Yramea lynx sp. nov. (Lepidoptera: Nymphalidae, Heliconiini) from the Andes of central Peru

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SUMMARY

LAMAS G, GRADOS J. 2004. Yramea lynx sp. nov. (Lepidoptera: Nymphalidae, Heliconiini) from the Andes of central Peru. Rev. per. Ent. 44.- Se describe e ilustra la nueva especie Yramea lynx, conocida de los departamentos de Ancash, Huánuco, Pasco y Junín, en los altos Andes del Perú central.

Palabras clave: especie nueva, Perú, taxonomía, Yramea.

RESUMEN

LAMAS G, GRADOS J. 2004. Yramea lynx sp. nov. (Lepidoptera: Nymphalidae, Heliconiini) de los Andes centrales de Perú. Rev. per. Ent. 44.- The new species Yramea lynx, known from the departments of Ancash, Huánuco, Pasco and Junín, in the high Andes of central Peru, is described and illustrated herein.

Key words: new species, Peru, taxonomy, Yramea.

Introduction

The genus Yramea Reuss, 1920 (= Chilargynnis Bryk, 1944, a junior objective synonym) contains five valid South American species, distributed along the Andes of Peru, Bolivia, Chile and Argentina, spreading into the Patagonian flatlands, Tierra del Fuego and the Falkland (= Malvinas) Islands (LAMAS 2004). Yramea is regarded as a member of the Nymphalidae, Heliconiinae, Heliconiini, but its subtribal position within Heliconiini is still uncertain (HARVEY 1991). It is putatively related to the Old World genera Kuekenthaliella Reuss, 1921 and Prokuekenthaliella Reuss, 1927 (REUSS 1927), although some authors (e.g. ACKERY et al. 1995) regard all three as subjective synonyms of Issoria Hübner, [1819]. However, SHIRÔZU & SAIGUSA (1973), HARVEY (1991), and LAMAS (2004) consider Yramea a valid genus, separate from Issoria, the latter a member of subtribe Argynnina. Based on whether the proximal end of the aedeagus was open or closed, WARREN et al. (1946) divided 'Argynninae' into two tribes, namely 'Argynnidi' and 'Boloriidi', including *Yramea* among the former. On the other hand, based on comparative studies of male and female genitalia, SIMONSEN (pers. comm.) regards Yramea and Boloria Moore, 1900, as very closely related genera, and thus Yramea and Boloria would be included in subtribe Yrameina

Reuss, 1926 (of which Boloriidi Warren, dos Passos & Grey, 1946, would become a junior subjective synonym). Division of Heliconiini into two subtribes is supported by preliminary molecular evidence provided by AUBERT *et al.* (1996).

Yramea was very succinctly introduced as a new genus by REUSS (1920), in a footnote, claiming that its type species, *Papilio cytheris* Drury, 1773, exhibited androconial scales distributed along some forewing veins, morphologically unlike "any northern [i.e. holarctic] species". Further details were offered in two subsequent papers (REUSS 1921a, b), and partly illustrated in a third contribution (REUSS 1921c), including forewing venation, wing shape, androconial morphology, and male genitalia characters.

We describe herein a sixth South American species of *Yramea*, the most northerly distributed in the genus, which possesses the diagnostic generic characters given by REUSS (opp. citt.). All specimens are deposited in the Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru.

Yramea lynx sp. nov. (Figs. 1-7)

Diagnosis.- A small, dark *Yramea*, with pointed forewings, dark spots and thin bands on both wings above and below, hindwing slightly angulate at end of vein M₃, and wing veins heavily overlaid with white scales on the underside.

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Male (figs. 1-2): Forewing length, 15-17 mm (n = 10). Most similar to Y. *inca*, differing by the much darker appearance of the wings above, with a slight purplish sheen (no sheen in *inca*); in several specimens the dark discal, postdiscal and submarginal spots are inconspicuous (always conspicuous in inca); forewing cilia pure white (mixed white and gray in *inca*); hindwing veins below heavily overlaid with white scales, extending on each side onto the wing membrane (white overlay restricted to the veins in inca). Genitalia (figs. 5-7): Uncus simple, long (longer than in inca), distal end non-bifid; saccus short; valva with dorsal process directed inwards, ending in two long points (three short points in *inca*); aedeagus short and broad.

Female (figs. 3-4): Forewing length, 15-17 mm (n = 4). Does not differ from male in size, wing shape or color pattern, except for secondary sexual characters.

Type material (all from PERU): **Holotype** \bigcirc (figs. 1-2), Ancash, Laguna Conococha, 3900m, 10°07'S, 77°17'W, 09 Jan 2002 (J. Grados). Paratypes: 5 \bigcirc , 2 \bigcirc , same data as holotype; 3 \bigcirc , 1 \bigcirc , Huánuco, Pachas, [3450m, 09°42'S, 76°46'W], 18, 23 Aug 1965 (P. Hocking); 1 \bigcirc , Pasco, Cerro de Pasco, 4300m, [10°41'S, 76°16'W], Jun 1992 (M. Büche); 1 \bigcirc , Junín, Yauli, Corpacancha, 4300m, 11°22'S, 76°13'W, 18 Jan 1997 (R. Acero).

Etymology.- A masculine noun in apposition, meaning a wildcat (lynx), and referring to the wing coloration, which resembles the pelage of a spotted cat, like that found in the rare and endangered Andean cat, *Oreailurus jacobita* (Cornalia, 1865), which might occur in the same locations as *Yramea lynx*.

Distribution: Apparently endemic to the high Andes of central Peru, above 3400m, in open grasslands. It may extend as far north as the Cordillera de Pelagatos in La Libertad, and as far south as the departments of Huancavelica and Ayacucho. Adults may fly throughout the year, as they have been collected both during the wet (January) and dry (June, August) seasons.

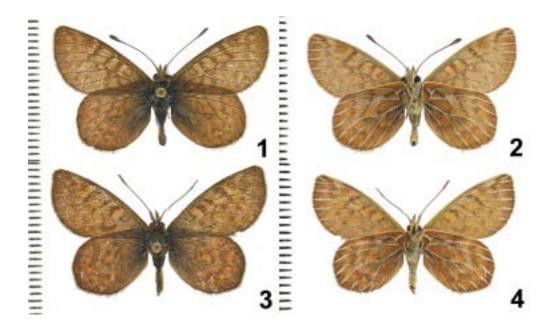
Hostplants. Unknown, but most probably one or more species of Viola (Violaceae). Candidate hosts are Viola membranacea W. Becker, V. micranthella Weddell, V. pallascaensis W. Becker, V. pygmaea Jussieu ex Poiret, and V. replicata W. Becker, all of which occur in Ancash (BRAKO & ZARUCCHI 1993).

Remarks: Species of *Yramea* may be divided superficially into two groups, one with the wing veins below overlaid with white scales (inca Staudinger, 1894, and lynx), the other without white overlay along veins (cytheris, lathonioides Blanchard, 1852, modesta Blanchard, 1852, and sobrina Weymer, 1890). Yramea inca and lynx are closely related, but readily differentiated by the heavy white overlay of the wing veins below in the latter (light overlay in inca), and the longer uncus and deeply bifurcate dorsal process of the valva in *lynx* (shallowly trifurcate in *inca*). Argynnis cora Lehmann, 1913, is provisionally regarded as a subspecies of inca (LAMAS 2004), as females (and some males) of both share the red submarginal band on hindwing below (absent in *lynx*), though no males of the former have been available for genitalic examination (the holotype of cora has no abdomen). The specimens of *lynx* from Huánuco and Pasco are lighter in color, with more conspicuous dark spots on the wings above; as they were collected during the dry season, this lighter coloration may result from climatic influences, or represent subspecific differentiation (specimens from Ancash and Junín were collected in the western chain of the Andes, those from Huánuco and Pasco in the central chain). In the highly variable phenotype of *inca* (wing ground color light tawny to dark greenishbrown), differences in coloration do not seem to be correlated with the seasons or geography.

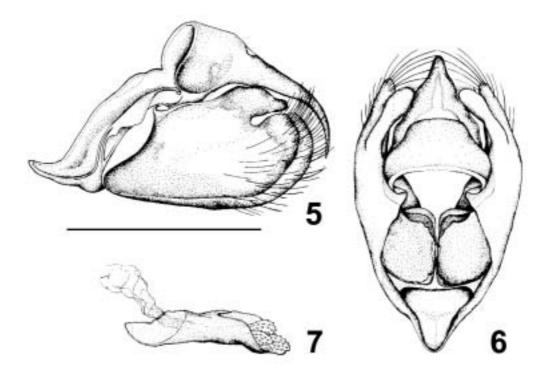
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FIGURES 1-4.- *Yramea lynx* sp. nov. 1-2. Male holotype, upperside (1) and underside (2); 3-4. Female paratype, upperside (3) and underside (4). Scale in mm.



FIGURES 5-7.- *Yramea lynx* sp. nov., male genitalia. 5. Side view, aedeagus removed; 6. Dorsal view, aedeagus removed; 7. Aedeagus, side view. Bar = 1 mm.

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