



First record of *Nyctemera adversata* (Schaller, 1788) and *N. carissima* (Swinhoe, 1891) (Lepidoptera, Erebidae, Arctiinae) from Myanmar

Vitaly M. Spitsyn^{1,2*}, Ivan N. Bolotov¹, Mikhail Y. Gofarov¹, Ilya V. Vikhrev¹ and Nikita I. Bolotov^{1,2}

1 Russian Museum of the Biodiversity Hotspots, Institute of Ecological Problems of the North, the Ural Branch of the Russian Academy of Sciences, Severnaya Dvina Emb. 23, 163000 Arkhangelsk, Russian Federation

2 Department of Zoology and Ecology, Northern (Arctic) Federal University, Severnaya Dvina Emb. 17, 163002 Arkhangelsk, Russian Federation

* Corresponding author. E-mail: vitalik91993@yandex.ru

Abstract: We report the first record of *Nyctemera adversata* (Schaller, 1788) and *N. carissima* (Swinhoe, 1891) (Lepidoptera, Erebidae, Arctiinae) from Kachin state, northern Myanmar.

Key words: Oriental region, Burma, tiger moths, biogeography

Species in the genus *Nyctemera* are extremely diverse in the Indo-Australian tropics. They are also found with a much lower diversity in Africa and Madagascar (Holloway 1988). Fauna of this genus is well studied in Borneo, the Philippines, Thailand and in some other areas (Holloway 1988; De Vos 1999, 2007; Cerny 2009; Bucsek 2012), but *Nyctemera* fauna of the Myanmar is poorly studied. Seven *Nyctemera* species have already been reported from Myanmar: *N. cenis* (Cramer, 1777), *N. lactinia* (Cramer, 1779), *N. latistriga* Walker, 1854, *N. tripunctaria* (Linnaeus, 1758), *N. arcata* Walker, 1856, *N. coleta* (Stoll, 1781) (Dubatolov 2010) and *N. muelleri* (Snellen von Vollenhoven, 1863) (Cerny 2009; Dubatolov 2010; Bucsek 2012).

We newly collected two more species for the fauna in this territory of this genus: *N. adversata* (Schaller, 1788) and *N. carissima* (Swinhoe, 1891) in northern Myanmar. Localities for *N. adversata*: Myanmar: Kachin state, Wasandum village, 27.4949° N, 097.1900° E, 9 ex. (7♂, 2♀), 18–19.III.2014; Kachin state, Masandum village, 27.4909° N, 097.3350° E, 6 ex. (5♂, 1♀), 13.III.2014; Kachin state, Putao town, 27.3396° N, 097.4037° E, 2 ex. (1♂, 1♀), 12.III.2014. Localities for *N. carissima*: Myanmar: Kachin state, Wasandum village, 27.4949° N, 097.1900° E,

4 ex. (3♂, 1♀), 18–19.III.2014 (Figure 1). Collecting was undertaken by using an ultraviolet lamp (Medium 250 WSB/E24-E23 250 Watt Self Ballast Mercury Vapor-Clear). Samples are kept in the Russian Museum of the Biodiversity Hotspots (RMBH), Arkhangelsk, Russian Federation.

We found individuals of *N. adversata* in such habitats as: mountain rainforest with bamboo patches at the river valley and rice fields (Figure 3). *N. carissima* was found exclusively in the mountain rainforest with bamboo patches (Figure 3). Specimens of those species, which were collected during the field trip, look much similar in their morphology to specimens which were previously collected in Thailand. One exception is the wingspan of collected male specimens, which is narrower than normal for *N. adversata* and wider than normal for *N. carissima*. The typical wingspan dimensions for *N. adversata* (by Bucsek 2012) are ♂ 45–50 mm and ♀ 45–50 mm. Wingspan of specimens from Myanmar is 36–50 mm ($n = 17$) (Figure 2). The shift in wing size is less than 45 mm for four specimens, it reaches its lower bound 45–46 mm for six specimens and there is no shift in wing size for three specimens. Dimensions are normal for female specimens at 46–50 mm ($n = 4$). For *N. carissima* the wingspan of males is slightly higher than the upper limit of 43–48 mm ($n = 3$), wingspan of the female is normally 48 mm ($n = 1$) (♂ 40–45 mm, ♀ 45–53 mm (Bucsek 2012).

Given our data, the species ranges are as follows: *N. adversata*: Sri Lanka; Bangladesh; India; Nepal; China: Tibet, Sichuan, Yunnan, Guangdong, Hunan, Hong Kong, Guangxi, Henan, Jiangxi, Zhejiang, Fujian; Taiwan; Japan, northern part of Honshu Island; Thailand;

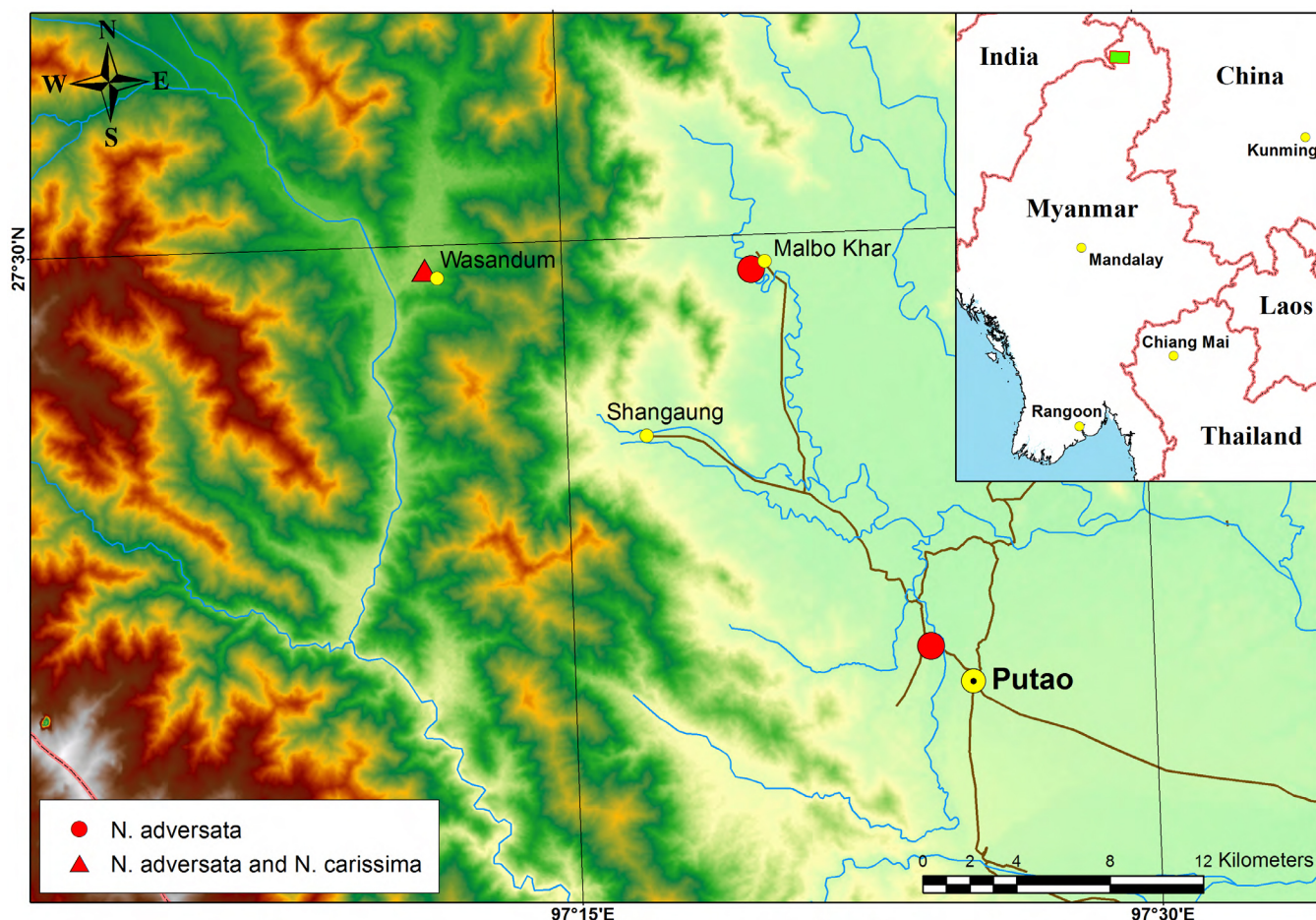


Figure 1. Map showing the first record of *Nyctemera adversata* (Schaller, 1788) and *N. carissima* (Swinhoe, 1891) in Myanmar.

Malay Peninsula; Sundaland: Sumatra, Java, Borneo; Philippines (Hampson 1894; De Vos 1999; Dubatolov 2010) and Myanmar: Kachin. *N. carissima*: Eastern India: Sikkim, Assam, Meghalaya (Khasis), Nagaland (Naga Hills), Arunachal Pradesh; Nepal; China: Guangdong, Hunan, Zhejiang, Fujian; Thailand; Malay Peninsula; Indonesia: northern Sumatra (Hampson 1894; De Vos 2002; Dubatolov 2010) and Myanmar: Kachin.

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Authors' contribution statement: VMS wrote the text, identified, collected and dissected specimens, INB collected the data and wrote text as co-author, MYG worked on the map, IVV took biotopes photos and NIB was the co-writer of the text.

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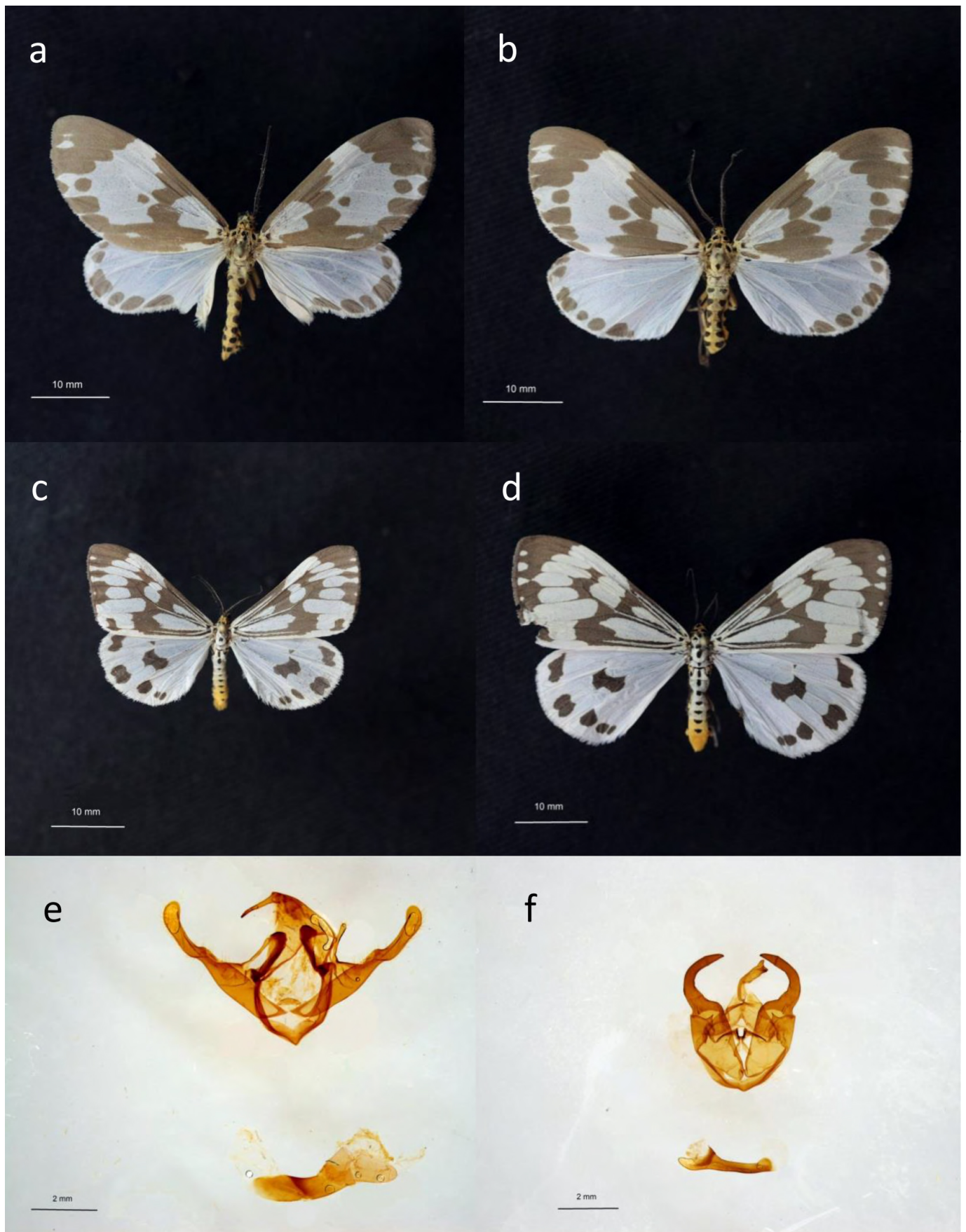


Figure 2. *Nyctemera carissima* (a – male, b – female, e – male genitalia) and *N. adversata* (c – male, d – female, f – male genitalia).



Figure 3. Habitat of *Nyctemera adversata* and *N. carissima* (photo by I.V. Vikhrev).