

NOTES ON THE GENUS *ARGYROGRAMMANA*, PART 2, WITH ONE NEW SPECIES (LEPIDOPTERA: RIODINIDAE)

JASON P. W. HALL AND KEITH R. WILLMOTT

Dept. of Entomology and Nematology, University of Florida, Gainesville, Florida 32611, USA

ABSTRACT.— The species of the *Argyrogrammana trochilia* (Westwood, [1851]) complex and *Argyrogrammana stilbe* (Godart, [1824]) complex (groups "Trochiliiformes" and "Stilbeiformes" respectively, of Stichel, 1911, 1930) are illustrated (including many type specimens), with notes on taxonomy and distribution. In addition, a new species (*A. pastaza* n. sp.) is described from the cloud forests of eastern Ecuador, and a revised classification is proposed for the entire genus *Argyrogrammana* Strand, 1932.

KEY WORDS: *Argyrogrammana pastaza* n. sp., *Baeotis*, Bolivia, Brazil, cloud forest, Clusiaceae, Colombia, Costa Rica, Ecuador, French Guiana, Guttiferae, hilltopping, hostplants, Neotropical, perching behavior, Peru, taxonomy.

The genus *Argyrogrammana* Strand, 1932, contains a number of species of Neotropical riodinids which are usually rare, often extremely similar in appearance, and occasionally quite variable. All species in the genus possess a thin gold or silver-blue submarginal line, traversing both wings on both dorsal and ventral surfaces, and often kinked basally in the forewing apex. In addition, all species appear to have a black medial stripe across the eyes, which may or may not appear on the frons. This combination of characters is unique among genera in the *incertae sedis* section (4 forewing radial veins) (*sensu* Harvey, 1987) of the Riodinidae, in which *Argyrogrammana* is currently placed.

The genus may be roughly divided into three main species complexes on the basis of external morphology. However, there are species intermediate between all these groups, and they are used here for the sake of convenience and are not intended to indicate any necessary monophyletic relationship between included species. The first group, the "*amalfreda* complex," we discussed in a previous paper (Hall and Willmott, 1995). This paper represents the second and concluding part of a review of *Argyrogrammana*, in which we critically examine the existing systematic arrangement and reassess the species diversity of the genus. Here we treat the "*trochilia* complex", characterised by banded females and often blue banded males, and the "*stilbe* complex," characterised by an orange or yellow dorsal surface mottled with small black spots (groups "Trochiliiformes" and "Stilbeiformes" respectively, of Stichel, 1911, 1930), illustrate many type specimens, and give notes on distribution, taxonomy and identification.

Among species of the "*trochilia* complex," we have found that the angle of the blue bands, the pattern of blue along the anal margin, and the shape of the silver submarginal line near the apex on the forewing dorsal surface are reliable characters for species diagnosis. Within the "*stilbe* complex," the precise pattern of

black spots in the forewing ventral surface apex and the shape of the silver submarginal line are both useful characters in identifying both males and females. The male genitalia are relatively homogenous, but some interspecific variation may be observed in the shape of the valvae and uncus. The diagnostic characters mentioned in each species account are consistent throughout the known ranges for all the specimens examined by us.

As a result of field work in Ecuador, it became apparent that there was a species in the "*trochilia* complex" from mid-altitude Andean cloud forest sites that was in need of description, and this is also formally described and named below. Finally, we present a new classification for the entire genus *Argyrogrammana*, incorporating information from our previous paper on the genus (Hall and Willmott, 1995).

Argyrogrammana Strand, 1932

Argyrogramma Stichel, 1910, preoccupied (Hübner, [1823])

"*trochilia* complex"

A. saphirina (Staudinger, [1887])

Fig. 1a,b. Male type, Río San Juan, W. Colombia (Zoologische Museum Humboldt Universität, Berlin, Germany, ZMHU).

Fig. 1c,d. Female type, Río San Juan, W. Colombia (ZMHU).

Fig. 15a-c. Male, nr. San Lorenzo, W. Ecuador (coll. of the authors).

Distribution: Panamá (Darién) - W. Ecuador.

This rare species is restricted to a rather small geographic range, where it can be found only in very wet lowland rainforest. It can immediately be distinguished from its close Amazonian relatives by its larger size and the interlocking pattern of blue squares towards the outer margins of both wings. The male genitalia are also distinctive (see Fig. 15a-c), with long pointed valvae which are joined at the tip by a sclerotized process (unique in the "*trochilia* complex"), and a pronounced bilobed uncus, in ventral view.