

A new subspecies of *Delias vietnamensis* Monastyrskii & Devyatkin, 2000 (Lepidoptera: Pieridae) from Cambodia

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Abstract: A new subspecies of *Delias vietnamensis* Monastyrskii & Devyatkin, 2000, *D. vietnamensis pequini* **ssp. nov.**, is described from the Cardamom Mountains, Cambodia.

Keywords: *Delias*, Pieridae, Cambodia, Cardamom Mts.

INTRODUCTION

Delias vietnamensis Monastyrskii & Devyatkin, 2000 has until recently been known only from the mountains of central and south Vietnam, where the nominate subspecies occurs in Gia Lai and Dak Lak provinces and a weakly distinguished subspecies, *yasusukei* Morita, 2003, occurs further south, in Lam Dong and Dong Nai provinces. Monastyrskii *et al.* (2011) published the results of fieldwork carried out in the Cardamom Mountains of southwest Cambodia between 2006 and 2010. Although no species were found to be endemic to the area, the presence of *D. vietnamensis* and many other species was recorded in Cambodia for the first time.

Discussing potential new taxa at subspecies level, Monastyrskii *et al.* (2011) stated that ‘the local population of *D. vietnamensis* has unusual yellow markings on the hindwing underside, which distinguish it from the nominate subspecies’ and also noted that the local population of *Neptis anjuna* Moore, 1881 has a different wing pattern to the nominate subspecies. The possibility that these might qualify as new subspecies was mentioned, although no formal description of either has subsequently been published. Examination of specimens of both sexes of *D. vietnamensis* from the Cardamom Mts. and comparison with examples from a locations in Vietnam has revealed a number of consistent differences in the phenotypes that, in combination with the geographical isolation of the Cambodian population, support description of a new subspecific taxon.

MATERIALS AND METHODS

Wing region and venation terminology follows the numerical system illustrated by Parsons (1999, p.111, fig. 24). The following acronyms are used in the text:

ANIC	Australian National Insect Collection, Canberra, Australia
AY	collection of Akira Yagishita, Tokyo, Japan
BMNH	Natural History Museum, London, UK
CD	collection of Chris Davenport, Inverness, UK
OP	collection of Olivier Pequin, Paris, France

RESULTS

Delias vietnamensis pequini **ssp. nov.** (Figs. 1-4)

Holotype male: Mt Tumpor, 950m, Phnom Samkos Wildlife Sanctuary, Pursat Province, Veal Veng Dist, SW Cambodia (12°22'25"N 103°02'50"E) 25.II.2006, collection of author, to be deposited in BMNH.

Paratypes: 3 males, 1 female, same data as holotype, collection of Olivier Pequin.

Diagnosis: Subspecies *pequini* is distinguished from other subspecies of *D. vietnamensis* by the increased extent of the gray-black markings on both surfaces of the wings and the absence of a gray basal patch in space 1B of the hindwing underside of the male.

Description of male: Length of forewing: 31 mm (holotype); 30-31 mm (3 paratypes). Upperside of forewing; basal and median area white; black discocellular bar well defined; subapical and subterminal area, extending to tornus, dusted with dark gray scales; 6 white apical and terminal spots, spot in space 4 smaller and more diffuse than others. Upperside of hindwing: basal and apical area translucent white such that pattern of underside is visible; inner margin and tornus chrome yellow, largely filling space 1A and forming a triangle at termen of space 2; a slight dusting of yellow scales at termen of spaces 3,4 and 5. Underside of forewing dark gray with four white apical spots and three terminal spots; spot in space 7 with slight dusting of yellow scales; spot in space 4 small. Underside of hindwing; cell patch, subterminal spots and inner margin chrome yellow; cell and subterminal spots narrowly bordered with white scales to a lesser degree than other subspecies; triangular spot in space 2 elongated basally, almost touching cell; yellow area in space 1B extends to base without gray suffusion in submedian area typical of other subspecies.

Description of female: Length of forewing: 32 mm. Upperside of forewing; basal and median areas blue-gray; black discocellular bar broader than in nominate subspecies; apical and postmedian spots dusted with white scales. Upperside of hindwing: dark gray vein markings and terminal band 2-3 mm wide; cell and tornal area filled with chrome yellow scaling,



Figs. 1-8. 1-4, *Delias vietnamensis pequini*: 1. ♂ HT Cardamom Mts (CD) upperside; 2. ♂ underside; 3. ♀ Cardamom Mts (OP) upperside; 4. ♀ underside. 5-6, *Delias vietnamensis vietnamensis*: 5. ♂ HT Gia Lai (BMNH) upper- and underside; 6. ♀ Banme Thotho (AY) upper- and underside. 7-8, *Delias vietnamensis yasusukei*: 7. ♂ Dong Nai (AY) upper- and underside; 8. ♀ Lam Dong (ANIC) upper- and underside.



Fig. 9. Distribution map. 1. *Delias vietnamensis vietnamensis*. 2. *Delias vietnamensis yasusukei*. 3. *Delias vietnamensis pequini*, **ssp. nov.**

shading to creamy-white at anterior part of cell and spots in spaces 3, 4 and 5. Underside of forewing: dark gray with all white markings much reduced compared to other subspecies; black discocellular bar approximately 4 mm wide. Underside of hindwing: dark gray with broader black vein markings than nominate; yellow suffusion in spots and cell bordered with white; basal half of cell and space 1B are gray.

Etymology: The subspecies is named after Olivier Pequin, who kindly provided material for study.

Distribution: The subspecies has been recorded from two locations at altitudes above 800m in the geographically isolated Cardamom Mountains of southwest Cambodia (Fig. 9), namely Mt Tumpor and Mt Khamaoch (Monastyrskii *et al.* 2011).

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LITERATURE CITED

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