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Paraspiculatus oroanna sp. n. from Peru (Lepidoptera: Lycaenidae)

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Abstract: The eumaeine lycaenid *Paraspiculatus oroanna* sp. n. (Peru, dept. Huanuco, Cushi) is described and distinguished from other members of the genus.

Key words: Neotropics, Peru, Lycaenidae, Eumaeini, Paraspiculatus

INTRODUCTION

Southern Brazilian members of the genus *Paraspiculatus* Johnson et Constantino, 1997 were recently reviewed (Bálint & Moser 2001). It was noted that the exsistence of several undescribed species from other parts of continental South America have been already known (Johnson & Constantino 1997: 1, 4 and Bálint & Moser 2001: 259). Present work describes one of the Peruvian taxa documented previously by d'Abrera (1995: 1195) and listed in the key to the species of the genus (Bálint & Moser 2001: 252).

DESCRIPTION OF NEW TAXON

Paraspiculatus oroanna sp. n. (Figs 1–2)

= "T. ? sp." and "T. ? sp.": d'Abrera 1995: 1195 (figures). = "P. (araspiculatus) sp.": Bálint & Moser 2001: 261.

Diagnosis – Reminiscent to sympatric *P. orocana* and *P. orobiana* species having similar dorsal colouration and wide black margin. The absence of the gleaming marking in the cell 3A+2A of the hind wing anal part on ventral side differentiates *P. orobiana*. Likewise, the absence of the fore wing apex white suffu-

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sion on the ventral side differentiates *P. orobiana*, what seems to be a smaller species having longer fore wing shape. The absence of hind wing tail differentiates *P. orocana*, plus the pointed fore wing apex and almost patternless ventral side of the wings.

Description – Male: Fore wing length measured from base to apex 20.7 mm (holotype). Dorsal ground colour gleaming sapphir blue, with 3 mm black border extending towards the apex. Hind wing vein CuA2 tailed. No androconial marks on either wing. Ventral ground colour chesnut brown. Fore wing subapical and post-discal area white in cells R2–3, median areas with gleaming spot in cells M1–CuA1. Hind wing median area with gleaming spots, postmedian area dark, submarginal area with gleming scales. Genitalia typical eumaeine without brush organ, appendix angularis very weakly developed. Female: not known.

Holotype – Male, deposited in the Natural History Museum, London (BMNH), labelled as "Cushi. / Prov. Huanuco. / Peru, 1900 m / (W. Hoffmanns)" [white paper, printed]; "Rothschild, Bequest, B.M.1939–I." [white paper, printed]; "B.M. (N.H.) / Rhopalocera / Slide (crossed), V. (handwritten) No. / 4740 (handwritten)" [white paper, printed in red]; "BMNH(H) # 266793" [white paper, printed]; "Holotype / Syntype (printed, crossed), &/ Paralustrus / oroanna / Bálint / Zs. Bálint, 2000 [printed] / London, VIII.18." [red paper, handwritten]; "Bálint 2 / 28A–190" [white paper, handwritten]. The specimen is in excellent condition except that the half of the right antenna is missing.

Distribution – Geographical: known only from the type locality. Spatial: the holotype was collected at elevation 1900 m. Temporal: no data.

Etymology – Noun, gender feminine; dedicated to my wife Annamária Kertész, formed for matching to previous congeneric species names almost all having the word "oro" with the meaning to entreat, to implore, to supplicate.



Figs 1-2. Paraspiculatus oroanna sp. n., holotype (BMNH): 1 = dorsum, 2 = venter (© BMNH)

DISCUSSION

Generic placement – Wing shape, colouration and markings immediately suggest the placement in *Paraspiculatus*. Certain taxa of genus *Denivia* Johnson, 1992 (type species: *Thecla deniva* Hewitson, 1874) somewhat resemble *Paraspiculatus* species. However, *Denivia* is typified by the apomorphy of the male androconial pouch situated along the vein 1A+2A on the hindwing ventrum. Likewise, some species of the genus *Lucilda* d'Abrera et Bálint, 2001 (type species: *Thecla crines* Druce, 1907) also resemble to the relatives of *Thecla orobia* but the female genitalia of these taxa are qualitatively distinct.

Characters – Lengths of the costal, distal and anal margins of the fore wing were measured solely on male specimens of *P. oroanna* sp. n. (holotype, BMNH), *P. orocana* (Druce, 1912) (holotype male, deposited in the BMNH), *P. orobiana* (Hewitson, 1867) (male, Peru, Chanchamayo, coll. König No. 260, Naturhistorisches Museum, Wien) and *P. orobia* (Hewitson, 1867) (male, Peru, Puerto Maldonado, coll. König No. 255) and *P. hannelore* Bálint et Moser, 2001 (paratype male, HNHM). Ratios were derived for (1) costal margin/distal margin and (2) anal margin/distal margin. Mean ratios of each specimen for each of (1) and (2) were then calculated (Table 1). Although comparisons of these single specimens are statistically not reliable, the mean venal margin/distal margin ratio for *P. oroanna* strikingly contrasts of the other species measured. This suggests that peculiar wingshape is likely a useful taxonomic feature among larger samples of these congeners.

Identification – The holotype specimen was curated as "Thecla sp. n.?" in the BMNH drawer containing representatives of the genus *Paraspiculatus*. This is documented by d'Abrera (1995, *l. c.*). *P. oroanna* has been already placed in a key constructed for the identification of *Paraspiculatus* species recognized by Bálint & Moser (2001: 252). This key with some modification is presented here for the identification of *P. oroanna*:

| | Δ | B | C | R1 | R2 |
|-------------|----|----|----|------|------|
| P. oroanna | 21 | 16 | 20 | 1.32 | 1.25 |
| P. orobiana | 19 | 14 | 15 | 1.35 | 1.07 |
| P. orocana | 20 | 15 | 17 | 1.35 | 1.13 |

 Table 1. Measurements of Paraspiculatus oroanna, P. orobiana and P. orocana. A=costal margin,

 B=distal margin, C=anal margin (lengths in mm, measured to nearest 0.5 mm), R1=mean ratio of A/B, R2 = mean ratio of C/B

| 1a | Hind wing vein CuA2 not tailed | (P. vossoroca, P | . orocana) |
|----|--|------------------------------------|-----------------------------|
| 1b | Hind wing vein CuA2 tailed | | 2 |
| 2a | Underside of hind wing with ruptive intercellula | r white median m | arkings <i>P. catrea</i> |
| 2b | Underside of hind wing with intercellular gleam | ing median spots | 3 |
| 3a | Underside fore wing with median spots lineally | arranged | P. orobia |
| 3b | Underside fore wing with median spots not linea | ally arranged | 4 |
| 4a | Underside of fore wing with median spots small | and distinct (P. orobiana, P.) | hannelore) |
| 4b | Underside of fore wing with median spots large | and contiguous <i>P. oro</i> | <i>anna</i> sp. n. |

Female of *P. oroanna* – There are two *Paraspiculatus* species, what possess entirely brown female wing dorsa: *P. orobia* (Hewitson, 1867) and *P. vossoroca* Bálint et Moser, 2001. Comparing to *P. oroanna* these taxa are more distinctive than *P. hannelore* Bálint et Moser, 2001 and *P. orobiana* (Druce, 1912) having blue females, therefore I presume that the female of *oroanna* is also blue dorsally.

Notes on "Thecla orobiana cosmophila" - The female of P. orobiana was described as "Thecla orobiana forma Q cosmophila nov." by Tessmann (1928: 125, pl. 5, Fig. 8) on the basis of a single female specimen (= holotype) taken between La Paz and La Salud, Eastern Peru. Tessmann stated that the ventral pattern of the wings was identical with that of the male. This phenomenon is general in the genus Paraspiculatus, therefore I am on the opinion that the holotype specimen of cosmophila is correctly associated with the taxon "Thecla orobiana", and the orobiana female described by Hewitson (1867: 103) represent the female of P. orobia or one of the undescribed relatives superficially close to P. orobia and documented from the Amazonas region (d'Abrera 1995: 1194, 1195 and Johnson & Constantino 1997, l. c.). This error of Hewitson resulted that Tessmann thought that the female of *P. orobiana* was brown, therefore he emphatically stated, that *cosmophila* is an individual female aberration, thus according to the Article 45.5 of the International Trust of Zoological Nomenclature (1999: 49-50) the name cosmophila is not available under the authorship of Tessmann. Subsequently Bridges (1988: II.108) listed the name as an available subjective junior synonym of "Thecla (New World Eumaeini) orobiana Hewitson, [1867], 1863–1878" referring to the synonymic list authored by Comstock & Huntington (1859-1964) (Bridges 1988: I.91). The name cosmophila did not became available via Bridges, as his action was neither nomen-

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clatural nor taxonomical but exclusively bibliographical, therefore he can not be regarded as the establisher of a new name (cf. Art 45.5.1. of the International Trust of Zoological Nomenclature (1999): 49).

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