

# A new species of the family Mycetophagidae (Coleoptera) in Korea

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## Abstract

A new species from Korea, Jeju, *Litargus (Litargosomus) jejuoensus* sp. nov., is described. A description, photographs of the adults, line drawings of the diagnostic characteristics of the species are presented and compared with similar Eastern Palaearctic species.

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## Introduction

The genus *Litargus* Erichson, 1846 is a relatively large group containing 54 species currently placed in 4 subgenera worldwide (Hetschko, 1930; Nikitsky, 1992, 1993, 2008, 2020; Háva, 2020, 2021) and 12 species divided into 3 subgenera in the Palaearctic region (Nikitsky, 2008; Háva, 2020). 4 species in 2 subgenera have been known from Korea until now (Kim *et al.*, 1994; Jung and Park, 2013; Hong and Lee, 2014; Jung, 2016; NIBR, 2019). During the collection of fungivorous beetles at the several Gotjawal forests of Jeju, I found a new species of *Litargus* Erichson, 1846. In this paper, *Litargus jejuoensus* sp. nov. is described.

## Materials and Methods

Materials for this study were collected by flight intercept traps (F.I.T.), installed in the mixed forest and Gotjawal of Jeju. Some samples were collected from the bark of dead

logs associated with fungi, which are the most commonly used food source of fungivorous mycetophagids. The measurements were made as following: total length (TL) - from anterior margin of head to elytral apex; elytral width (EW) - maximum linear transverse distance.

The voucher specimens of two species were rented from the K. MASUMOTO Collection in the National Science Museum, Japan for identifying the new species as follows:

*Litargus japonicus* Reitter: Japan: Honshu, Mt. Daisen, Tottori Pref., 27.v.1989, K. MASUMOTO leg (DET. MASUMOTO).

*Litargus unifasciatus* Reitter: Japan: Mie-Ken, Ohyamadamura, Aoyama-kogen 800m, 18.vi.2001. K. MASUMOTO leg (DET. MASUMOTO).

## Species accounts

Family Mycetophagidae Leach, 1815 애머섯벌레과  
Genus *Litargus* Erichson, 1846 점박이애머섯벌레속  
*Litargus* Erichson, 1846: 415.

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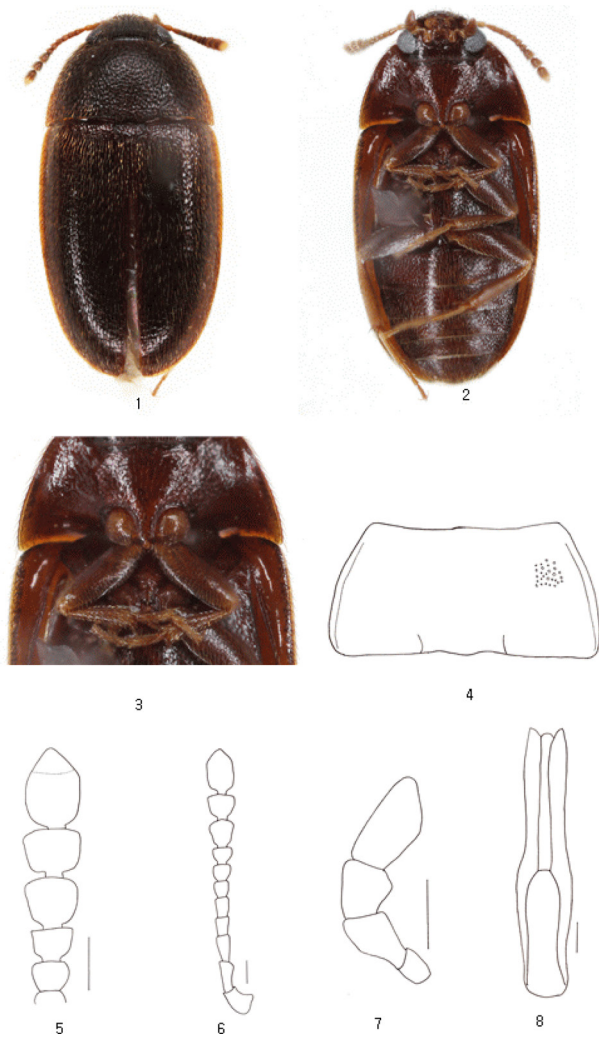
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**Figs. 1-8.** *Litargus (Litargosomus) jejuensis* sp. nov. 1. Habitus (dorsal view); 2. Habitus (ventral view); 3. Prosternal process and epipleural fold of pronotum; 4. Pronotum; 5. antennal club (scale bar = 0.1 mm); 6. Antennae (scale bar = 0.1 mm); 7. Maxillary palpi (scale bar = 0.1 mm); 8. Genitalia (male, scale bar = 0.1 mm).

Type species: *Ips bifasciatus* Fabricius, 1787.

Subgenus *Litargosomus* Motschulsky, 1858

*Litargosomus* Motschulsky, 1858: 52.

Type species: *Litargosomus maculatus* Motschulsky, 1858.

***Litargus (Litargosomus) jejuensis* sp. nov. 제주애버섯벌레(신칭)(Figs. 1-8)**

**Description:** Body measurements TL 2.1 mm, EW 1.0 mm. Body oblong-ovate, subparallel-sided, roundly narrowed anteriorly and posteriorly; weakly convex, more or less flat; weakly glossy; covered with short, dense, decumbent yellowish brown hairs and granular punctures; body color mostly black

to brownish black; antennae, mouth parts, legs and edges of body yellowish brown; elytra without markings and patches. **Head** finely and densely punctate and granulate; ocular distance about 2.2 times wider than diameter of eyes; eyes prominent laterally in dorsal view, not protruding, coarsely faceted and slightly emarginate near antennal insertions; antennae with 11 antennomeres (Fig. 6), clavate, antennomeres 1-6 more or less cylindrical, antennomeres 7-8 nearly triangular, weakly enlarged; antennomeres 9-11 strongly enlarged, forming a distinctive club (Fig. 5); third antennomere 1.8 times longer than fourth and 1.2 times longer than second; apical antennomere oblong, gradually tapered to apex; apical maxillary palpomere cylindrical, gradually enlarged apically (Fig. 7). **Thorax.** Pronotum broad trapezoidal, convex dorsally, twice wider than long, widest at basal part, gradually narrowed anteriorly; with tiny and dense granular punctures and rugose; anterior margin slightly arcuate; lateral sides gradually narrowed anteriorly; basal margin almost sinuate, with very small, short and shallow impressions at subbasal parts (Fig. 4). Prosternal process elongate, relatively wide and parallel-sided, reaching out procoxa and distinctly separating procoxae (Fig. 3); metaventrite widely and longitudinally flat at middle part; metacoxae widely separated; epipleural fold of pronotum strongly concave (Figs. 2, 3). Scutellum almost semicircular, wider than long, with dense granulate punctures. Elytra elongate, about 1.7 times longer than wide; subparallel-side, gradually and roundly narrowed from apical 1/4 to apex; elytral base almost equal to base of pronotum in width; lateral margins entirely visible dorsally; covered with dense, regular, short and decumbent hairs and with small, dense granular punctures; not punctate-striate; unicolor without patches. All **legs** slender; all tibiae slender with two strong and distinctly strongly spurs at apex; metatarsomere 1 long, almost equal to tarsomeres 2-4 combined. Male genitalia (Fig. 8).

**Variability.** 29 specimens (Paratype) were reviewed. As a result, body measurements TL 2.0- 2.3mm, EW 1.0- 1.2mm and there is no color variation.

**Type material. Holotype: Korea:** Male, Gueok-ri, Daejeong-eup, Seogwipo-si, Jeju-do, 13.iv-18.v.2019, J.B. Seung and B.H. Jung (F.I.T.); **Paratypes (28 specimens) : Korea:** 1♂1♀, Gueok-ri, Daejeong-eup, Seogwipo-si, Jeju-do, 19.v-15.vi.2019, J.B. Seung and B.H. Jung (F.I.T.); 1♀, Hwasun Gotzawal, Seogwipo-si, 15.iv-20.v.2017, J.B. Seung; 1♀, Goratmeodeul, Daejeong-eup, Seogwipo-si, Jeju-do, 13.iv-18.v.2019, J.B. Seung and B.H. Jung (F.I.T.).

**Distribution.** Jeju of Korea (New species).

**Remarks.** The new species belongs according to structure of antennae to the subgenus *Litargosomus* Motschulsky, 1858; this subgenus contains eight species recorded from the Palaearctic region: *Litargus coloratus* Rosenhauer, 1856, *Litargus japonicus* Reitter, 1877, *Litargus kyushuensis* Miyatake, 1985, *Litargus lewisi* Reitter, 1889, *Litargus sexsignatus* Miyatake, 1957, *Litargus unifasciatus* Reitter, 1889, *Litargus (Litargosomus) yunnanus* Háva, 2020, and *Litargus vestitus* Sharp, 1879. According to examination of the voucher specimens and illustrated habitus, all described eight species with maculate or patterned elytra (Nikitsky, 1992: 410, Figs. 1-4, 8-17; Mifsud and Jelínek, 2012: 108; Háva, 2020: 57), so the new species differs from them by the structure of the antennae, the male genitalia and the unicolorous elytral pattern, without markings or fascia bands. Among them, *Litargus (Litargosomus) jejuoensis* sp. nov. is most similar to *Litargus (Litargosomus) yunnanus* Háva, 2020 which distributed in China but can be distinguished by the following characteristics (Háva, 2020: 57, Figs. 1-3, 5-6): apical antennomere oblong, gradually tapered to apex; elytra unicolor and black, without markings or fascia bands; the parameres surround the median lobe, almost reaching to the tip of parameres.

**Etymology.** The species is named, referring to its occurrence locality, Jeju in Korea.

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