

FOUR NEW SPECIES OF SYMMACHIINI FROM ECUADOR (LEPIDOPTERA: RIODINIDAE)

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ABSTRACT.— Four new species in the riodinid tribe *Symmachiini*, *Symmachia busbyi* n. sp., *Symmachia emeralda* n. sp., *Pirascca patriciae* n. sp. and *Xenandra ahrenholzi* n. sp. are described from Ecuador, with brief notes on their habitats and behavior. The taxon *hypochloris* Bates, 1868, is transferred from *Exoplisia* Godman & Salvin, 1886, in the tribe Riodinini, to *Symmachia* Hübner, [1819] (n. comb.), *Xenandra heliodes* C. & R. Felder, 1865, is synonymised with *Xenandra agria* (Hewitson, [1853]) (n. syn.), and the taxon *mielke* Hall & Furtado, 1999, is transferred from *Xenandra* C. & R. Felder, 1865, to *Symmachia* (n. comb.).

KEY WORDS: androconia, Cayenne, Chocó, cloud forest, endemism, *Exoplisia*, French Guiana, Junín, *Menander*, *Mesene*, *Mesenopsis*, Morona-Santiago, Napo, Pastaza, perching behavior, *Periplacis*, Peru, Pichincha, *Pirascca*, *Pirascca patriciae* n. sp., Riodinini, San Martín, South America, *Stichelia*, *Symmachia*, *Symmachia busbyi* n. sp., *Symmachia emeralda* n. sp., taxonomy, Tungurahua, *Xenandra*, *Xenandra ahrenholzi* n. sp.

The riodinid tribe *Symmachiini* Bates, 1859, contains approximately 140 (Hall, unpubl. data) typically small and aposematically colored species (see d'Aberra, 1994). Although the tribe usually constitutes about 10% of the riodinid fauna in most Neotropical forests (DeVries, 1997; Hall and Willmott, unpubl. data), few species are ever commonly encountered in nature, and most are among the rarest in the family. One third of them are known from fewer than ten specimens (Hall, unpubl. data). It is therefore not surprising that recent intensive field work, especially in the Andes where the tribe remains relatively diverse, has continued to uncover undescribed species in this tribe (Brévignon and Gallard, 1992; Salazar and Constantino, 1993; Brévignon, 1995; Hall and Willmott, 1995a,b, 1996; Hall and Furtado, 1999; Callaghan and Salazar, 1999; Hall and Lamas, 2001). Harvey (1987) defined this monophyletic group by males of its members possessing concealed androconial scales on the anterior margins of tergites four to seven (see illustrations in Harvey (1987) and Hall and Willmott (1996)); these scales differ in their ultrastructure from those found in the unrelated nymphidiine genera *Periplacis* Geyer, 1837, and *Menander* Hemming, 1939 (Harvey, 1987).

The purpose of this paper is to describe four new *symmachiini* species in the genera *Symmachia* Hübner, [1819], *Pirascca* Hall & Willmott, 1996, and *Xenandra* C. & R. Felder, 1865, to provide names for a faunistic treatment of the butterflies of Ecuador currently being undertaken by the authors. Morphological terms for genitalia follow Eliot (1973) and Klots (1956), and terminology for wing venation follows Comstock and Needham (1918). All those collections listed in Hall (1999) have been examined for material of the species described here, but only the following collection acronyms are used throughout the text:

BMNH	The Natural History Museum, London, England
DA	Collection of David Ahrenholz, St. Paul, MN, USA
GWB	Collection of George W. Busby, Boston, MA, USA
JHKW	Collection of Jason P. W. Hall and Keith R. Willmott, Washington, DC, USA
JYG	Collection of Jean-Yves Gallard, Matoury, French Guiana
MECN	Museo Ecuatoriano de Ciencias Naturales, Quito, Ecuador
MUSM	Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru
USNM	National Museum of Natural History, Smithsonian Institution, Washington, DC, USA

Symmachia busbyi Hall & Willmott, new sp.

Fig. 1a,b; 5a,b

Description: MALE: forewing length 12.5mm. Forewing costa strongly convex at base, distal margin strongly convex creating weakly falcate apex; hindwing somewhat pointed at apex and tornus. *Dorsal surface:* forewing ground color black; two dark orange marks at base of costa, two in discal cell, one at base and one at middle, one dark orange spot at base of cell Cu1, two vertical pairs of dark orange spots in basal half of cell Cu2, two dark orange marks towards base of cell 2A; uneven dark yellow triangle at costa covering discal cell end with uneven line distally that is dark yellow at costa and dark orange distal to discal cell end; uneven postdiscal band of spots consists of two yellow marks in cells R4+5 and R3, an inwardly curving series of dark orange marks in cells M3 to Cu1 and a vertical pair of dark orange spots more distally in cell Cu2; broken row of submarginal dark orange spots that are most prominent in apex and at tornus, distal margin dark orange; fringe black. Hindwing ground color dark orange, paler in tornus; black along costa, anal margin and at wing base; faint black scaling marking discal cell end, two postdiscal black marks in cells M3 and Cu1, distal one elongate in latter cell, three distal black marks in cell Cu2, faint submarginal black scaling in apex, series of black marginal spots, that in cell Cu2 elongate; evenly distributed patch of sparse black setae in basal half of cell Cu2; fringe brown. *Ventral surface:* forewing ground color dark brown; blue-gray scaling at upper base of cell Cu2, base of costa and in basal half of discal cell, that in latter containing two dark brown spots, inwardly diagonal line of postdiscal blue-gray marks in cells M2 to Cu1, disjointed blue-gray scaling at margin of cell Cu2 containing elongate dark brown mark, dark yellow markings of dorsal surface pale yellow-white, that distal to costal triangle entirely pale yellow-white. Hindwing ground color blue-gray; black scaling marking discal cell end, a diagonally vertical pair of black marks at middle of discal cell, a single black mark above towards base of cell Sc+R1, a disjointed postdiscal line of black spots curves around discal cell end from cell Sc+R1 to cell Cu1 then outwards to cell Cu2; a marginal series of black spots with semicircles of black scaling proximally. *Head:* labial palpi blue-gray with dark brown scaling towards tip. Eyes bare and brown, marginal scaling orange. Frons brown with orange scaling ventrally and laterally. Antennal segments brown with elongate area of white scaling at base, very narrow nudum along inner-ventral edge; clubs brown. *Body:* dorsal surface of thorax black, ventral surface blue-gray; dorsal surface of abdomen black with thin line of dark orange scaling at posterior margin of segments, ventral surface blue-gray; continuous narrow band of concealed androconia on dorsal half of anterior margin of abdominal tergites four and five. All legs blue-gray. *Genitalia* (Figs. 5a,b): uncus rectangular, produced into small divided point dorsally; vinculum uniformly narrow, small saccus rectangular in ventral view; valvae bifurcate, produced into two medium length projections of equal length, small sclerotized band extends

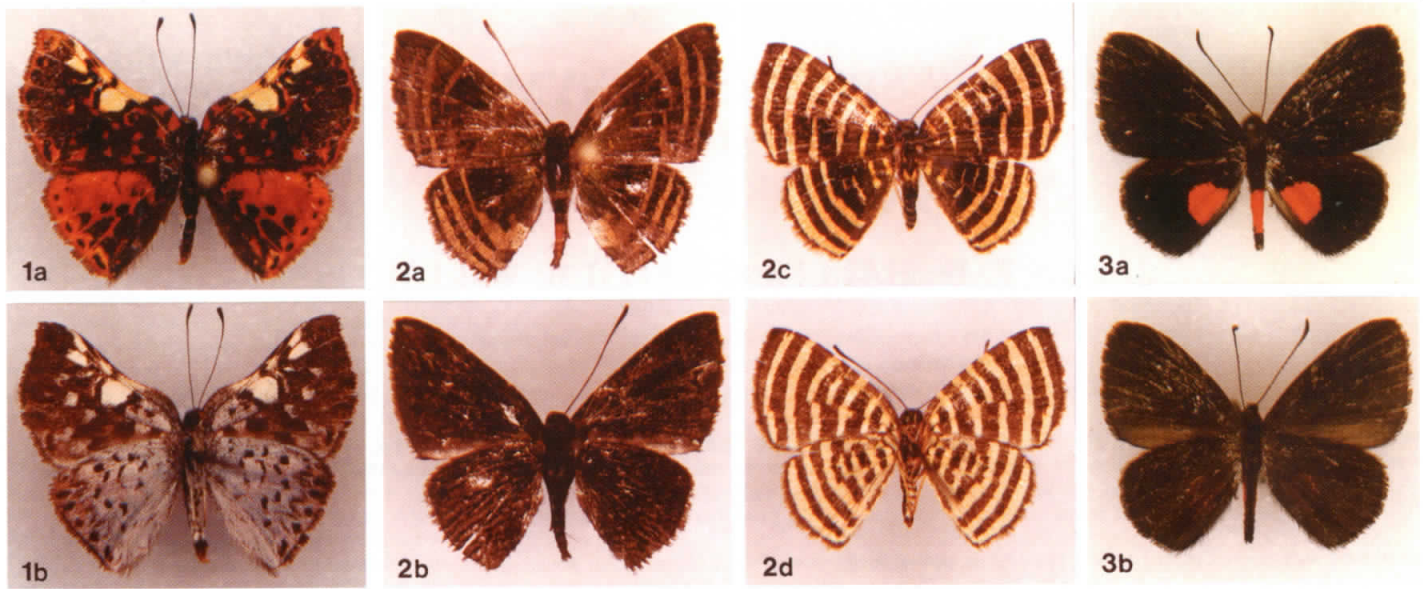


Fig. 1-3. 1. *Symmachia busbyi* Hall & Willmott, n. sp., holotype male, a) dorsal surface; b) ventral surface. 2. *Symmachia emeralda* Hall & Willmott, n. sp., holotype male, a) dorsal surface; b) ventral surface. Allotype female, c) dorsal surface; d) ventral surface. 3. *Pirascca patriciae* Hall & Willmott, n. sp., holotype male, a) dorsal surface; b) ventral surface.

from base of upper projection over aedeagus; aedeagus short and very broad, aedeagal cornuti consist of outwardly directed clusters of five long spines in upper left corner, four long spines in upper right corner, approximately eight long spines in lower right corner, and an "S"-shaped whirl of numerous, increasingly larger spines in central and lower left corner of partially everted vesica, pedicel produced into short posteriorly projecting "horn".

FEMALE: unknown.

Types.— *Holotype male*: ECUADOR.— *Tungurahua*, Río Topo, 1300m, 12 Oct 1988 (G. W. Busby); deposited in the USNM.

Paratypes.— 1 male: same data as HT; in the GWB. 2 males: PERU.— *Junin*, Chanchamayo (1 with label: "Joicey Bequest/Brit. Mus./1934-120."); both in the BMNH.

Etymology.— This species is named for George Busby, who has amassed an impressive collection of Ecuadorian lycaenoid butterflies in recent years, including the only recently collected specimens of this *Symmachia*.

Diagnosis.— One of the paratype males of *Symmachia busbyi* n. sp. was illustrated in d'Abrera (1994) as *S. virgatula*, a name that actually applies to the specimens illustrated immediately below as "*S. urichi* ? subsp.". Based on the wing facies and male genitalia, *Symmachia busbyi* appears to be most closely related to the lowland species *Symmachia juratrix* Westwood, [1851], from Brazil and the Guianas. d'Abrera (1994) correctly illustrates a male of this latter species, and a female is erroneously illustrated under the name *S. stigmosissima* Stichel, 1910. *S. busbyi* differs externally from *S. juratrix* by having a markedly convex distal forewing margin with a falcate apex, more extensive black markings on the dorsal hindwing, including a discal cell end mark, more black at the wing base, and two additional black spots distally in cells Cu2 and Cu1, a large oval instead of small triangular yellow mark at the discal cell end on the forewing with a thin yellow and red band immediately distally and two large subapical yellow marks at the costa. The ventral surface of *S. busbyi* has a predominantly black forewing with better defined gray at the wing base and forming the postdiscal spots with virtually no submarginal markings visible, and an entirely gray hindwing with reduced black markings, especially submarginally. The male genitalia of the two species are very similar, but the exact number of aedeagal cornuti differs slightly, although such differences may only be intraspecific.

Discussion.— This cloud forest species is currently known only from the Andes of Ecuador and Peru, but probably has a more widespread

distribution. The Ecuadorian males were encountered perching along the bank of a small stream at 1300m, lined with a mixture of primary and secondary forest.

Symmachia emeralda Hall & Willmott, new sp.

Fig. 2a-d; 6

Description: MALE: forewing length 12mm. Forewing costa approximately straight, distal margin very slightly convex; hindwing slightly pointed at tornus and apex. **Dorsal surface:** forewing ground color black; three equally spaced matte gold-brown lines, one postdiscal and two submarginal, traverse wing from costa to anal margin, postdiscal one outwardly diagonal from costa to vein Cu1 then kinking slightly proximally and extending vertically to anal margin, submarginal ones following curve of distal margin; green iridescence occupies basal third of wing proximal to discal cell end and extends along costal margin to apex interrupted only by gold-brown lines, most prominent and broad between postdiscal and first submarginal line; fringe brown. Hindwing differs from forewing in following ways: gold-brown lines are postdiscal, submarginal and marginal, first two of these coalesce at anal margin, postdiscal line broadens below vein Cu1 and again at anal margin, extending several millimeters basally along anal margin; green iridescence along costa is absent postdiscally, additional green iridescent spot is present at anal margin between postdiscal and submarginal lines; fringe brown. **Ventral surface:** both wings entirely black with faint dark blue-gray iridescence, except for pale brown along anal margin of forewing. **Head:** labial palpi black. Eyes bare and brown, marginal scaling black. Frons black with a faint dark blue-gray iridescence. Antennal segments brown with small area of dirty white basal scaling; clubs brown. **Body:** dorsal and ventral surface of thorax black; dorsal and lateral surface of abdominal segments four to eight dark orange, remainder black, ventral surface of all segments black; continuous narrow band of concealed androconia on dorsal half of anterior margin of abdominal tergites four and five. All legs black. **Genitalia** (Fig. 6): uncus elongate and rectangular; narrow vinculum broadens slightly medially, saccus elongate, flattened and triangular in ventral view; valvae bifurcate, lower projection short and triangular, upper projection pointed at tip with flat dorsal margin that connects dorsally over aedeagus with semi-sclerotized tissue; aedeagus elongate and narrow, partially everted vesica contains small spines on surface that become somewhat longer posteriorly, pedicel narrow and strap-like.

FEMALE: differs externally from male in following ways: forewing length 10.5mm. Forewing less pointed, distal margins of both wings more convex. **Dorsal surface:** all transverse lines dark yellow, additional dark yellow lines at base and through middle of discal cell on both wings, a complete line

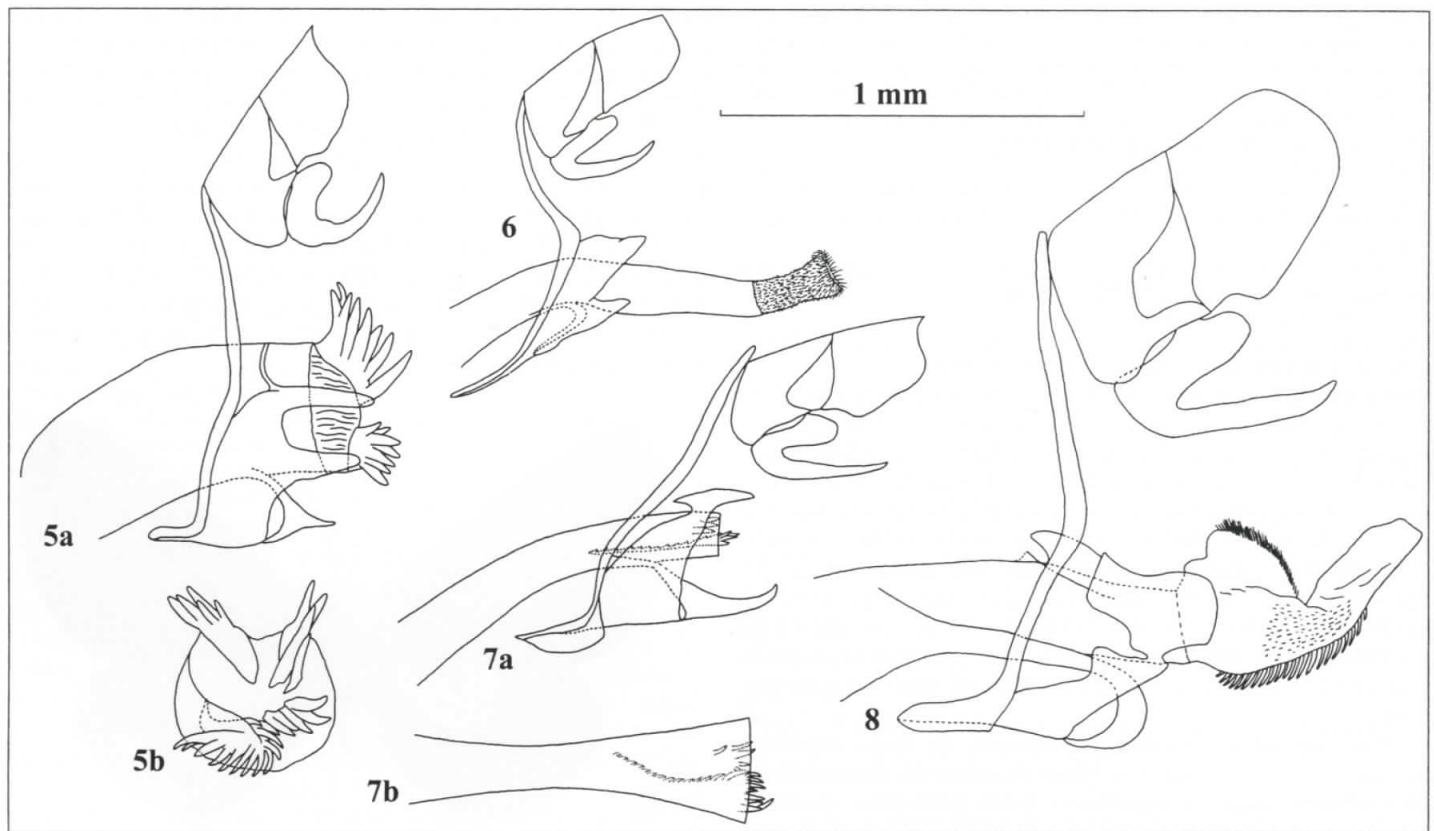


Fig. 5-8. Male genitalia. 5. *Symmachia busbyi* Hall & Willmott, n. sp., a) lateral view; b) anterior view of aedeagal aperture. 6. *Symmachia emeralda* Hall & Willmott, n. sp., lateral view. 7. *Pirascca patriciae* Hall & Willmott, n. sp., a) lateral view; b) ventral view of aedeagus. 8. *Xenandra ahrenholzi* Hall & Willmott, n. sp., lateral view.

crossing discal cell end on forewing, a faint incomplete line crossing discal cell end on hindwing with a further faint line of yellow scaling distally at middle, a postdiscal line extending from costa to vein Cu1 on forewing; iridescent green scaling somewhat less prominent, especially along forewing costa, absent in apex of hindwing. *Ventral surface*: same as dorsal surface except ground color and transverse lines slightly paler, discal lines on both wings proximally thickened in cell Cu1, that on hindwing complete and more prominent with prominent yellow line distally at middle, yellow along basal two-thirds of hindwing cell 3A. *Head*: labial palpi yellow, black at tip of third segment. Frons black with yellow lateral scaling. Antennal segments brown with small area of yellow basal scaling; clubs brown with yellow ventral scaling. *Body*: dorsal surface of thorax brown with three lateral yellow spots; abdominal segments brown with yellow scaling along posterior margins that is most prominent ventrally. All legs yellow with black rings around tarsal segments of mid and hindlegs.

Types.—*Holotype male*: PERU.—*San Martín*, km 18 Tarapoto-Yurimaguas rd., 06°27'S 76°17'W, 1250m, 13 Nov 1998 (R. K. Robbins); in the MUSM.

Allotype female.—ECUADOR.—*Napo*, km 20 Tena-Puyo rd, Apuya, 600m, 10 Oct 1996 (K. R. Willmott); in the JHKW. *Paratypes*: 1 female: FRENCH GUIANA.—*Cayenne*, Kaw, P.K. 42, sea-level, 7 Nov 1997 (J. Cerda); in the JYG (# 385).

Etymology.—The species name refers to the iridescent emerald green dorsal coloration found in both sexes.

Diagnosis.—*Symmachia emeralda* n. sp. presents an extraordinary and unique phenotype for the Symmachiini, and the female in particular perhaps superficially more closely resembles certain species in the distantly related genera *Hyphilaria* Hübner, [1819], and *Argyrogrammana* Strand, 1932. The species is certainly most phenotypically similar to those of *Symmachia*, but only the otherwise very different *S. norina* Hewitson, 1867, has dorsal green iridescence, only *S. eraste* (Bates, 1868) approaches such a derived banded instead of spotted pattern, and no species have males with a pure black ventral surface. Having examined the male genitalia of over ninety percent of *Symmachia* species, it is still unclear which

S. emeralda might be most closely related to. The male genitalia of *S. eraste* are different in almost all respects and, unfortunately, no males are known of *S. norina*.

Discussion.—This lowland species has recently been almost simultaneously discovered in three disparate locations in Ecuador, Peru and French Guiana, and it is clearly very rare but widespread across Amazonia. The Peruvian male was encountered perching low to the ground in a forested hilltop sunfleck during the early afternoon (R. Robbins, pers. comm.), and the Ecuadorian female was found resting beneath a leaf 2 meters above the ground just inside the forest edge around noon on a very hot, sunny day, also on a ridgetop.

***Pirascca patriciae* Hall & Willmott, new sp.**

Fig. 3a,b; 7a,b

Description: MALE: forewing length 12mm. Wing shape compact; forewing costa and distal margin approximately straight; hindwing rounded. *Dorsal surface*: forewing entirely black; fringe black. Hindwing black with small semicircle of orange at middle of anal margin that extends to lower edge of discal cell; fringe black. *Ventral surface*: forewing dark brown, pale brown along anal margin. Hindwing entirely dark brown, orange of dorsal surface very faintly visible. *Head*: labial palpi black. Eyes bare and black, marginal scaling black. Frons black. Antennal segments black with white basal scaling; clubs black. *Body*: dorsal and ventral surface of thorax black; dorsal surface of abdomen black with orange dorsally and laterally on segments three to six, ventral surface black; continuous narrow band of concealed androconia on dorsal half of anterior margin of abdominal tergite four (two additional small clusters of scales on segment three on both individuals examined, and an additional line of eight androconial scales on segment five in one of the two individuals examined). All legs black. *Genitalia* (Figs. 7a,b): uncus rectangular with bulbous ventral margin, produced into small divided point dorsally; vinculum uniformly narrow, saccus bulbous and

rectangular in ventral view; valvae broad at base and produced into single upper triangular projection joined over aedeagus by unsclerotized tissue; narrow, somewhat dorso-ventrally flattened aedeagus broadens posteriorly, aedeagal cornuti consist of five short spines at left, four short spines at right, and an elongate string of numerous small spines medially, pedicel produced into elongate, posteriorly and slightly upwardly projecting "horn".

FEMALE: unknown.

Types.—*Holotype male*: ECUADOR.—*Pichincha*, km 5 Nanegal-G. Moreno rd, Palmitopamba, 1550m, 1 Sept 1996 (Keith R. Willmott); to be deposited in the BMNH.

Paratypes.—5 males: same data as HT; 2 in the JHKW; 1 deposited in the USNM; 1 to be deposited in the MECN. 2 males: same data as HT except 15 Oct 1996; both in the JHKW.

Etymology.—This species is named after my mother Patricia Exell, who has constantly supported my systematic endeavors (JPWH).

Diagnosis.—This new species possesses the typical wing pattern of the genus *Pirascca*, yet it does not possess the male genitalic apomorphy (valvae divided into a weakly sclerotized upper triangular portion and a heavily sclerotized, typically serrate lower portion) or many of the other morphological characteristics of that genus as defined by Hall and Willmott (1996). Firstly, the male abdomen of *P. patriciae* n. sp. contains androconia only on the upper half of tergite four instead of along the entire length of tergites four and five (note that a few scales were seen under high magnification on segments three [the first report of androconial scales on this segment in the Riodinidae] and five – see description).

The only other symmachiine species to have abdominal androconia restricted to segment four is the otherwise phenotypically very different *Exoplisia hypochloris* Bates, 1868. This species is currently treated in the riodinine genus *Exoplisia* Godman & Salvin, 1886 (Bridges, 1994), but its possession of concealed androconial scales and typical symmachiine male genitalia clearly place it in the tribe Symmachiini. Although *E. hypochloris* somewhat resembles certain *Pirascca* species in wing pattern, its male genitalia suggest that it is not that closely related to any *Pirascca* species, and we transfer it to the large "catch-all" genus *Symmachia* (n. comb.), preferring at least to classify the species in the correct tribe until a natural generic classification can be completed for it.

The male genitalia of *P. patriciae* possess a posteriorly projecting "horn"-like pedicel, which occurs in certain species of *Mesene* Doubleday, 1847, and *Symmachia*, and all species of *Mesenopsis* Godman & Salvin, 1886, and *Stichelia* Zikán, 1949, but no *Pirascca* species (see Hall and Willmott, 1996). However, *P. patriciae* does possess a dorso-ventrally flattened aedeagus that broadens posteriorly, which occurs in all *Pirascca* species, but very rarely elsewhere, and since it exhibits a wing pattern seen nowhere else but *Pirascca*, we tentatively place it in that genus and suggest that it may be basal to the remaining members.

In wing pattern, *Pirascca patriciae* most closely resembles the congeners *P. pluto* (Stichel, 1910), *P. tyriotes* (Godman & Salvin, 1878), *P. apolecta* (Bates, 1868) and *P. crocostigma* (Bates, 1868), but the last two of these have no orange or red on the abdomen, *P. tyriotes* has a pale brown dorsal surface with visible pattern elements and a pale orange dorsal hindwing band that extends from the anal margin to near the costal margin, and *P. pluto* has red instead of orange markings, and a red hindwing patch that is positioned more centrally on the wing. As well as exhibiting significant morphological differences, *Pirascca patriciae* can additionally be distinguished from all other *Pirascca* species by having a rounded forewing, a small semicircular orange patch restricted to the anal margin of the dorsal hindwing, and no hint of ventral blue iridescence.

Discussion.—This species is currently only known from a single premontane cloud forest locality on the west Andean slope of

Ecuador between 1550 and 1700m, but it is presumably a Chocó endemic and should thus also occur at similar elevations in western Colombia. Males were encountered perching between 1030 and 1430 hrs at several locations along a ridgetop path in forest light gaps, but were most numerous in one large treefall light gap on a hilltop. In this light gap, several individuals could be seen perching beneath and on top of leaves 2 to 7 meters above the ground, where they would remain motionless for long periods of time, only becoming active, with a slow fluttering flight, during brief spells of sunshine. Although relatively common at the type locality during September and October 1996, the species appeared to be absent during a return visit in March 2001, despite adequately good weather conditions, suggesting it is seasonal.

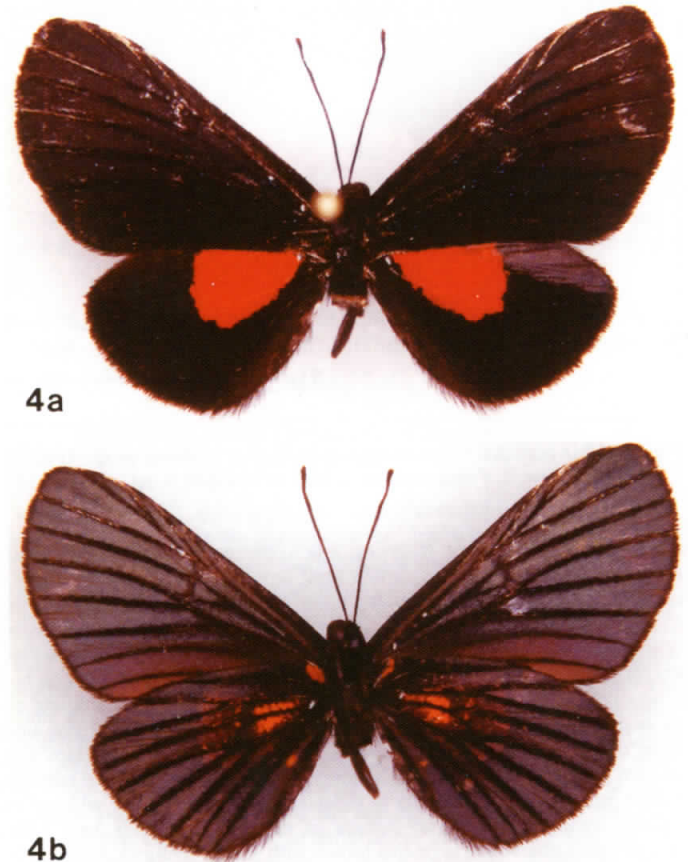


Fig. 4. *Xenandra ahrenholzi* Hall & Willmott, n. sp., holotype male, a) dorsal surface; b) ventral surface (greatly enlarged images).

Xenandra ahrenholzi Hall & Willmott, new sp.

Fig. 4a,b; 8

Description: MALE: forewing length 18mm. Forewing costa straight, distal margin convex; hindwing black and somewhat elongate. *Dorsal surface:* forewing ground color black, distal half of wing paler; fringe black. Hindwing ground color black; bright crimson red patch in basal half of wing extends from costa to upper portion of cell Cu2 and just beyond discal cell end; fringe black. *Ventral surface:* forewing ground color greenish-gray, anal margin paler; all veins outlined in black, black line through middle of discal cell forks towards end, black line through middle of cell Cu2. Hindwing same as forewing except red spot at base of costa, faint red scaling in discal cell and small red spot in middle of cell 2A. *Head:* labial palpi short and black. Eyes bare and black, marginal scaling black. Frons black. Antennae black and half length of forewing; clubs short, flattened and black. *Body:* dorsal and ventral surface of thorax and abdomen black; medially divided band of concealed androconia on dorsal half of anterior margin of abdominal tergites four and five. All legs black. *Genitalia* (Fig. 8): uncus large and

rounded, shallowly indented dorsally; vinculum uniformly narrow, small saccus rectangular in ventral view; valvae rectangular with small medial projection along ventral margin, joined over aedeagus with narrow folded band of sclerotized tissue; aedeagus short, everted vesica dorsally bulbous at base with medially divided patch of very small anteriorly directed spines, single row of larger anteriorly directed spines along anterior half of ventral margin, pedicel broad and strap-like.

FEMALE: unknown.

Types.— *Holotype male*: ECUADOR.— *Pastaza*, km 25 Puyo-Tena rd, 1000m, 11 Oct 1988 (G. W. Busby); deposited in the USNM.

Paratypes: ECUADOR.— *Napo*, 1 male: nr. Talag, Pimpilala, 600m (A. F. E. Neild); in the JHKW. *Pastaza*, 1 male: km 25 Puyo-Tena rd, Rfo Llandia, 900m, 26 Aug 1993 (J. P. W. Hall); in the JHKW. 3 males: 9 km S. of Shell, 1°33.6'S 78°00.5'W, 1000m, 13 Oct 1989 (D. Ahrenholz); in the DA. *Morona-Santiago*, 2 males: 25 km S. of Mendéz, 2°50.4'S 78°22.0'W, 850m, 13 Sept 2000 (D. Ahrenholz); in the DA.

Etymology.— This species is named for David Ahrenholz, who has made an important contribution to our knowledge of Ecuadorian Riodinidae and collected the bulk of the type series.

Diagnosis.— The short, heavily clubbed antennae and elongate wing shape with greenish-gray interneural ventral shading unequivocally place *X. ahrenholzi* n. sp. in the genus *Xenandra*. *X. ahrenholzi* lacks the prominent black interneural lines on the ventral surface and elongate costal hindwing red patches of *X. helius* (Cramer, [1779]) and *X. agria* (Hewitson, [1853]) (= *X. heliodes* C. & R. Felder, 1865 n. syn.), and thus appears to be most closely related to the west Andean *X. nigrivenata* Schaus, 1913, *X. vulcanalis* Stichel, 1910, and *X. desora* Schaus, 1928. *X. ahrenholzi* is a larger species, lacks a large prominent red patch on the ventral hindwing and has a smaller, brighter red patch on the dorsal hindwing that is restricted to the costal wing base. The male genitalic valvae of all the aforementioned species have a small triangular instead of large rectangular upper portion, and *X. ahrenholzi* is unique among these species in having medially divided concealed abdominal androconia. The taxon *mielke* Hall & Furtado, 1999, described in *Xenandra*, also has medially divided abdominal androconia (Hall & Furtado, 1999), but recent morphological examination of certain very rare *Symmachia* species indicates that the male genitalia of *S. mielke* are actually closest to those of a group of *Symmachia* species that includes *S. hippodice* Godman, 1903, *S. fulvicauda* Stichel, 1924, *S. virgatula* Stichel, 1910, *S. virgaurea* Stichel, 1910, and *S. fassli* Hall & Willmott, 1995. The *Xenandra*-like male patterning and *Mesenopsis*-like female patterning of *mielke* therefore appear to be attributable to convergence, and we transfer *mielke* to *Symmachia* (n. comb.).

Discussion.— This species is currently known only from the base of the eastern Ecuadorian Andes between 600 and 1000m, where it is probably restricted to lower premontane forest habitats. At Rfo Llandia, a solitary male was encountered perching along a riverbank composed of secondary forest about 3m above the ground around 1430h. Near Shell (Dept. Pastaza), several males were encountered perching in an overgrown hilltop during overcast weather; three males perched simultaneously beneath leaves with their wings spread open around a small tree trunk 5m above the ground from 1000h to 1020h (D. Ahrenholz, pers. comm.).

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