1779-1791). *Papillons exotiques des trois parties du monde, l'Asie, l'Afrique et l'Amerique*. Amsterdam, vols. 1-4.

##### DOS PASSOS, CYRIL FRANKLIN

1938. A new race of *Basilarchia archippus* Cramer from Louisiana. *Canadian Ent.*, vol. 70, p. 243.

##### EDWARDS, WILLIAM HENRY

1882. Descriptions of species of butterflies taken in Arizona by Jacob Doll, 1881. *Papilio*, vol. 2, pp. 19-29.

##### HOFFMANN, CARLOS C.

- 1940a. *Lepidopteros nuevos de Mexico*, IV. *Ann. Inst. Biol. Mexico*, vol. 11, pp. 275-284.  
1940b. *Catalogo sistematico y zoogeografico de*

los Lepidopteros Mexicanos, primera parte, Papilionoidea. *Ibid.*, vol. 11, pp. 639-739.

##### HUBNER, JACOB

- 1816-1826. *Verzeichniss bekannter schmetterlinge*. Augsburg, 432 + 72 pp.

##### STRECKER, FERDINAND HEINRICH HERMAN

1878. *Butterflies and moths of North America*, a complete synonymical catalogue of Macrolepidoptera with a full bibliography. Reading, Pennsylvania, 283 pp.

##### TALBOT, GEORGE

1943. Revisional notes on the genus *Danaus* Kluk. *Trans. Roy. Ent. Soc. London*, vol. 93, pp. 115-148.

##### WATSON, FRANK E., AND WILLIAM P. COMSTOCK

1920. Notes on American Lepidoptera with descriptions of new varieties. *Bull. Amer. Mus. Nat. Hist.*, vol. 42, pp. 447-457.