First verifiable record of *Neptis nata* Moore, 1857 (Lepidoptera, Nymphalidae) in Hong Kong

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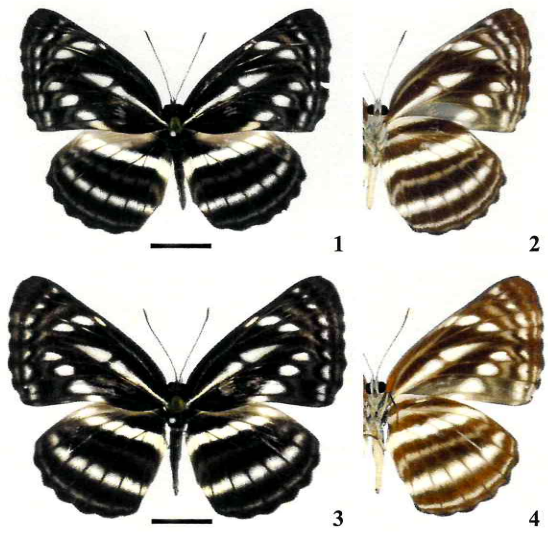
Abstract

Materials of *Neptis nata* Moore, 1857 were collected from recent biodiversity survey representing the first unequivocal record of the species in Hong Kong. Past unconfirmed records were also discussed.

Keywords

Neptis nata adipala, new record, South China.



Figs. 1–4. *Neptis nata adipala* from Hong Kong. **1.** ♂, upperside; **2.** *ditto*, underside; **3.** ♀, upperside; **4.** *ditto*, underside. Scale bar = 1 cm.

Neptis Fabricius, 1807 is a species-rich Neptini genus, consisting of over 160 species (Ma *et al.*, 2020), distributed across tropical and temperate of the Old World (Eliot, 1969). Although 55 species have been found in China (Lang, 2012), this genus is poorly represented in Hong Kong with only four species recorded in previous studies (e.g. Lo & Hui, 2004; Chan *et al.*, 2011), namely *N. hylas* (Linnaeus, 1758), *N. clinia* Moore, 1872, *N. soma* Moore, 1858 and *N. miah* Moore, 1857.

During recent biodiversity survey, some *Neptis* specimens with reduced white spots were reared from larvae collected in Hong Kong. These specimens were compared with *Neptis* materials from the other regions and subsequently identified as of *Neptis nata adipala* Moore, 1872. Vouchers are deposited in Kadoorie Farm and Botanic Garden, Hong Kong (KFBG) and Department of Biology, National Taiwan Normal University, Taipei (NTNU).

Species account

Neptis nata adipala Moore, 1872 (Figs. 1–4)

Voucher materials examined: ♂, Hong Kong: Sai Kung, Yung Shue O, 18. xii. 2018, Coll Y. F. Hsu, HSU No.18 M14, reared from *Trema tomentosa*, emgd. 16. I. 2019 (NTNU); ♂♀, Hong Kong: New Territories, Ma On Shan, Sap Sze Heung, Tin Liu, 14/23. v. 2020, SF Pun Coll, reared from *Trema tomentosa* (KFBG).

Discussion

N. nata used to be included in some Hong Kong butterfly checklists (e.g. Walthew, 1997; Young & Lee, 2001; Young, Wu & Yu, 2016) based on the sighting record reported by Walthew (1996a). However, the description in the identification key of Walthew (1996b), "forewing white submarginal spots in 6 to 8 moved inwards out of line with rest of fascia", is actually a diagnostic characteristic of *N. soma*, according to Eliot (1969). The specimen stated in Walthew (1996b) was not retained (Walthew, per. com.), and the authors of present study inspected a photograph of another life individual presented by Walthew and

found that its characters differ from those of *N. nata*, but are undistinguishable from those of *N. soma*. There was lack of evidence to prove the existence of *N. nata* in Hong Kong prior present study because all *Neptis nata* illustrations in published works involved either mis-identification (e.g. Young & Wu, 2020, p.242, which are individuals of *N. clinia*), or non-local origin (e.g. Young & Yiu, 2002), and the larval hostplant association and immatures of *N. nata* recorded in Choi (2011) was based on material collected from Taiwan (Choi, per. com.). Lo & Hui (2004) suggested that the presence of *N. nata* in Hong Kong was questionable because there was no reliable photographic record or voucher specimen. Chan *et al.* (2011) further removed the species from local checklist because of lack of recent verifiable record. Thus, the discovery in present study represents the first unequivocal record of *N. nata* in Hong Kong.

Although *N. nata* is apparently unrecorded in continental China except southern Tibet and southern Yunnan (Eliot, 1969; Lang, 2012), unpublished field records of the authors reveal that it is a widespread species in lowland habitat of South China and the population in Hong Kong is likely to be recently established. The Hong Kong race is assigned to ssp. *adipala* Moore, 1872 since its diagnostic features conformed to the materials collected in South China, Yunnan and Indochina. *N. nata* is a polyphagous species which feeds on a diversity of host plants including Celtidaceae, Euphorbiaceae, Febaceae, Verbenaceae, Combretaceae, Urticaceae, etc (Hsu, 2013). Although *Trema tomentosa* (Ulmaceae) was the only host plant recorded in this study, more plants species will be found utilized by the larvae of *N. nata* in Hong Kong is expected.

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［和文摘要］

タイワンミスジの香港からの新記録

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中国ではこれまで55種の*Neptis*属が記録されているが，香港ではそのうち4種が記録されているのみである。著者らは今回，香港においてタイワンミスジの分布を確認したので報告する。これは，ホソバウラジロエノキから幼虫を採集し，飼育して得られたものである。タイワンミスジはこれまで，中国大陸部においては雲南省やチベットの一部でのみ分布するとされてきたが，未発表の標本データを見る限り，中国南部に広く分布していることが判明している。おそらく，香港に分布するようになったのも比較的最近になってからだと推測される。（文責：宇野　彰）