AMERICAN MUSEUM NOVITATES

PUBLISHED BY THE AMERICAN MUSEUM OF NATURAL HISTORY CITY OF NEW YORK JANUARY 3, 1949 NUMBER 1385

TWO NEW SPECIES OF TELEMIADES AND NOTES ON SOME OTHERS (LEPIDOPTERA, RHOPALOCERA)

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A study of some of the members of the genus *Telemiades*, including *amphion* Geyer and several others having a somewhat similar superficial appearance, has resulted in establishing the identity of two or three rather obscure names applied to these insects by authors and in the discovery of two species not previously described. One name has been removed from the usual synonymy of *amphion* Geyer and restored to specific rank.

In this study much help has been given by Brigadier W. H. Evans in furnishing information in regard to Hewitson and Mabille types in the collection of the British Museum (Natural History).

All the specimens mentioned in this paper are in the collection of the American Museum of Natural History.

Reference to the venation of the wings by number, where it is given, follows the English system of numbering each vein from the lowest one upward.

Telemiades amphion amphion Geyer

Figure 1

Proteides amphion HÜBNER, 1819, p. 105. Manuscript name.

Proteides amphion GEYER, 1832, p. 12, figs. 631, 632 (Hübner, 1826, manuscript figures). West Indies.

Plesioneura compressa Möschler, 1876, p. 336, pl. 4, fig. 22. Surinam.

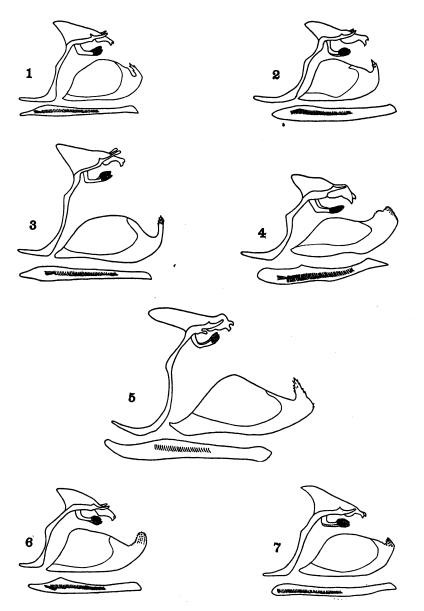
Proteides zethos Plötz, 1882, p. 71. Para.

Proteides compressa, Plötz, 1882, p. 71.

Aethilla buffumi Weeks, 1906, p. 174. Suapure, Venezuela.

Telemiades zethos, Godman, 1907, p. 135.

Aethilla buffumi WEEKS, 1911, p. 26, pl. 18, fig. 1.



Figs. 1-7. Male genitalia of Hesperiidae. 1. Telemiades amphion Geyer. 2. Telemiades amphion misitheus Mabille. 3. Telemiades amphion marpesus Hewitson. 4. Telemiades antiope Plötz. 5. Telemiades brazus, new species. 6. Telemiades amphion Geyer. (?Variant.) 7. Telemiades fides, new species.

The sex of the type of *amphion* was not stated in the original description, but the figure seems to be that of a male. The figure shows six moderately small white hyaline spots on each primary wing, of which two are subapical and four form a discal band, the one in the cell not being deeply excavated on its outer side.

The male *amphion* sometimes has three subapical spots, the third, and lowest, one always very small and lying below the outer corner of the spot above it. The cell spot is sometimes deeply excavated on its outer side. The spots of the discal band of the female are much larger than those of the male.

I have removed *antiope* Plötz from the synonymy of *amphion* where it has been placed by previous authors and have restored it to specific rank, for the reasons given on subsequent pages of this paper.

The specimens of *amphion* before me are from localities in Colombia; British, French, and Dutch Guiana; Perú; and Bolivia.

The male genitalia of amphion have a moderately short uncus, with a truncate apex having a short hook on each corner. On each side there is a rod-like structure attached to the tegumen, along the lower side of which these rods extend as far as the base of the uncus where they are angled, then curved forward and upward and are tapered to a narrow, rounded apex. There is a well developed scaphium. The apical arm of each clasper is directed upward and usually inclined a little backward, terminates in a sharp point, and carries a few short teeth. The aedeagus carries a long series of internal spines.

A single male specimen from British Honduras closely resembles amphion in superficial characters, but the genitalia (fig. 6) differ in that the terminal arm of each clasper is broader and apically rounded, not sharply pointed as is usual in amphion, and carries more numerous short teeth arranged in vertical rows. The other characters of the genitalia are as in amphion. Additional material is needed for study to determine whether the differences shown by this specimen are merely variations or are specific.

Telemiades amphion misitheus Mabille

Figure 2

Telemiades misitheus Mabille, 1888, p. 221, fig. 4 (not fig. 3). Chanchamayo. Telemiades misitheus, Mabille and Boullet, 1912, pp. 113, 121.

The figure of the type of *misitheus* shows but one subapical white hyaline spot on each primary wing, but Mabille and Boullet say that there are three such spots in the specimens before them from Bolivia, Guiana, and Colombia. The specimens before me are two males from the vicinity of Baños, Ecuador; one has two subapical spots on each primary wing and the other has three, the lowest one being small and placed outward of the spot above it. In both specimens the uppermost subapical spot is the largest.

The male genitalia of *misitheus* do not appear to differ materially from those of *amphion*.

The male *misitheus* superficially differs from that sex of typical amphion in having much enlarged discal hyaline spots on each primary wing, similar to those of female amphion. The geographical range of misitheus seems to parallel closely that of typical amphion, and, lacking definite data, I am not sure of the exact relationship between the two forms. Perhaps misitheus may be merely a minor form of amphion.

Telemiades amphion marpesus Hewitson

Figure 3

Eudamus marpesus Hewitson, 1876, p. 354. Brazil.

Telemiades amphion, DRAUDT, 1922, pl. 168e.

Telemiades amphion, HAYWARD, 1933, p. 180, pl. 14, fig. 9 (not pl. 9, fig. 19, male genitalia).

On each primary wing of both sexes of marpesus the subapical and discal hyaline spots are externely large. There are three subapical spots; the upper two are elongate, and the lowest one, though much smaller than the others, is well developed and lies directly under the middle of the spot above it. The dark bands of both primary and secondary wings are broad and continuous and stand out prominently in contrast with the rest of the wings. The outer margin of each primary wing is a little sinuous and that of each secondary wing is noticeably angled below vein 4. The size of marpesus is somewhat larger than that of typical amphion.

In the southern part of its range amphion is represented by marpesus.

The specimens at hand are from localities in the State of Santa Catharina, Brazil, and from Puerto Bertoni, Alto Parana, Paraguay.

The male genitalia of marpesus are very similar to those of amphion.

Telemiades amphion pekahia Hewitson

Pterygospidea pekahia Hewitson, 1868, p. 52. Venezuela.

The type of *pekahia* is a female. The original description states that there are eight white spots on each primary wing.

I have before me two specimens, a male and a female, from Mototan, Trujillo, Venezuela (P. J. Anduze). The female has the eight white hyaline spots as described by Hewitson. All the spots of the discal band are very much reduced in size in comparison with those of other members of the *amphion* group, the usual cell spot being represented by two small spots, thus accounting for the extra spot in the band. The male specimen has only three small white hyaline subapical spots on each primary wing, there being no trace of any of the discal spots.

I know of no specimens of *pekahia* from other than Venezuelan localities, and thus this form seems to be confined to a geographical range within that of typical *amphion*. In the absence of data I am unable to determine the exact relationship of *pekahia* to *amphion*, but Brigadier Evans considers it to be a form thereof.

The genitalia of our only male specimen are too malformed to be of any use.

Telemiades antiope Plötz

Figure 4

Proteides antiope Plötz, 1882, p. 71. Colombia and Para. Telemiades antiope, GODMAN, 1907, p. 135. Telemiades antiopa, MABILLE AND BOULLET, 1912, p. 121.

Godman says that the Plötz unpublished figure of antiope represents a variety of *Telemiades amphion* Geyer. Mabille and Boullet place antiope (spelled antiopa) as a synonym of amphion and in this action have been followed by subsequent authors.

The brief description of antiope seems sufficient to distinguish it from amphion, as Plötz says that the white hyaline spots of the discal band of each primary wing do not reach the costal margin of the wing. This indicates that there is no spot of the discal band lying on the costal margin above the cell spot. I have seen no specimen of amphion having a well-defined discal band in which the spot on the costal margin is absent.

Before me are three specimens which agree with the description of antiope: a male from Zanderij Island, Boven, Para District, Dutch Guiana, and two females, one from St. Laurent, French Guiana, and the other from Dabadie, Trinidad, British West Indies. These specimens resemble the male form of amphion in which the cell spot of the hyaline discal band of each primary wing is deeply excavated, but they are easily distinguished from that form of amphion by the absence of the hyaline spot on the costal margin above the cell spot and by the three well developed, subapical, hyaline spots, of which the lowest one is the same size, or a little larger, than the one above it. On the under side of each secondary wing there is a small dark spot at the anal angle.

The female of *antiope* is similar to the male; the hyaline spots of the discal band of each primary wing are only a little larger than those of the male and are not so greatly enlarged as they are in the female *amphion*.

The uncus of the male genitalia of antiope is somewhat longer and stouter, and the rod-like structure along each side of the tegumen is broader, than in amphion. The series of internal spines of the aedeagus is well developed. Each clasper terminates in a short triangular apex which is heavily covered with short teeth, and immediately behind it is another small angulation that is also toothed on its dorsal edge.

Telemiades fides, new species

Figure 7

Male: The upper side of the wings is brown, lightly over-scaled with yellowish gray. On each primary wing are seven white hyaline spots, of which three are subapical and four form a discal band. The subapical spots are small but well developed, and the lower one is a little outward of the spot above it. The discal band is composed of a minute spot in about the middle of the costal margin; a large spot crossing the cell and excavated on its outer side, the lower arm of the excavation is broad, bluntly rounded at the apex, and longer than the upper arm; a quadrate spot in interspace 2, the outer side of which is a little excavated; a small triangular spot in interspace 3, a little excavated on the outer side, the rounded apex of this spot about reaches as far as the apex of the lower arm of the cell spot and almost to the center

of the upper side of the spot in interspace 2. There is a dark outer marginal band. The apex of the cell is narrowly darker. There is a dark spot below the lower subapical spot and two dark spots in interspace 1, one near the base and the other towards the outer margin. There is a slight angulation in the outer margin at the end of vein 1. The fringes are brown, slightly paler outwardly.

On each secondary wing the anal angle is produced into a slight lobe. There are a sinuous dark discal band, which is rather inconspicuous, and a dark subbasal spot. There are long brown and yellowish brown hair scales along the inner edge of the abdominal fold. The fringes are as on the primary wing.

The under side of the wings is paler brown than on the upper side. Both primary and secondary wings are overscaled with yellowish, the secondary wings quite heavily so. The hyaline spots of the primary wings and the dark bands of both primary and secondary wings are repeated, the latter more distinct than on the upper side.

On the upper side, the head, thorax, and abdomen are yellowish brown. On the under side, the palpi and pectus are yellow brown; the thorax and abdomen, yellow and brown intermixed. The antennae are black on both sides, spotted with yellowish at the joints on the under side. The clubs are reddish on the under side.

FEMALE: The female is similar to the male except that the hyaline spots of the discal band of each primary wing are enlarged.

Length of one primary wing: male, 17-18 mm.; female, 18

TYPE MATERIAL: The holotype male and the allotype female are from Balboa, Canal Zone, Panama. Paratypes: One male from the same locality as the holotype; one male from Tapia Bridge, Panama; one female from Lascascadas, Panama; one male from Presidio, Vera Cruz, Mexico.

This species quite closely resembles *amphion*, but the lowest hyaline subapical spot of each primary wing is well developed and not very small as it is in *amphion*.

The uncus and the aedeagus of the male genitalia of *fides* are similar to those of *amphion*, but the termination of the clasper is different. Each clasper of *fides* terminates in a short, triangular apex on which are numerous short teeth.

Telemiades brazus, new species

Figure 5

Male: The upper side of both primary and secondary wings is a somewhat rufous brown. Each primary wing has three white hyaline subapical spots in an oblique line, the lowest spot a little outward of the one above it. There are two dark bands. The outer one begins on the costal margin, encloses the three hyaline subapical spots, runs downward across interspaces 5 and 4, then curves inward to a little beyond the end of the cell and downward to vein 1. This outer band begins narrowly on the costal margin and widens as it extends downward. The inner band crosses the cell a little before its apex and extends to vein 1. The two bands are connected along the costal margin of the wing. There is a narrow dark line bordering the apex of the cell. All the veins of the wing are slightly darker than the ground color. The fringes are concolorous.

On each secondary wing the basal area is dark, and there is a dark discal band in which there is a deep excavation just below vein 6. The fringes are concolorous.

On the under side the ground color of both primary and secondary wings is paler rufous brown than on the upper side. The apical area of the primary wing is darkened. The two dark bands and the dark line bordering the apex of the cell are repeated, but the two bands are much narrower and less prominent and tend to become broken into separate spots. In and along the abdominal fold on the secondary wing there is an overscaling of grayish which, in scattered scales, extends to the middle of the discal area. The dark discal band and the dark basal area of the upper side are repeated, but the discal band is narrow, indistinct, and broken into separate spots, and the dark basal area is represented by three separated spots which tend to become indistinct.

The top of the head and body is brown with some fulvous brown scales intermixed. On the under side the palpi, pectus, thorax, and abdomen are grayish. The antennae are black on the upper side, and on the under side they are blackish brown in the basal half; the rest, including the clubs, is pale fulvous brown.

Length of one primary wing: 20-22 mm.

TYPE MATERIAL: From the State of Santa Catharina, Brazil.

The holotype male is from Neudorf, November 9, 1939. One male paratype from Massaranduba-Blumenau.

This species is not a member of the amphion group but superficially resembles Telemiades delalande Latreille (1822, p. 761, no. 95, note). On the upper side of the wings the white hyaline subapical spots of each primary and the dark discal bands of each primary and secondary are extremely similar, but there is a more or less defined purple sheen on the wings of delalande which is not present on the wings of brazus. On the under side of the wings, the dark bands of each primary and secondary of delalande are generally well formed, continuous, and more or less prominent, whereas those of brazus tend to become broken into separate spots, especially on the secondary wings, and are not prominent.

The male genitalia of *brazus* have a rod-like structure on each side of the tegumen, and each of these has a short projection from its ventral edge a little before the base of the uncus. Each clasper terminates in a long triangular apical arm on which there are a number of teeth. The aedeagus is long and stout and has a series of internal spines.

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