



A new species, *Poecilocampa deqina* (Lepidoptera: Lasiocampidae), from China

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A new lappet moth, *Poecilocampa deqina* sp. n., from southwest China is described. Previously the genus *Poecilocampa* Stephens included three species (*Poecilocampa tenera* O. Bang-Haas, 1927, *Poecilocampa nilsinjaevi* Zolotuhin, 2005 and *Poecilocampa morandinii* Zolotuhin & Saldaitis, 2010) from China territory. The new species differs in appearance, genitalia and DNA from its closest congener, *P. morandinii*.

Institutional acronyms used are as follows: AFM = Alessandro Floriani (Milan, Italy); ASV = Aidas Saldaitis (Vilnius, Lithuania); OPB = Oleg Pekarisky (Budapest, Hungary); MWM = Entomological Museum of Thomas J. Witt (Munich, Germany); WIGJ = World Insect Gallery (Joniškis, Lithuania).



1.

CHINA, NW-Yunnan
Zhongdian mt., 3350 m
27°24'800"N, 99°40'500"E
16-20. X. 2011. A. Floriani leg.



OP2741m 43mm

P. deqina sp. n., male, HT



2.

CHINA, NW-Yunnan
road from Zhongdian to Deqin
Baima Xue Shan, 4100-4200 m
N28°19'900", E99°05'400"
17-19. X. 2011. A. Floriani leg.



OP2740m 40mm

P. deqina sp. n., male, PT



3.

China, W.Sichuan
Kangding, road to
Zheduo pass, h=3200m
17.10.2009.
Floriani&Saldaitis leg.

P. morandinii, male, HT



4.

China, W. Sichuan
Kangding, near
Zheduo Pass
3700 m.
14.10.2009.
Floriani&Saldaitis leg.

PANATYPUS
Poecilocampa morandinii
sp. nova
Zolotuhin & Saldaitis, 2010



OP2742m 38mm

P. morandinii, male, PT

FIGURES 1–4. *Poecilocampa* ssp. adults. 1. *P. deqina* sp. n., male, holotype, China, Yunnan (ASV); 2. *P. deqina* sp. n., male, paratype, China, Yunnan (OPB); 3. *P. morandinii*, male, holotype, China, Sichuan (MWM); 4. *P. morandinii*, male, paratype, China, Sichuan (OPB).

Paratypes: 2 males (Fig. 2) China, NW Yunnan, road from Zhongdian to Deqin, Balma Xue Shan, 4100–4200 m, N28°19'900", E99°05'400", 17–19.X.2011, leg. A. Floriani, 11 males China, NW Yunnan, road from Zhongdian to Deqin, Balma Xue Shan, 3900 m, N28°24'900", E98°59'800", 19.X.2011, leg. A. Floriani (Slide No. OP2740m) in the AFM, ASV, OPB, MWM and WIGJ collections.

Diagnosis. *P. deqina* is a sister species of *P. morandinii* and is distinguished from it by external, genital and DNA characters. *P. deqina* averages a bigger wingspan (40–44 mm) (n=14), than *P. morandinii* (wingspan (37–41 mm) (n=7)). The less contrasted wing pattern of *P. deqina* has a black-brown base color compared to the translucent blackish-grey of *P. morandinii* (Figs 3, 4). *P. deqina* has a very indistinct antemedial line and its hindwing has a rounded medial line compared to *P. morandinii* which has sharply defined crosslines and a straight hindwing medial line. Unlike *P. deqina*, *P. morandinii* has distinctive dark and light checked wing fringes. Male genitalia of the new species differs from *P. morandinii* (Fig. 6) by having somewhat wider valvae, a remarkably larger and wider saccular lobe and a less curved aedeagus.

Description. Wingspan of holotype 43 mm; wingspan of paratypes 40–44 mm. Head and frons brown; collar light brown; thorax, tegulae and abdomen black with some light brown hear-like scales; forewing ground color brownish grey with light postmedial area; antemedial line vague, hardly traceable; postmedial line distinct with light fascia; discal spot dark brown. Hindwing brown; discal spot present; medial line distinct, roundish with light fascia; cilia as ground color. **Male genitalia** (Fig. 5) Uncus and gnathos well developed, uncus flattened with bilobate top; juxta shield-like with cleft on posterior margin; valvae short and wide; saccular lobe large, wide. Aedeagus thick, short, slightly curved; carinal plate with few sclerotized dents; vesica tubular with basal swelling, as long as aedeagus. **Female unknown.**

Molecular analysis. DNA barcoding also supports the existence of a new species of *Poecilocampa*. Full length 658 base pair 'barcodes' of the Cytochrome Oxidase Subunit 5' Region (COI-5P) gene were prepared by the University of Guelph's barcode of Life Data Systems (BOLD) by methods described in Hebert *et al.* (2003). Molecular distance based on the Kimura two-parameter model for COI DNA barcodes between two specimens of *P. deqina* sp. n. and three specimens of *P. morandinii* were 2.99%. Both *P. deqina* specimens sampled had the same sequence for COI 5' positions.

Biology and distribution. All fourteen males were collected at ultraviolet light on 16–20 October 2012 in northwest China's Yunnan province in a remote area, located near Yak La pass of the Baima Xue mountain range. *P. deqina* was collected at altitudes ranging from 3400 to 4200 meters in mountain mixed forests dominated by various conifer trees, bushes and rhododendron. Other late autumn species collected there at that time include several Noctuidae species: *Dasypolia carlotta* Floriani, Benedek, Behounek & Saldaitis, *D. irene* Floriani, Benedek & Saldaitis, *D. sigute* Saldaitis & Benedek.

Etymology. The name is toponymical to Deqin, China.

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