New and little known species of the genus *Casmara* Walker, 1863 (Lepidoptera: Oecophoridae) from Southeast Asia

Новые и малоизвестные виды рода *Casmara* Walker, 1863 (Lepidoptera: Oecophoridae) из Юго-Восточной Азии

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Two new species of the genus *Casmara* Walker, *C. nedoshivinae* **sp. nov.** and *C. subagronoma* **sp. nov.** are described from Vietnam, China and Indonesia. *Casmara exculta* (Meyrick, 1914) is recorded from Vietnam and Indonesia for the first time.

Два новых вида из рода *Casmara* Walker, *C. nedoshivinae* **sp. nov.** и *C. subagronoma* **sp. nov.**, описываются из Вьетнама, Китая и Индонезии. *Casmara exculta* (Meyrick, 1914) впервые указывается для фауны Вьетнама и Индонезии.

Key words: moths, taxonomy, Vietnam, China, Indonesia, Lepidoptera, Oecophoridae, *Casmara*, new species

Ключевые слова: моли, таксономия, Вьетнам, Китай, Индонезия, Lepidoptera, Oecophoridae, *Casmara*, новые виды

INTRODUCTION

The genus *Casmara* Walker, 1863, belongs to subfamily Oecophorinae. Hitherto it was represented by 19 species distributed in Korea, Japan, China, India, Thailand, Malaysia, Indonesia and New Guinea (Meyrick, 1907, 1914, 1922, 1931; Caradja & Meyrick, 1934; Gaede, 1938–1939; Bradley, 1953; Clarke, 1963; Diakonoff, 1966; Moriuti, 1982, 1985; Robinson et al., 1994; Wang, 2006; Byun et al., 2012; Wang et al., 2012). Only one species, *C. regalis* Diakonoff, 1966, was pointed out from Australia (Common, 1996). To date no species was known from Vietnam.

TAXONOMY

Order **LEPIDOPTERA** Family **OECOPHORIDAE** Subfamily **OECOPHORINAE**

Casmara Walker, 1863

The moths of this genus are rather large insects with narrow and long wings as well as with brushes of dense scales on legs. Also these species are characterized by the following characters of external structure: wingspan 29-60 mm; proboscis absent; labial palpi upcurved; second segment longer or much longer than terminal one; hind legs ordinary, not extremely long as in Ashinaga Matsumura, 1929 and Lactistica Mevrick, 1907. Venation is common for Oecophoridae: forewing with R4 and R5 stalked; hindwing with R and M1 separate. Male genitalia are characterized by the following features: uncus conical; gnathos with a beak-shaped apical part; valva broad and sclerotized at base with faintly sclerotized cucculus and rounded apex; sacculus sclerotized, free distally; aedeagus with caulis joined with juxta. In female genitalia, the ovipositor is short, antrum and distal part of ductus bursae are usually sclerotized, ductus seminalis is connected with ductus bursae in middle part of latter duct or near antrum, and signum is absent or present. The genus is very close to Epimecyntis Meyrick, 1924 but differs in a narrow second segment of palpi lacking wide brush of dense scales.

Casmara nedoshivinae sp. nov.

(Fig. 1)

Holotype. Male; Central **Vietnam**, Thua Thien Hue Prov., A Ruang, 16°04'N, 107°29'E, 663 m, 24–27 April 2009, leg. S. Nedoshivina (genital preparate No. 17602). Holotype at Zoological Institute, Russian Academy of Sciences, St Petersburg.

Paratype. Male; China, Guangdong Prov., Guangzhou ("Canton"), 10 July 1918, leg. R. Mell (genital preparate No. 69). Paratype at Museum of Natural History, Humboldt University, Berlin.

Description. Forewing length 14–15 mm; wingspan 31–33 mm. Head with white and brown narrow scales; antenna white with small brown triangles on sides; second segment of labial palpi slightly longer than terminal one, with brown and white scales; terminal segment of these palpi white with brown belt near apex. Forewing brown with dark brown marks, large pale gray spot near outer margin having black anterior border, three white transversal streaks in middle, and some pink scales at 1/4 and at 2/3 of costal margin. Hindwing gray.

Male genitalia (Fig. 1). Gnathos with broad basal part (before conical prominence); its apical part beak-shaped and narrow. Valva broad at base and narrow at apex; cucullus oblong and rather narrow. Free distal part of sacculus very short. Aedeagus very long and strongly bent, with long caulis. Cornutus curved, with thorn at middle, 1/7-1/10 length of aedeagus.

Diagnosis. The new species is similar to Casmara longiclavata Wang, 2012, described from China, but can be distinguished by a large pale gray spot near the outer margin of forewing restricted by a anterior narrow black border (in Casmara longiclavata, the gray spot more narrow and restricted by an anterior triangular fuscous spot). Male genitalia of the new species differ in a long narrow apical part of gnathos (2/3 the length of the rest part of gnathos) and a short cornutus (1/7–1/10 the length of aedeagus). Whereas Casmara longiclavata has narrow apical part of gnathos shorter (1/2 the length of the rest part of gnathos), and cornutus longer (1/3 the length of aedeagus).

Etymology. The species is named after Svetlana Nedoshivina, a collector of holo-type.

Casmara subagronoma sp. nov. (Fig. 2)

Holotype. Male; North **Vietnam**, Vinh Phuc Prov., Ngoc Thanh Vill., Me Linh Biostation, 60 m, 21°23'N, 105°43'E; 1–4 May 2009, leg. S. Nedoshivina (genital preparate No. 17603). Holotype at Zoological Institute, Russian Academy of Sciences, St Petersburg.

Paratype. Male; **Indonesia**, "Sumatra sept., Tobasee-Ostseite, Holzweg, 1200 m, zw. Sianter und Prapat, 22.5.1982, leg. Dr. Diehl" (genital preparate No. 18, det. Lvovsky). Paratype at Zoological State Collection, Munich.

Description. Forewing length 15–16 mm; wingspan 33–35 mm. Head with white and dark brown narrow scales; antenna light brown; second segment of labial palpi some longer than terminal one, with dark brown and white scales; terminal segment white with black belt near apex. Forewing brown with dark brown marks, large pale gray spot near outer margin having black anterior border, white spot near base, three white transversal streaks at middle, and some pink scales at 1/4 and at middle of wing as well as at 3/4 of its costal margin. Hindwing gray.

Male genitalia (Fig. 2). Gnathos with broad basal part and with very short and narrow beak-shaped apical part. Valva broad at base, with somewhat oblong cucculus. Free distal part of sacculus very short. Aedeagus medium-sized, bent, with long caulis and long longitudinal notch of distal half. One hook-shaped cornutus situated near base of this notch in middle part of aedeagus.

Diagnosis. The new species is similar to *Casmara agronoma* Meyrick, 1931, described from China, but can be distinguished by a large pale grey spot near the outer margin of forewing (this spot is absent in brown wing of *C. agronoma*). Male genitalia of the



Figs 1–2. *Casmara*, male genitalia. 1, *C. nedoshivinae* sp. nov., holotype; 2, *C. subagronoma* sp. nov., holotype.

new species differ in a narrow apical part of gnathos (1/3 the length of the rest part of gnathos) and a long notch at the distal half of aedeagus which is approximately equal to half of the aedeagus length. Whereas in *C. agronoma*, narrow apical part of gnathos is 1/2 the length of the rest part of gnathos, and the notch in the distal part of aedeagus shorter than half of the aedeagus length.

Etymology. The species name is derived from the Latin name *Casmara agronoma*, referring to the similarity of the two species.

Casmara exculta (Meyrick, 1914)

Specimens examined. 1 male; Central Vietnam, Thua Thien Hue Prov., A Ruang, 16°04'N, 107°29'E, 663 m, 24–27 April 2009, leg. S. Nedoshivina; 1 male; **Indonesia**, North Sumatra, Prapat, 1150 m, 28 May–1 July 1984, leg. E. Diehl.

Distribution. India (Assam) (Meyrick, 1914), Thailand, Malaysia (Robinson et al.,

1994), Vietnam, Indonesia. The species is recorded from Vietnam and Indonesia for the first time.

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REFERENCES

Bradley J.D. 1953. A new species of Casmara Walker, 1863, from Malaya – (Lepidoptera: Oecophoridae). Annals and Magazine of Natural History, 6: 319–320.

- Byun B.K., Park Y.M., Sora K., Lee B.W. & Bang N. 2012. Notes on *Casmara agronoma* Meyrick (Lepidoptera, Oecophoridae) in Korea. *Entomological Research*, 42(5): 281– 283.
- Caradja A. & Meyrick E. 1934. Materialien zu einer Microlepidopteren-Fauna Kwangtungs. Deutsche Entomologische Zeitschrift "Iris", 48: 28–43.
- Clarke J.F.G. 1963. Catalogue of the type specimens of Microlepidoptera in the British Museum (Natural History) described by Edward Meyrick, 4. London. 521 p.
- Common I.F.B. 1996. Oecophoridae. In: Nielsen E.S., Edwards E.D. & Rangsi T.V. (eds). Monographs on Australian Lepidoptera. Checklist of the Lepidoptera of Australia, 4: 59–89. Canberra: CSIRO.
- Diakonoff A. 1966. Records and descriptions of South Asiatic Microlepidoptera. *Tijdschrift* voor Entomologie, 109(3): 49–86.
- Gaede M. 1938–1939. Oecophoridae I, II. In: Bryk F. (ed.). *Lepidopterorum catalogus*, 88, 92. Gravenhage. 476 p.
- Meyrick E. 1907. Descriptions of Indian Microlepidoptera. III. Journal of the Bombay Natural History Society, 17: 730–754.

- Meyrick E. 1914. Oecophoridae. Exotic Microlepidoptera, 1(8): 225–256.
- Meyrick E. 1922. Oecophoridae. Exotic Microlepidoptera, 2(17): 513–544.
- Meyrick E. 1931. In: Caradja A. Second contribution to our knowledge about the Pyralidae and Microlepidoptera of Kwanhsien. *Bulletin de la Section Scientifique de l'Académie Roumaine*, 14: 62–75.
- Moriuti S. 1982. Oecophoridae (Ashinagidae).
 In: Inoue H., Sugi S., Kuroko H., Moriuti
 S. & Kawabe A. Moths of Japan, 1: 245–254,
 2: 204–206. Tokyo.
- Moriuti S. 1985. A new and an unrecorded species of *Casmara* Walker (Lepidoptera: Oecophoridae) from Thailand. *Tinea*, **12**(2): 11–16.
- Robinson G.S., Tuck K.R. & Shaffer M. 1994. A field guide to the smaller moths of South-East Asia. Kuala Lumpur. 308 p.+32 pls.
- Wang S.X. 2006. Oecophoridae of China (Insecta: Lepidoptera). Beijing. 255 p.+15 pls.
- Wang S.X., Zhang L. & Wang J. 2012. Four new species of the genus *Casmara* Walker, 1863 (Lepidoptera: Oecophoridae) from China. *Zootaxa*, 3239: 58–63.

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