



Subspecific status of the southern Indian population of *Nyctemera coleta* (Lepidoptera: Arctiidae)

Peter Smetacek

The Retreat, Jones Estate, P.O. Bhimtal, Nainital
Uttarakhand 263136, India
Email: petersmetacek@rediffmail.com

Nyctemera coleta (Stoll, 1781) is a widespread Asian taxon, with a known distribution through the Oriental Region to Japan and New Guinea (Holloway 1988). Across this range, three subspecies are currently recognized. These are *N. coleta coleta* from Assam to Singapore, Java and Malacca; *N. coleta melas* Röber, 1891 from Ceram, Bangkai and the Moluccas and *N. coleta nigrovenosa* Moore, 1879 from Sri Lanka. *Nyctemera melaneura* (Butler, 1883) from Nias was also considered a subspecies of *N. coleta* but this placement is invalid according to the card index in the Natural History Museum (NHM), London (Beccaloni et al. 2003).

In recent years, the moth has been found to be common in suitable localities in peninsular India. However, it does not seem to have been reported from there in the literature. There are specimens from peninsular India in the collection of the Agricultural University, Coimbatore, Tamil Nadu. Besides, Julie Valsarajan (Bengaluru) photographed this moth in Kodagu, Karnataka in October 2008 and Kousik Nandy (Bengaluru) photographed a

specimen on 16 November 2004 near Muthadi Nature Camp, Bhadra Wildlife Sanctuary, about 35km from Chikkamagaluru in Karnataka.

Since *N. coleta nigrovenosa* is found in Sri Lanka, it was thought desirable to establish the sub-specific status of the southern Indian population of this moth, since it could belong either to the nominate subspecies, *nigrovenosa* or to an intermediate form.

Prof. K. Gunathilagaraj of the Agricultural University, Coimbatore kindly sent six specimens consisting of five males and a female from southern India for critical examination. The data labels on the males are identical as follows: Light/Thadiyankudisai/27.06.08/NPIB-CBE; forewing length 24-28 mm. The data label of the female states: Light trap/Myladumpara/03.06.08/NPIB-CBE; forewing length: 25mm.

Unfortunately, the species is not illustrated in Holloway (1988) due to an error of omission.

The male genitalia of one specimen examined was identical to those figured in Holloway (1988) and Arora (1983). Hampson (1894) stated that the form *nigrovenosa* from Ceylon (= Sri Lanka) has veins 3 and 4 (= Cu1A and M3 respectively) of the hindwing black and the spots of the postmedial band of forewing smaller (than *N. c. coleta*).

Since some of the material examined in the present study approached this description, a photograph of these specimens was sent to the Natural History Museum, London, for comparison with specimens of *nigrovenosa* contained therein.

Dr. I.J. Kitching kindly compared this photo with specimens in the collection of the NHM and concluded that although both *N. c. coleta* and *N. c. nigrovenosa* have black lines running basad along the hindwing veins from the marginal black bands, in *N. c. coleta*, these lines stop before the discal cell while in *N. c. nigrovenosa*, the black along M and Cu1A (and sometimes others in heavily marked specimens) not only reaches the cell but continues along the cubital vein almost to the wing base. This feature is not found in any of the southern Indian material, so they appear to be *N. coleta coleta*.

Therefore, it seems that the mainland Indian population as well as the population on the Andaman Islands (Arora 1983) belongs to *N. c. coleta* and *N. c. nigrovenosa* is restricted to Sri Lanka.

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Date of publication (online): 26 April 2010
Date of publication (print): 26 April 2010
ISSN 0974-7907 (online) | 0974-7893 (print)

Editor: Krushnamegh Kunte

Manuscript details:

Ms # o2417
Received 03 March 2010
Finally accepted 16 March 2010

Citation: Smetacek, P. (2010). Subspecific status of the southern Indian population of *Nyctemera coleta* (Lepidoptera: Arctiidae). *Journal of Threatened Taxa* 2(4): 835-836.

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Acknowledgements: I am indebted to Prof. K. Gunathilagaraj and the authorities of the Agricultural University, Coimbatore for kindly supplying specimens of this moth, to Dr. I.J. Kitching at the Natural History Museum, London, U.K. for kindly comparing this material with specimens in the collection there, to Julie Valsarajan, Bengaluru, Karnataka and Kousik Nandy, Bengaluru, Karnataka, for photographing this moth in southern India and thereby alerting me to its presence there and especially to Sameera Karunarathna for kindly helping me with photographs of Sri Lankan specimens.

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Image 1. Specimens of southern Indian *Nyctemera coleta* examined in the present study. Female is in centre of right row.

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