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A NEW SPECIES OF *NICONIADES* FROM NICARAGUA (LEPIDOPTERA: HESPERIIDAE)

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ABSTRACT: A new species of *Niconiades* is named and described from Nicaragua, and illustrated with its genitalia.

KEY WORDS: Central America, neotropics, genitalia.

Several suspected undescribed species of HesperIIDae were collected in Nicaragua during the mid-1970's (Anderson, 2007). One of these was an unknown *Niconiades* Hübner, [1821], HesperIIDae: HesperIIDinae: Moncini which is described below.

Niconiades bifurcus Anderson, new species

(Figs. 1-7)

Description. Male (Figs 1,2): forewing length 15 mm (holotype), 15.5 mm (paratype); forewing produced, apex slightly rounded, termen straight; hindwing apex rounded, termen slightly convex to a moderately elongated tornus; dorsum dark brown with brown and iridescent green hair tufts in basal 1/3 of Cu_2 -2A and central 1/3 of anal margin of forewing, and basal 1/2 of hindwing; forewing with three short dark brown brands (Fig. 5), one above the other; one above vein Cu_2 at base of cell, one below Cu_2 (the narrowest), and one above 2A; forewing with very pale yellow translucent macules as follows: subapical, aligned in R_4 - R_5 , R_5 - M_1 , roughly square, that in R_4 - R_5 smallest; in discal cell, two separate and nearly equal sized; M_3 - Cu_1 , rectangular with proximal edge in line with distal edge of macule in Cu_1 - Cu_2 ; mid- Cu_1 - Cu_2 , more or less quadrate with excavated distal edge; Cu_2 -2A, elongated in lower half of space over middle of vein 2A and not as pale yellow as the other forewing macules; fringe dark brown at apex, paler

towards tornus; hindwing with three very pale yellow, almost round, macules in M_1 - M_2 , M_2 - M_3 , M_3 - Cu_1 , fringe pale brown apex to tornus. Venter slightly lighter brown than dorsum, darker basal 1/3 of forewing; forewing with macules repeated from dorsum, that in Cu_2 -2A elongated and extended distad by pale ochreous scaling; hindwing with macules repeated from dorsum, plus a round macule near end of discal cell, and an elongated patch of pale ochreous scaling in Cu_1 - Cu_2 .

Dorsum of head, thorax, and anterior abdomen iridescent green, posterior abdomen dark brown, palpi green above, whitish beneath and pale yellowish on cheeks; antenna dark brown, pale yellow scaling at base of club beneath, nudum brown with 16 segments ($n=2$); legs dark brown with iridescent green hair tufts on the femur and coxa, mid-tibiae spined with single pair of spurs, hind tibiae with two pair of spurs; ventral abdomen pale brown.



Figures 1-4. *Niconiades bifurcus* in dorsal (left) and ventral (right) view. 1-2) Holotype male, 3-4) Paratype female.

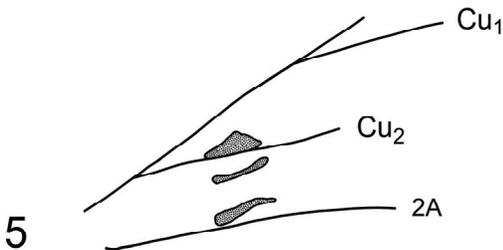
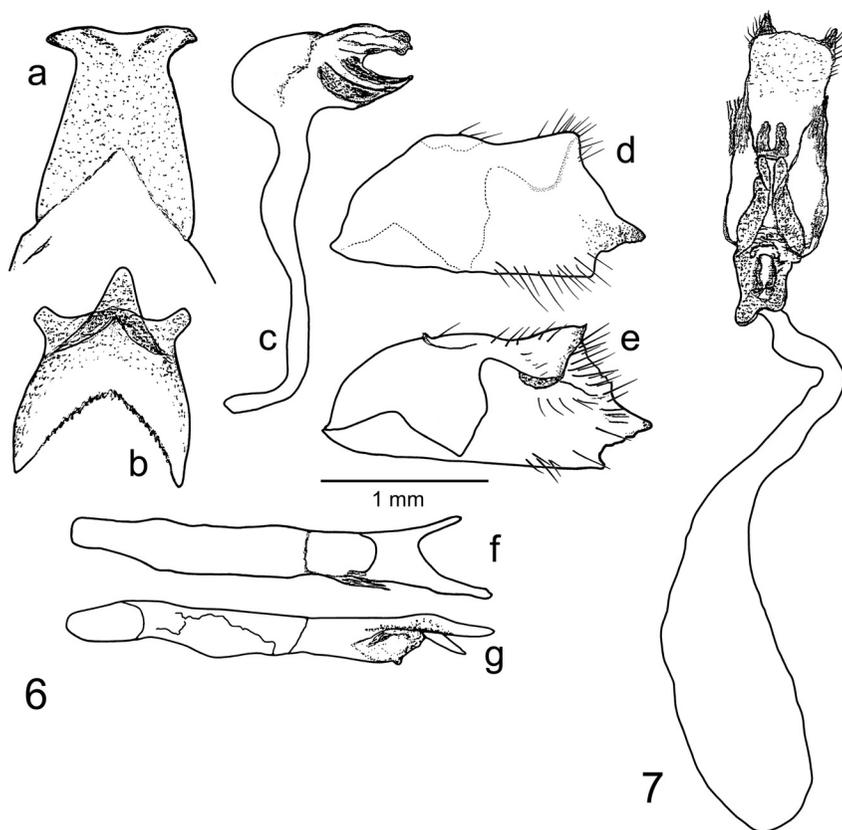


Figure 5. Male holotype forewing secondary sex characters.

Genitalia (Fig. 6): tegumen bulbous; uncus broad, tripartite, curving downward and flared laterally with a central projection and two lateral square-ended processes; gnathos slightly shorter than uncus, divided, pointed caudad, arms nearly convergent; vinculum somewhat sinuate; saccus short slightly upturned; valva broad, harpe triangular, caudal end curved mesad, dorso-caudal margin with fine serrations; aedeagus tubular, expanding slightly caudad to lateral pronounced prongs, dorsad left prong longer than right; no cornutus.



Figures 6-7. Genitalia of *Niconiades bifurcus*. **6** Male genitalia of *N. bifurcus*, holotype, SRS Vial # 5624; **(a)** dorsal view of tegumen and uncus, **(b)** dorsal view of downward curved uncus, **(c)** lateral view of uncus, gnathos, tegumen, vinculum, saccus, **(d)** lateral view left valva, **(e)** internal view of right valva, **(f)** dorsal view of aedeagus, **(g)** lateral view of aedeagus; **7** Female genitalia of *N. bifurcus*; paratype, RAA Vial # 0200, ventral view. Scale line applies to all except 6a and 6b, which were drawn at higher magnification.

Female (Figs. 3,4): forewing length 16.5 mm, similar to male in maculation, but slightly paler brown on both dorsal and ventral surfaces; no brands; forewing broader; hindwing termen slightly less convex; antennal nudum with 17 segments. Genitalia (Fig. 7): lamella postvaginalis long, double process extending caudad where joined to bifurcate extension; lamella antevaginalis concave cephalad, ventrad left lobe longer than right;

ostium bursae elongated sclerotized structure; ductus bursae and corpus bursae not clearly separable, gradually expanding to bulbous cephalad end.

Types. Holotype, Nicaragua: Nueva Guinea, 28 August, 1976, Leg. R. A. Anderson bearing the following labels: white, printed and hand printed, / Zelaya Dept., Nicaragua, / Nueva Guinea, / 28 Aug. 1976, / Leg. R.A. Anderson/; white, printed / Gent.Vial / No. SRS-5624; red, printed, HOLOTYPE / *Niconiades bifurcus* / Anderson. Paratypes: 1 male (SRS-5625) and 1 female (RAA # 0200) same location and date as holotype, Leg. R.A. Anderson. The holotype, and the female and male paratypes are deposited in the McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, Gainesville, Florida.

Type locality. NICARAGUA: Zelaya Department (now South Atlantic Autonomous Region/Región Autonomista Atlántico Sur), Nueva Guinea. Nueva Guinea is located in a broad, hot, humid coastal plain comprised of humid to very humid lowland and lower montane forests (Holdridge 1962).

Etymology. The name refers to the pronounced bifurcate shape of the caudal end of the aedeagus.

Distribution. The distribution of this taxon outside of Nicaragua is unknown, but should be expected in similar areas along the Caribbean coast of Central America.

Discussion. *Niconiades* is a neotropical genus of 17 described species occurring from Mexico to Argentina (Austin 1998, Evans 1955, Lamas 2004, and Llorente et al. 1990). These species can be separated into two groups based on the presence, or lack of, a pale band or stripe on the ventral surface of the hindwing extending from near the costa to space Cu₂-2A. Eleven species are striped and six are not. Those without the stripe: *N. centralis* Mielke, 1967; *N. merenda* Mabille, 1878; *N. mabona* Evans, 1955; *N. pares* Bell, 1959; *N. viridis vista* Evans, 1955; and *N. parna* Evans, 1955, vary in the size and number of macules in the postmedian area on both surfaces of the hindwing. *Niconiades parna* is an exception in this group in that the ventral surface of the hindwing is unmarked (Evans 1955). There are six species of *Niconiades* within Central America (including Panama and Mexico), but only two, *N. viridis vista* and *N. merenda*, lack the ventral hindwing pale stripe. *Niconiades bifurcus* is similar in maculation but lacks the greenish-ochreous shading on the ventral surfaces characteristic of *N. viridis vista*. *Niconiades bifurcus* differs from *N. merenda* in that the later has two discal macules on both surfaces of the hindwing and lacks the elongated patch in Cu₂-2A on the ventral hindwing. *Niconiades bifurcus* most closely resembles *N. centralis*, a South American species, in size, coloring, and general maculation; however, in *N. centralis*, the valva is not similar and the aedeagus lacks the prong extensions of *N. bifurcus*. It is the bifurcate shape of the aedeagus that most easily distinguishes *N. bifurcus*. The female genitalia of *N. bifurcus* were not compared with other members of the genus.

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