

## A New Subspecies of *Coladenia uemurai* HUANG, 2003 from SE Tibet

(Lepidoptera, Lycaenidae)

by

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The first author made his third collecting trip to the Motuo area of SE Tibet during the summer of 2005 and only a few butterfly records were added to previous results. Of the specimens collected, only a pair of *Coladenia* species were of interest and here they are described as a new subspecies of *Coladenia uemurai* HUANG, 2003, which was recently described from the Nujiang valley of NW Yunnan. A similarity in the butterfly faunas of SE Tibet and NW Yunnan was confirmed.

### *Coladenia uemurai motuoa* subsp. nov.

(colour plate 12, fig A)

**Diagnosis:** This new subspecies from the Motuo area of SE Tibet can be easily distinguished from the nominotypical subspecies of *Coladenia uemurai* HUANG, 2003 from Nujiang valley, NW Yunnan by the following combination of characters.

- 1) The discal spot in space 3 on the forewings is clearly separated from that in 2, and does not touch as in ssp. *uemurai*; the spot is more oblique and points towards the termen above the tornus, whereas in ssp. *uemurai* the spot aims directly at the tornus.
- 2) The  $\sigma$  genitalia are different: the clasp is bifurcated as in ssp. *uemurai* HUANG but in *motuoa* **subsp. nov.** the distal branch is much shorter (fig. 1, 2).

**Discussion:** Can a single pair of specimens support the proposition of a new subspecies? According to the first author's field observations, this new taxon is very rare and only active on sunny days in the wet season in the Motuo area – it was only encountered twice during the whole of August in 2006, these being the only examples collected. Normally just two specimens is insufficient evidence to support a fresh idea of a geographical race. However, the new taxon described here shows a significant difference in the  $\sigma$  genitalia, as mentioned under the “diagnosis” heading. All four type specimens of ssp. *uemurai* have been dissected and there is no variation in the length of distal branch of the clasp. After checking specimens of most Chinese species of *Coladenia* and reading the recent literature concerning this group, the difference in the  $\sigma$  genitalia of the Motuo specimens cannot be simply explained by natural variation between individuals. Moreover, there is also a constant difference in the shape and position of the discal spot in space 3 on the upperside of the forewings between ssp. *uemurai* and *motuoa* **subsp. nov.** The description of these external differences is based upon an examination of 6 specimens (2 in ssp. *motuoa* and 4 in ssp. *uemurai*). It is

suggested here that *motuoa* **subspec. nov.** is a race which has evolved from ssp. *uemurai* and *motuoa* **subspec. nov.**, the length of time which has passed being such that significant differences in their genitalia have appeared.

What is the closest allied species of *C. uemurai* HUANG and how do they differ from each other? In the original description of *C. uemurai* HUANG, *C. tanya* DEVYATKIN, 2002 from Vietnam was regarded as the nearest species by the first author. Even after the discovery of the new subspecies, *C. uemurai* HUANG, such opinion still stands up. Both *C. uemurai uemurai* HUANG and *C. uemurai motuoa* **subspec. nov.** differ from *C. tanya* DEVYATKIN chiefly in the following characters: 1) the forewing discal spot in space 3 is separated, or at most touching, the spot in 2, it never overlapping for half its length, 2) the forewing hyaline spot above the cell spot hardly enters into space 10, 3) the dorsal branch of the clasp in the  $\sigma$  genitalia is much longer and thinner. Character 3 should be regarded as synapomorphy of *C. uemurai uemurai* HUANG and *C. uemurai motuoa* **subspec. nov.**, which is never shared by other known taxa of the genus.

Work on the *Colandia* after 2003: Only one new species, namely *C. neomaeniata* FAN & WANG, 2006, has been described from NW Yunnan since 2003, this perhaps being just a morphological form of *C. maeniata* (OBERTHÜR, 1896). Both forms of *C. neomaeniata* FAN & WANG and *C. maeniata* (OBERTHÜR) have been found in NW Yunnan by the first author and a further discussion on the first-mentioned will be published separately.

Type data: Holotype  $\sigma$ , length of forewing 21mm, on route between Hanmi and Arnqiqiao, Motuo (Metok, Medog) area, SE Tibet. ca. 1800m, 10<sup>th</sup> August 2006. leg. HAO HUANG.

Paratype: 1  $\varphi$ , same data as holotype.

Etymology. The name is derived from the type locality of the new taxon: Motuo.

## References

- CHIBA, H., NAKANISHI, A., FUKUDA, H. & O. YATA (1991): A new species of *Coladenia* from Luzon, Philippines, with descriptions of immatures. – Trop. Lep. 2: 59-64, Gainesville.
- DE JONG, R. & C. G. TREADAWAY (1992): Revisional notes on *Coladenia* MOORE, 1881.- Zool. Meded. 66 (15): 283-293, Leiden.
- DEVYATKIN, A. L. (2002): Hesperiiidae of Vietnam, 10. A new species of *Coladenia* MOORE, [1881].- Atalanta 33 (1/2): 123-125, Würzburg.
- EVANS, W. H. (1949): A catalogue of the Hesperiiidae from Europe, Asia and Australia in the British Museum (N.H.).- British Museum, London.
- FAN, X.-L. & M. WANG (2006): A New Species of the Genus *Coladenia* MOORE from China (Lepidoptera: Hesperiiidae).- J. Kansas Ent. Soc. 79 (1): 78–82, Manhatten, Kansas.
- HUANG, H. (2003): A list of butterflies collected from Nujiang (Lou Tse Kiang) and Dulongjiang, China with descriptions of new species, new subspecies, and revisional notes. – Neue Ent. Nachr. 55: 3-114, Marktleuthen.

Fig.1

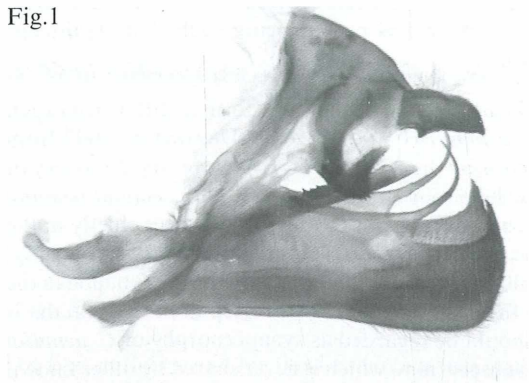


Fig.2

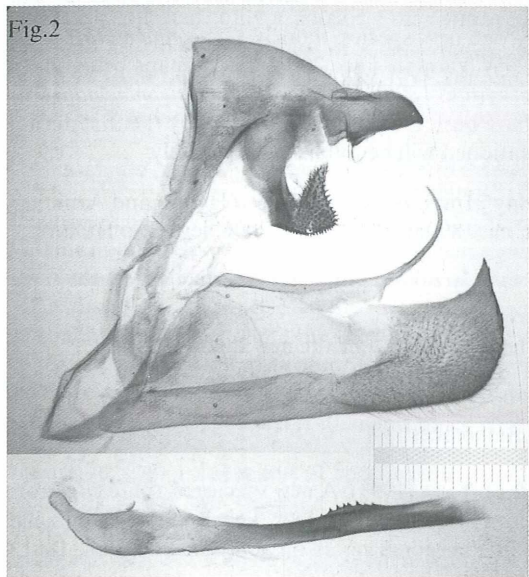


Fig.1: natural shape of  $\sigma$  genitalia of *Colandia uemurai motuoa* **subspec. nov.** in lateral view.

Fig.2: photo of slide of  $\sigma$  genitalia of *Colandia uemurai motuoa* **subspec. nov.** consisting of lateral views of the whole capsule with the left clasp removed (top), and of the aedeagus (bottom).

Colour plate 12, p.513

Fig.A: *Colandia uemurai motuoa* **subspec. nov.** holotype  $\sigma$  Upperside (left half) and Underside (right half).

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