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# Two new species of *Catasticta* Butler, 1870 from Peru (Lepidoptera: Pieridae)

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ABSTRACT. *Catasticta pillcopata* n. sp.(Cuzco, Peru) and *C. pyrczi* n. sp. (Junín, Peru) are described. The female of *C. suadela* (HOPPFER, 1874) is illustrated for the first time.

Key words: entomology, taxonomy, Pierinae, *Catasticta*, new species, distribution, Neotropical nomenclature, Peru.

#### INTRODUCTION

Our knowledge of the Andean lepidopterological fauna is still far from complete, and sampling of remote or poorly sampled areas still throws up novelties. Although the genus *Catasticta* Butler, 1870 has been studied in the past by various authors, and extensive material is preserved in most public collections, its taxonomy is not completely understood and new taxa can be discovered from time to time.

Thanks to the cooperation of Tomasz Pyrcz and some Peruvian field collectors, I had the opportunity to examine long series of *Catasticta* collected in Junín and Cuzco (Peru). The genus is taxonomically quite complex, and only the comparison of long series from different localities allowed me to identify two hitherto undescribed taxa. To give the reader an idea of what is involved, I examined more than 5,000 *Catasticta* collected over a period of 3 years along the road from Abra Acjanaco to Pillcopata in order to get to know the local fauna, and to ensure that what I felt was a new species was really so; I describe it here as:

Catasticta pillcopata n. sp. (figs. 1-2)

DIAGNOSIS

A medium-sized species. Female unknown. FW with slightly rounded apex and outer margin indented at M<sub>3</sub>-M<sub>3</sub>; HW with smooth outer margin and rounded anal lobe.

Type material.

Holotype: male, Peru – Cuzco / Road Acjanaco-Pillcopata /  $\sim 13^{\circ}08^{\circ}S$   $71^{\circ}25^{\circ}W$  / m. 2100-2500 – XI-XII.2004 / Lg. local collectors, currently in MBLI, will be deposited in MUSM

Paratypes (43 males): 39 males, Peru – Cuzco / Road Acjanaco-Pillcopata /  $\sim$  13°08'S 71°25'W / m. 2100-2500 – XI-XII.2004 / Lg. local collectors; 3 males, Peru – Cuzco / Acjanaco-Pillcopata km. 26 /  $\sim$  13°08'S 71°25'W / m. 2200 – III..2005 / lg. José Böttger; 1 male, Peru – Depto. Cusco / Rio Pillcopata /  $\sim$  13°07'S 71°19'W / m. 2000-2300 – IX.2003 / lg. local collectors, all in MBLI

DESCRIPTION

FW length: 23.7 mm.

Dorsal surface: Ground colour of both wings deep brown (PANTONE® 412 C). FW with a complete series of pale yellow discal, submarginal and marginal spots obscured by brown scales, marginal spots slightly elongated. HW with complete series of pale yellow discal, submarginal and marginal spots obscured by brown scales, except discal spots in space 3A-2A-1A which have no suffusion; submarginal spots chevron-shaped; marginal spots triangular.

Ventral surface: General pattern as in the sympatric *C. collina* Brown, 1939 and related species of the "susiana" group. FW with a complete series of pale yellow discal, submarginal and marginal spots; marginal spots elongated and triangular, those in space R4-R5-M1-M2 yellow. HW black spots at the end of veins wide, clearly marked and not suffused with white scales in the inner portion (in *C. collina* and related species the black spots are thick and mostly suffused with white scales); marginal lunules yellow.

#### DISTRIBUTION

To the best of my knowledge, this species is restricted to the Kosñipata River Valley, at an altitude of 2,100-2,300 m. a.s.l., where it is seasonally quite common. It has not been collected in any other localities in spite of extensive sampling carried out by experienced field collectors northward to Ayacucho Dep. and southward to Puno Dep.

Another interesting new taxon was discovered after examination of the material collected by Tomasz Pyrcz during his trips to Peru. The area near San Ramon (Junín) and surrounding zones has been extensively sampled in the past, and a comprehensive list of local Pierid fauna was published by Baumann & Reissinger (1969). Fritz König collected as high as 2,500 m. a.s.l. along the Rio Palca Valley, probably stopping only a few kilometres short of the habitats of the new species described herein. However, among the Pierids collected in this area by Tomasz Pyrcz, I had the pleasure to recognise a new species, which I describe here as:



1, 2. Catasticta pillcopata n. sp.: 1 – HT, dorsal; 2 – idem, ventral; 3, 4. Catasticta pyrczi n. sp.: 3 – HT, dorsal; 4 – idem, ventral; 5, 6. Catasticta suadela: 5 – male, half right dorsal, half left ventral, Peru – Pasco / Palcamayo / Huancabamba Distr. / ~ 10°25'S 75°34'W / m. 2200 – XI.2004 / Lg. local collectors, in MBLI; 6 –female dorsal, Peru – Pasco / San Alberto / Oxapampa Distr. / ~ 10°36'S 75°20'W / m. 2000 – IX.2003 / Lg. local collectors, in MBLI

# Catasticta pyrczi n. sp. (figs. 3-4)

DIAGNOSIS

A medium-sized species. Female unknown. FW with slightly rounded apex and outer margin indented at M<sub>2</sub>-M<sub>3</sub>; HW with smooth outer margin and rounded anal lobe. A very distinctive species, its pattern is comparable only to *Catasticta suadela* (Hoppfer, 1874), with which it flies in parapatry. In fact P. Boyer (in litt.) collected typical *C. suadela* at Pampa Hermosa (24 km. from San Ramon, 1,200-1,400 m.), which lies, as the crow flies, about 30 km. from the type locality of the new species: Qda. Malambo. A male of *C. suadela*, collected by König along the Rio Palca Valley, is illustrated by Baumann & Reissinger (l.c.: plates VI-VII, fig. 5).

TYPE MATERIAL

Holotype: male, Peru / Dep. Junín / Chanchamayo / Cachiyacu – Casca / Qda. Malambo / 05.07.2003, 2600-2700 m. / leg. T. Pyrcz, currently in MZUJ, will be deposited in MUSM

Paratypes (109 males): 6 males, Peru – Depto. Junín / Quebrada Malambo / ~ 11°12'S 75°35'W / m. 2600 – 26.II.2003 / lg. Tomasz Pyrcz; 6 males, same data, but 26.I.2003; 4 males, same data, but 1.II.2003; 1 male, Peru/ Dep. Junín / Chanchamayo / Cachiyacu – Casca / Qda. Malambo / 02.03.2003, 2600 m. / leg. T. Pyrcz; 1 male, same data, but 05.07.2003, 2550 m., all in MBLI; 20 males, Quebrada Malambo, route de Cashiyaco à Casca, 2700m (Junin), 23/1/2003, P. Boyer leg.; 22 males, same data, but 26/1/2003; 1 male, same data, but 1/2/2003, T. Pyrcz Leg, all in PBPF; 5 males, Quebrada Malambo, route de Cashiyaco à Casca, 2700m (Junin), 23/1/2003, P. Boyer leg., presently in PBPF, will be deposited in MUSM; 14 males Peru/ Dep. Junín / Chanchamayo / Cachiyacu – Casca / Qda. Malambo / , 2600-2700 m. / leg. T. Pyrcz; 3 males, same data, but 05.10.2002; 3 males, same data, but 23.01.2003; 5 males, same data, but 05.07.2003, all in MZUJ.

DESCRIPTION

FW length: 26.5 mm.

Dorsal surface: Ground colour of both wings nearly pure black (PANTONE® 419 C). FW with a complete series of small pale grey discal, submarginal and marginal spots. HW with a complete series of small pale grey submarginal and marginal spots; discal band absent except for a small dot at apex of cell and an oval spot in space  $SC+R_1$ .

Ventral surface: General pattern as in *C. suadela*. FW with a complete series of discal, submarginal and marginal spots. Submarginal spots are chevron-shaped, grey and centred by a white spot (in *C. suadela* they are round and pale chestnut); marginal spots long, all reaching the submarginal ones (in *C. suadela* shorter and only those in space 3A-2A-1A reach the submarginal spots). HW with pale grey areas lightly obscured by dark brown scales (in *suadela* such areas are strongly obscured); pale spot in cell SC+R<sub>1</sub> long (in *C. suadela* it is short, ending near the origin of M1); pale spot

at base of cell Rs (*C. suadela* lacks such a spot); yellow marginal lunules touching submarginal yellow spots, those near vein 1A forming two yellow lines along the vein (in *C. suadela* yellow marginal lunules separated from submarginal yellow spots by a brown area, those along vein 1A being reduced to 4 small spots).

### VARIATION

Two phenotypes are clearly identifiable within the type series:

- 1) specimens with deep black dorsal ground colour, clearly marked dorsal spots and grey ventral pale spots
- 2) specimens with deep brown dorsal ground colour, suffused dorsal spots and brown ventral pale spots.

Colour variations in *Catasticta* species are not infrequent, and could be considered, most probably, as only ecophenotypes due to the development of the preimaginal stages during wet or dry seasons. Obviously such a merely speculative hypothesis could be disproved by further investigations but, at the moment, it appears to be the most likely explanation.

# DISTRIBUTION

Currently, *Catasticta pyrczi* is known only from the type locality, where it is locally and seasonally the dominant species of the genus. The species was not met with at Qda. Mansha, 3000-3400 m. a.s.l., a few kilometres from Qda. Malambo (T. Pyrcz, in litt.). Its presence southward cannot be rejected *a priori*, whilst its presence in Pasco can be considered to be improbable, as I have never seen any specimens from there despite extensive sampling carried out during recent years all along the Oxapampa valley.

# DERIVATIO NOMINIS

The new species is named after Tomasz Pyrcz (Warsaw – Poland), who honours me with his friendship, is specializing in Andean Satyrinae (Pronophilina), and, last but not least, discovered the new species.

For comparison, I illustrate both a typical *C. suadela* male (fig. 5), and the hitherto unknown *C. suadela* female from Pasco (fig. 6).

Acronyms for institutions and private collections holding specimens examined in this paper largely follow EVENHUIS (2008):

MBLI: collection of Maurizio Bollino, Lecce, Italy;

MUSM: Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru;

MZUJ: Zoological Museum, Jagellonian University, Krakow, Poland;

PBPF: collection of Pierre Boyer, Le Puy Ste. Réparade, France.

Abbreviations used in the text include the following:

FW: forewing; HT: holotype; HW: hindwing.

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