

# NINE NEW SPECIES AND ONE NEW SUBSPECIES OF *EUSELASIA* FROM ECUADOR (LEPIDOPTERA: RIODINIDAE)

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**ABSTRACT.**— Nine new species and one new subspecies in the euselasiine genus *Euselasia* Hübner, [1819] (*Euselasia andreae* n. sp., *Euselasia cyanofusa* n. sp., *Euselasia hieronymi bianala* n. ssp., *Euselasia illarina* n. sp., *Euselasia jigginsi* n. sp., *Euselasia mapatayna* n. sp., *Euselasia nauca* n. sp., *Euselasia palla* n. sp., *Euselasia pillaca* n. sp., and *Euselasia thaumata* n. sp.), are described from Ecuador, with brief notes on their habitats and behavior.

**KEY WORDS:** behavior, Brazil, Central America, *Charis*, cloud forest, conservation, Costa Rica, deforestation, *Diaethria*, *Dynamine*, endemism, *Eueides*, *Eresia*, *Euprychia*, *Euselasia andreae* n. sp., *Euselasia cyanofusa* n. sp., *Euselasia hieronymi bianala* n. ssp., *Euselasia illarina* n. sp., *Euselasia jigginsi* n. sp., *Euselasia mapatayna* n. sp., *Euselasia nauca* n. sp., *Euselasia palla* n. sp., *Euselasia pillaca* n. sp., *Euselasia thaumata* n. sp., Euselasiinae, *Hades*, *Hamadryas*, *Hyposcada*, *Ithomeis*, *Melanis*, *Methone*, Mexico, mimicry, *Myscelia*, Neotropical, Nicaragua, Nymphalidae, Panama, Peru, *Phoebis*, Pieridae, South America, *Stalactis*, *Symphachia*, taxonomy.

*Euselasia* Hübner, [1819], is the largest riodinid genus with approximately 152 described species (Hall and Willmott, unpubl. data), and contains all members of the subfamily Euselasiinae Kirby, 1871, except the three species in *Hades* Westwood, 1851, and *Methone* Doubleday, 1847 (Harvey, 1987). *Euselasia* species are widespread throughout the Neotropics and form a significant proportion of the riodinid fauna in all wet forest habitats up to about 1700m. While some species are common and likely to be seen by the casual observer, many are very rare and poorly known.

Seitz (1916) and D'Abrera (1994) both gave pictorial overviews of the genus, but the only attempt at a comprehensive taxonomic revision of *Euselasia* was that of Stichel (1928), who recognised 133 species. However, his appraisal is now woefully outdated by information collated over the last 25 years during intensive regional studies. These have usually resulted in the recognition of previously confounded sibling species (Brévignon, 1995, 1996, 1997; Callaghan, 1997) but quite novel phenotypes continue to be discovered, especially in the comparatively less well studied Andean cloud forest habitats (Hall and Willmott, 1995a). The purpose of this paper is to describe a number of *Euselasia* taxa from both of the above categories. The majority of these taxa have been collected by the authors during a faunistic study of Ecuadorian butterflies over the last five years, but the last two originate from the private collection of R. C. Busby, with whom those species descriptions are co-authored.

Approximately 92% of extant holotype specimens representing *Euselasia* taxa reside in the four museums listed below and all have been examined. Type illustrations and/or descriptions have been consulted for the remainder (we follow Heppner and Lamas (1982) in using the following acronyms throughout the text):

BMNH British Museum (Natural History), London, England  
MNHN Muséum National d'Histoire Naturelle, Paris, France  
USNM United States National Museum, Washington, DC, USA  
ZMHU Zoologische Museum, Humboldt Universität, Berlin, Germany

## *Euselasia palla* Hall & Willmott, new sp.

Fig. 1a,b.

**Description.**— MALE: unknown.

**FEMALE:** forewing length 26mm. Outer forewing margin convex, four radial veins; hindwing rounded with slightly dentate distal margin. **Dorsal surface:** forewing ground color dark brown; orange extends from wing base

to cell end, with some black scaling at the costal edge of the cell, and two-thirds distance from cell base to distal wing margin as ellipsoids in cells  $Cu_1$  and  $Cu_2$ , a similar distance from wing base to distal margin in cell 1A+2A, with extensive black scaling occurring in the central area of the distal half and along the anal margin; one tiny, faint costal white fleck in cells  $R_4+R_5$  and  $R_3$ , one large elongate submarginal white spot in cells  $M_1$ ,  $M_2$  and  $M_3$ , and increasingly smaller submarginal spots in cells  $Cu_1$ ,  $Cu_2$  and 1A+2A. Hindwing ground color dark brown; large orange patch extends from wing base three-quarters distance to distal wing margin, becoming darker at its distal edge and paler along anal margin. **Ventral surface:** forewing ground color pale brown; dull orange extends from wing base two-thirds distance to distal wing margin, outer edge convex; uneven, dark orange-brown line, 1mm thick, extends from cell  $R_2$  at costa to vein 1A+2A at a point two-thirds distance from wing base to tornus; thin line of dark orange-brown scaling extends along costal edge of discal cell; one small submarginal white spot in cells  $R_4+R_5$  and  $R_3$ , one large elongate submarginal white spot in each of cells  $M_1$ ,  $M_2$  and  $M_3$ , the latter two containing a pale brown macule across their middle, and three parallel pairs of submarginal spots in cells  $Cu_1$ ,  $Cu_2$  and 1A+2A that are all white except the proximal spot in  $Cu_2$ , which is dull orange. Hindwing ground color pale brown; dull orange extends from wing base three-quarters distance to distal wing margin; uneven, dark orange-brown line, 1mm thick, extends from distal end of vein Sc+ $R_1$  at costa almost to edge of orange in cell 1A+2A, then at a right angle up to anal margin; a pair of parallel submarginal white spots in cells  $M_1$ - $Cu_2$ , two pairs partially joined in cell 1A+2A, two thin white dashes in cell 3A; thin, orange-brown marginal line at tornus. **Head:** labial palpi white. Eyes black and bare. Frons white with orange scaling beneath antennae. Dorsal surface of antennae black, ventral surface black with brown band at base of each segment; clubs black, tips orange-brown. **Body:** thorax black; abdomen orange-brown, slightly paler on ventral surface. Legs orange-brown.

**Types.**— *Holotype female:* ECUADOR.— *Esmeraldas Prov.:* km 44 Lita-San Lorenzo rd., La Punta, 300m, 21 Jun 1994 (K. R. Willmott); to be deposited in the BMNH.

*Paratypes:* ECUADOR.— same data as above, 1 ♀ (J. P. W. Hall); in coll. of the authors.

**Etymology.**— This species is named after the Quechua word "palla", which means a woman of the Inca nobility, in reference to its impressive size and the fact that it is currently known only from female specimens.

**Diagnosis.**— *Euselasia palla* n. sp. is uniquely patterned amongst the Euselasiinae, bearing a fleeting resemblance only to the female of *Euselasia aurantiaca* (Salvin & Godman, 1868), which lacks the subapical white forewing markings and the broad distal black margin on the hindwing. It has been suggested to us (Harvey, pers. comm.) that the female specimens of *E. palla* match a small series of male

