

# A new species of *Hypolycaena* (C. & R. Felder, 1862) from Papua, Indonesia (Lepidoptera: Lycaenidae)

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*Abstract:* *Hypolycaena daawiae* **spec. nov.** is described from Biak, a new species which is allied to *H. danis*.

*Ikhtisar:* *Hypolycaena daawiae* **spec. nov.** dari Biak dipertelakan, suatu spesies baru yang dekat dengan *H. danis*.

*Keywords:* new species, Biak, Teluk Cenderawasih, *Hypolycaena daawiae*, *Hypolycaena danis*.

## Introduction

In the genus *Hypolycaena* about thirty species have been described, occurring in tropical Africa and the Indo-Australian region including Waigeo, Biak, Roon and the mainland of New Guinea. Parsons (1999) recorded six species in PNG; *Hypolycaena erylus* (Godart, 1824), *H. periphorbas* Butler, 1882, *H. phorbas* (Fabricius, 1793), *H. dictaea* (C. & R. Felder, 1865), *H. danis* (C. & R. Felder, 1865) and *H. alcestis* (Grose-Smith, 1889). Beside these, Parsons mentioned the type species *Hypolycaena sipylus* (C. Felder, 1860) that has only be collected in the western part of Papua (near Fakfak, the Arfak Mtns and the northern Teluk Cenderawasih (Geelvink Bay)).

Among the seven species mentioned above, *H. alcestis* is endemic in the Solomon Islands, including Bougainville (North Solomon Prov., PNG) and *H. periphorbas* occurs in the Bismarck Archipelago (excluding the Admiralty Group, Manus Prov.) and Nissan Island (NSP) in PNG. From the five other species occurring in Papua, only *H. danis* and *H. phorbas* are known from islands in the Teluk Cenderawasih; *H. sipylus* has been reported from 'the northern Geelvink Bay area' and it is unclear whether it is found on the mainland or the islands in the Geelvink Bay.

During a recent survey on Biak island by a team from the Cenderawasih University, Jayapura, a new species of *Hypolycaena* was recorded, represented by a single male specimen.

## Abbreviations

The abbreviations given below have been used throughout the text:

- Fwl - length of forewing  
 Kab. - Kabupaten (= Regency)  
 NSP - North Solomon Province (Solomon Islands)  
 PNG - Papua New Guinea  
 UNCEN - Universitas Cenderawasih, Jayapura.

## *Hypolycaena daawiae* spec. nov.

### Material examined:

HT ♂: (Indonesia) "PROV. PAPUA, Kab. Biak-Numfor, Biak Barat Arabdori/ Wardo, hutan sekunder, S 01° 02,102' E 135° 50,663' 31.VII+1.VIII.2007; UNCEN: Klemens, Yoel, Alfred", KSP (damaged at termen of left forewing).

### Diagnosis:

The new species is closely related to *Hypolycaena danis* which is unknown from Biak but occurs on the nearby islands of Numfor and Japen in the Cenderawasih Bay. It can easily be separated from *danis* by the upperside of its hindwing which has a pale blue marginal band, about 6 mm width at the anal area, reducing towards tornus, bearing 6 black spots, one in each cell.

### Description:

Male. Upperside of forewing with white central area from M<sub>2</sub> to middle of inner margin, which border rounded at the top. Costa is broadly black entering discal cell, and continues via apex to tornus; on 1/3 black band is reducing to a line with at innerside a pale blue band; greyish-black veins visible. In base some blueish diffusion on black and white parts. Upperside of hindwing with two grey tails with a white apex: a smaller one at vein CuA<sub>2</sub> and a larger one at 1A+2A. White central part, as continuation of white part in forewing until inner margin. At outside a pale blue marginal band, width about 6 mm in anal area reducing towards tornus. The cells 1A+2A, CuA<sub>2</sub>, CuA<sub>1</sub>, M<sub>3</sub>, M<sub>2</sub> and M<sub>1</sub> bear a rounded black spot near the termen, decreasing in size from the one in 1A+2A to the one in M<sub>2</sub>. The border is grey (about 1.5 mm) from tornus to vein M<sub>2</sub>, continued by a grey line to tornus. Base with greyish and some bluish diffusion. Underside of forewing with white area slightly larger towards costa. Costal and terminal band greyish; greyish diffusion in base. Underside of hindwing with white area of same size as upperside. Broad greyish band from apex to tornus, increasing in width from 1 to 6 mm at inner margin with greyish to black veins, bearing a row of seven very irregular black

spots with pale blue border; largest one in cell CuA1 reducing to both sides. A thin pale bluish more or less zigzagged line from Rs to tornus, interrupted by grey veins, and near the tornus turning inwards as a straight line (length 2.5 mm).

Fwl.: 15 mm

Female: Unknown.

### **Etymology:**

The species is dedicated with love to Mrs Dra Daawia M. Sc., teacher at the Biology Dept. of the Faculty of Mathematics and Science, Cenderawasih University, Jayapura, for her enthusiasm, support and guidance of students, especially on the survey at Biak in 2007.

### **List of *Hypolycaena* sp. in Papua**

The following *Hypolycaena* are known from Papua:

<i>H. sipylus</i> (C. Felder, 1860)	–	Waigeo, Fakfak, Birds head, North Cenderawasih Bay.
<i>H. erylus</i> (Godart, 1824)	–	Waigeo, Batanta, NG.
<i>H. phorbas</i> (Fabricius, 1793)	–	Waigeo, Mioswar, Roon, Numfor, Supiori, Biak, Yapen, NG.
<i>H. dictaea</i> (C. & R. Felder, 1865)	–	Waigeo, NG.
<i>H. danis</i> (C. & R. Felder, 1865)	–	Numfor, Yapen, NG
<i>H. daawiae</i> <b>spec. nov.</b>	–	Biak.

### **Acknowledgements**

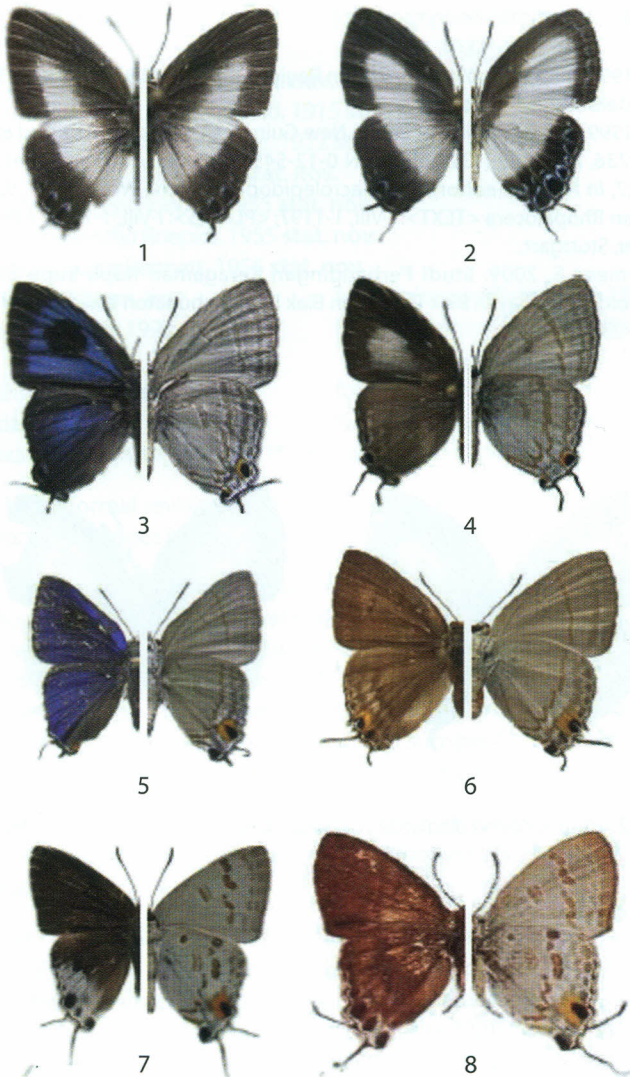
Acknowledgement is due to the team that surveyed West Biak in 2007 (Dra Daawia, Evie L. Warikar, Klemens Naraha, Yarius Pakage, Yoel Sineri, Alfred Wayeni) resulting in the new species record and to the local people who supported the team. Thanks to Stefan Schröder (Köln, Germany) for his advice and to Chris Davenport (Inverness, U.K.) for print proof reading.

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**Figs 1-2.** *Hypolycaena daawiae* ♂ **spec. nov.**: 1. upperside; 2. underside.



**Figs 3-4.** upperside & underside *H. danis*: 3. ♂; 4. ♀.  
**Figs 5-6.** upperside & underside *H. phorbas*: 5. ♂; 6. ♀.  
**Figs 7-8.** upperside & underside *H. erylus*: 7. ♂; 8. ♀.  
**Figs 9-10.** upperside & underside *H. sipylus*: 9. ♂; 10. ♀.