Two new species of the genus *Meleonoma* Meyrick (Lepidoptera, Lypusidae) from Korea

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**Abstract**

Two species belonging to *Meleonoma* Meyrick— *M. tamraensis* Park, sp. nov. and *M. brevicula* Park, sp. nov.—are described from Jeju Island, Korea, and *Meleonoma facialis* Li & Wang, 2002 is reported for the first time from Korea. The genus *Meleonoma* is still a source of some debate in terms of the taxonomic position of its family level, and it is tentatively placed in the family Lypusidae.

**Introduction**

The genus *Meleonoma* Meyrick (Type species: *Cryptolechia stoma*ta Meyrick, 1910) was originally placed in the family Oecophoridae (Meyrick 1914). The taxonomic position of the genus has remained under debate, as well as other related genera including *Periacma* Meyrick, Clarke (1965) placed the genus *Meleonoma* in Cosmopterigidae, but Lvovsky (2015) recently noted that it was erroneously attributed to Cosmopterigidae without any comments, and subsequently this error was followed by several authors: Li and Wang (2002, 2004) described five species from China, belonging to the family Cosmopterigidae. Prior to this, Lvovsky (2011) classified these related genera as belonging to the subfamily Periacminae under the family Cryptolechiidae. Recently, Lvovsky (2015) placed *Meleonoma* in the subfamily Periacminae of the family Lypusidae, describing five new *Meleonoma* species from Nepal and China. At the same time, he established a new subfamily, Meleonomini, separating from Periacmini Lvovsky, 2005 by the separable character—with labial palpus three-segmented, instead of two-segmented—in the tribe Periacmini. The genus comprises about 25 known species, but it is assumed that more species will be newly found and added, or several species that have been placed in some related genera including *Cryptolechia* could be transferred to this genus. The distributional range of the genus extends from India and Sri Lanka to the Russian Far East, including Indonesia and Nepal, and few species are known in Madagascar, too. In Korea, the genus is introduced for the first time, but *Meleonoma malacobyrsa* (Meyrick), which originally belonged to *Cryptolechia* and transferred to this genus by Lvovsky (2015), was previously known (Park 1983). In the present paper, two species that were collected from Jeju Island are described as new to science, and are attributed tentatively to the family Lypusidae following Lvovsky (2015). At the same time, *Meleonoma facialis* Li & Wang, 2002 is reported for the first time from Korea.

**Materials and methods**

Materials studied herein were collected from Jeju Island, Korea. Types of the new species are tentatively deposited in the first author’s private collection.

**Taxonomic accounts**

Genus *Meleonoma* Meyrick, 1914


Type species *Cryptolechia stoma*ta Meyrick, 1910.


Type species *Cryptolechia malacobyrsa* Meyrick, 1921.
Meleonoma tamraensis Park, sp. nov.
LSID urn:lsid:zoobank.org:act:7AC7769A-B97B-4239-A2A7-A29B286E0CC4
(Figures 1, 1a, 1b, 3, 4, 4a)


Figures 1–7. 1. Adult of Meleonoma tamraensis Park, sp. nov., 1a, ditto, dorsal view of head; 1b, Ditto, labial palpus; 2, Adult of M. brevicula Park, sp. nov.; 2a, Ditto, dorsal view of head; 3, Venation of M. tamraensis Park, sp. nov.; 4, Male genitalia of M. tamraensis Park, sp. nov. 4a, Ditto aedeagus. 5, Male genitalia of M. brevicula Park, sp. nov.; 5a, Ditto aedeagus.; 6, Adult of Meleonoma facialis Li & Wang; 7, Ditto, male genitalia; 7a, Ditto, aedeagus.
**Diagnosis.** The new species is superficially similar to *M. fascialis* Li & Wang, which was described from China, but the forewings are scattered with more fuscous scales irregularly and the male genitalia are quite different each other.

**Description.** Adult (Figure 1). Wingspan 10.0 mm. Head covered with fuscous scales medially and pale orange scales laterally on dorsal surface; long scales, which are pale orange in basal 2/3 and fuscous beyond, covered downward anterolaterally; frons shiny grayish brown. Basal segment of antenna slender, pale orange to grayish orange dorsally, blackish laterally; flagellum grayish orange with blackish annulations. Second segment of labial palpus thick, long, pale orange with three blackish bands on both surfaces: first one near the base, second beyond half; and third before apex, apex with pale orange scales; third segment as long as half of the second, pale orange basal 1/3 and blackish beyond, with pale orange apical part; apex acute (Figure 1b). Tegula blackish, except pale orange distal 1/3. Thorax pale orange dorsally, irregularly mixed with fuscous scales. Hind tibia with hair-like scales all around beyond middle spurs. Forewing densely covered with fuscous scales irregularly; subbasal fascia pale orange, often obscure; median fascia pale orange, arising from costa medially and obliquely extended to near inner margin, but not quite reaching to it; an ovate pale orange patch at lower corner of cell, with black scales anteriorly; large pale orange triangular costal patch at beyond 2/3 of costa, extending to vein M₂ with a blackish round spot at middle on anterior margin; costal margin slightly arched; apex obtuse; termen oblique; fringe blackish, with narrow, pale orange pale orange line at basal margin, venation (Figure 3) with R₁ arising from before middle; distance between R₁–R₂ at base slightly longer than that of R₂–R₃; R₃ arising from upper corner of cell; R₄ and R₅ stalked before middle; R₅ to island from which these types were collected.

**Male genitalia (Figures 4, 4a).** Uncus slender, as long as saccus, with acute apex. Gnathos reduced. Valva broad, nearly trapezoidal; ventral margin with broadly sclerotized edge, with long setae, more dense distally, inner margin slightly serrate; distal margin truncate, with long setae along margin. Sacculus more or less quadrate, length shorter than width, about half of caudal margin in inner side concave with short, triangular lateral processes. Saccus narrowed towards apex, with obtuse apex. Aedeagus stout, as long as sacculus + valva; round basally; cornuti consist of two different sized, heavily sclerotized plates: longer one about 3/4 length of aedeagus, bifurcate with triangular lateral processes.

**Distribution.** Korea (Jeju Island).

**Etymology.** This species name is derived from the Latin, *brevi* (= short) with a Latin diminutive suffix, *cula*, referring to the short uncus of the male genitalia.

**Meleonoma fascialis Li & Wang, 2002** (Figures 6, 7, 7a)

**Meleonoma fascialis Li et Wang, 2002: 230; Yin & Wang, 2016: 140.**

**Male genitalia (Figure 7, 7a)**

**Material examined.** 1♂, Chugok, Chuncheon, Korea (37°71′, 127°69′E), 30 vii 1986, (leg. K.T. Park); 1♂, Chuncheon, Korea (37°78′N, 127°82′E), 13 vii 1995, (leg. Y.S. Lee and C. G. Lee); 1♂, Chuncheon, Korea, 25 vii 1999, (leg. S.Y. Sim and S.M. Lee).

**Distribution.** Korea, China, Thailand.

**Notes.** This species is newly recorded from Korea.

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**References**


**Meleonoma brevicula Park, sp. nov.**

**LSID urn:lsid:zoobank.org:act:A72EDB5D-2E12-4082-89D4-9F549E8CD241**

**Notes.** This species name is derived from the old name of the island from which these types were collected.


