

First Record of the Genus *Psilomma* Förster (Hymenoptera: Diapriidae) from the Eastern Palaearctic Region

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동구북구 지역의 미기록속 *Psilomma* Förster (벌목: Diapriidae)에 대한 보고

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ABSTRACT: The genus *Psilomma* Förster, 1856 and a species of the genus, *P. dubium* Kieffer, 1908 are recorded for the first time from South Korea. The genus *Psilomma* is also recorded from the Eastern Palaearctic region for the first time. Redescription and photographs of the diagnostic characters of *P. dubium* are provided.

Key words: Belytinae, Eastern Palaearctic, new record, Pantolytini

조 록: 한국산 미기록속인 낮어리염주벌속(*Psilomma* Förster) (신칭)과 미기록종인 낮어리염주벌(*Psilomma dubium* Kieffer) (신칭)을 처음으로 보고한다. 그에 따라 본 속을 동구북구 지역에 최초로 보고한다. 재기재문 및 주요 형질에 대한 사진을 함께 제시한다.

검색어: 어리염주벌아과(신칭), 동구북구, 미기록속, 점어리염주벌속(신칭)

Psilomma Förster, a small and rare genus within the tribe Pantolytini (Diapriidae: Belytinae), consists of three species, *P. dubium* Kieffer, 1908; *P. fuscicornis* Kieffer, 1908; *P. fusciscapis* Förster, 1861, widely distributed in Europe (Macek, 1990). This genus is easily distinguished from other Pantolytini genera by the sickle form of mandibles. To date, *Psilomma* has not yet been recorded outside of Europe.

As a result of the present study, the genus *Psilomma* is reported from South Korea for the first time based on a species of *P. dubium*. In addition, the known range of *Psilomma* is extended from European countries (Western Palaearctic) to South Korea (Eastern Palaearctic). Here, detailed redescription and photographs of this species are provided.

Materials and Methods

Morphological terms generally follows Nixon (1957) and Macek (1990), and terms for wing venation follow Masner & García (2002). The images were captured with an AxioCam HRc camera through a Discovery V20 stereomicroscopy (Carl Zeiss, Oberkochen, Germany) and were produced with Axio Vision40AC software (Carl Zeiss, Oberkochen, Germany). Final plates were prepared in Adobe Photoshop CS6 (Adobe Systems Incorporated, San Jose, United States of America).

The following abbreviations are used throughout the text: **YNU**, Department of Life Sciences, Yeungnam University, Gyeongsan, South Korea; **POL**, distance between the inner edges of the two lateral ocelli; **OOL**, distance from the outer edge of a lateral ocellus to the compound eye; **MT**, Malaise Trap.

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Received May 31 2016; Revised June 30 2016

Accepted July 15 2016

Systematic accounts

Family Diapriidae Haliday, 1833 **염주벌과 (신칭)**

Subfamily Belytinae Förster, 1856 **어리염주벌아과 (신칭)**

Tribe Pantolytini Hellén, 1964 **점어리염주벌족 (신칭)**

Genus *Psilomma* Förster 1856 **낮어리염주벌속 (신칭)**

Psilomma Förster 1856: 128, 130, 132. Type species:
Psilomma fusciscapis Förster, first included species.

Diagnosis. Mandibles sickle-shaped, overcrossing apically;
female antenna 15-segmented, scape with simple apical rim,

flagellomeres gradually widened and shortened to apex; male
antenna 14-segmented, filiform, distinctly longer than wide;
eyes bare or sparsely setae; epomia absent; radial cell reduced,
indistinct or absent; femora slender with long femoral stalk;
petiole cylindrical; gaster fusiform, sharply pointed to apex.

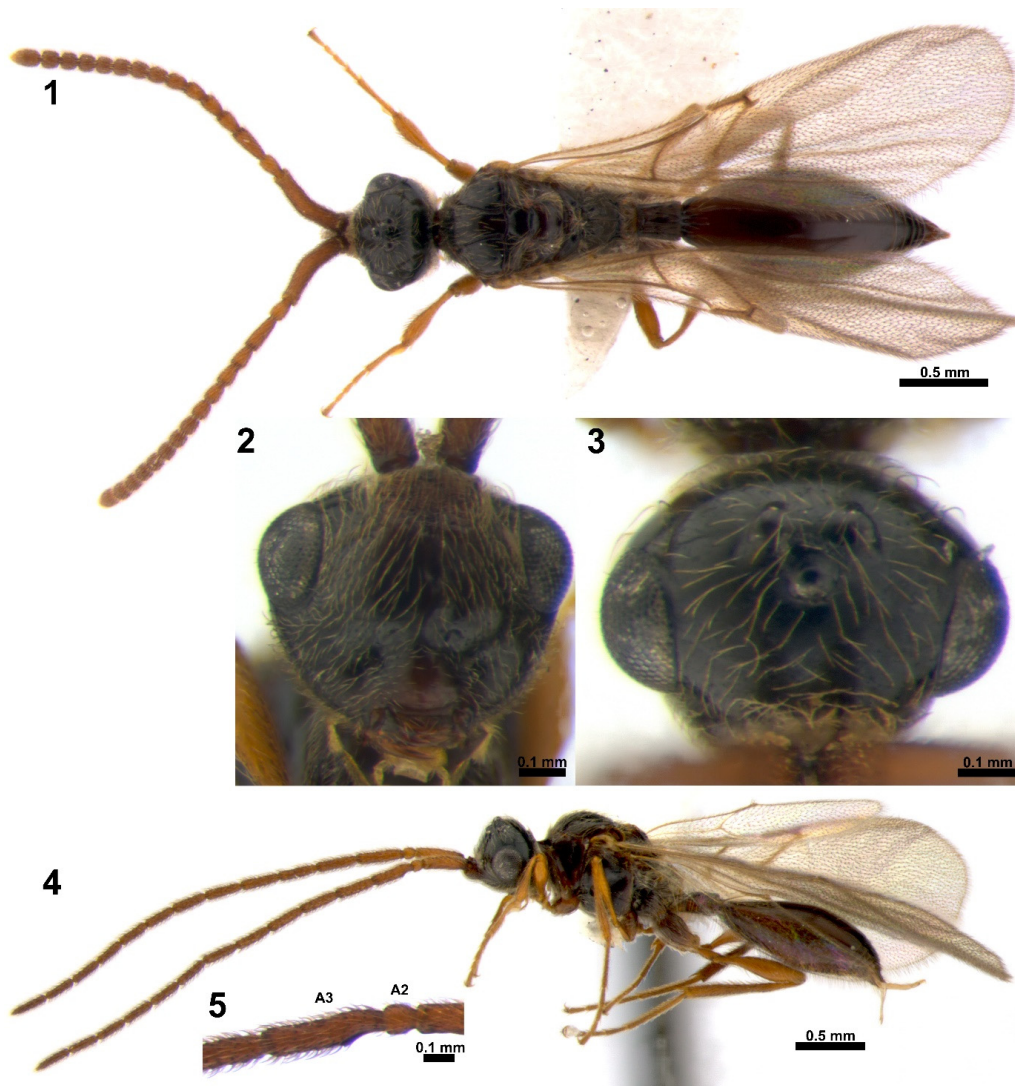
Psilomma dubium Kieffer, 1908 **낮어리염주벌 (신칭)** (Figs.
1-5)

Psilomma dubia Kieffer, 1908: 426.

Psilomma atriceps Kieffer, 1908: 422.

Psilomma flavipes Kieffer, 1908: 423.

Psilomma crassicornis Kieffer, 1908: 425.



Figs 1-5. *Psilomma dubium* Kieffer. 1. female habitus, dorsal; 2. female head, frontal; 3. female head, dorsal; 4. male habitus, lateral; 5. male antenna (A2, A3), lateral.

Psilomma dubium Kieffer: Johnson, 1992: 105.

Redescription of female.

Color. Head black; antenna brown; palps yellow; legs, tegula yellowish brown; mesosoma and metasoma dark brown to blackish brown.

Head. Slightly wider than long (7: 6) in dorsal view, slightly narrower than mesosoma (34: 35), OOL longer than POL (11: 9); occipital carina distinct, covered with dense whitish setae; vertex and frons smooth with sparse setae; tentorial pit large and deep; clypeus smooth and distinctly convex; mandibles sickle-shaped, overcrossing apically, asymmetrical; head in lateral view slightly shorter than height (11: 10), with protrusive antennal shelf; eye bare, much shorter than height of head (11: 28), slightly shorter than malar space (11: 12); antenna much shorter than body length (19: 30) and covered with short dense setae; antennal segments in the following proportions (length: width): 48: 9; 10: 7; 18: 6; 10: 6; 10: 6; 10: 7; 9: 7; 9: 7; 8: 7; 8: 7; 8: 7; 8: 7; 8: 7; 14: 8.

Mesosoma. Distinctly longer than width (45: 29) in dorsal view; cervix short and stout; pronotum short and covered with setae; pronotal shoulders angled; mesoscutum flattened and bare; notauli complete; humeral sulcus distinct; scutellum smooth, bare and slightly convex; anterior scutellar pit large and deep, transverse (17: 13), as long as remaining scutellar disc; posterior scutellar pits absent; mesosoma in lateral view clearly longer than height (3: 2); lateral part of pronotum smooth, bare and shiny; upper part of mesopleuron smooth, bare and shiny with deep sulcus under tegula, without sternaulus; lower part of mesopleuron smooth and covered with sparse setae; median keel of dorsellum prominent, tubercle-shaped; posterior margin of propodeum slightly emarginated; median propodeal keel simple.

Wing. Fore wing with basal, costal, subcostal, marginal, radial and stigmal veins tubular; radial vein shortly indicated; stigmal vein short, as long as one third of marginal vein and postmarginal vein.

Metasoma. Petiole cylindrical in dorsal view smooth, bare, shiny, with irregular longitudinal keels and dense cushion of long setae ventrally; base of tergite II with several costae and short median furrow.

Measurements. Head length 0.63 mm, width 0.68 mm;

mesosoma length 1.10 mm, width 0.70 mm; metasoma length 2.06 mm; fore wing length 2.95 mm; total body length 3.79 mm.

Male. Body length 3.29 mm. Similar to female, but antenna filiform, long and slender; antennal segment III (A3) slightly emarginated basally; antennal segments in following proportions: 28: 8; 7: 7; 25: 6; 24: 5; 22: 5; 22: 5; 22: 5; 21: 5; 20: 4; 20: 4; 18: 4; 18: 4; 18: 4; 22: 4.

Material examined (2♀ ♀2♂♂). South Korea: 1♀ 2♂♂, Gangwon-do, Wonju-si, Socho-myeon, Hakgong-ri, Mt. Chiaksan, 37°22'18"N, 128°03'01"E, 20.VI-19.VII.2013 (MT), J.W. Lee (YNU); 1♀, Gyeongsangbuk-do, Cheongdo-gun, Unmunmyeon, Ssalbawi, 35°38'08"N, 129°01'27"E, 29.VI-10.VII.2012 (MT), J.W. Lee (YNU).

Distribution. South Korea (new record), Armenia, Austria, Czech Republic, Denmark, France, Finland, Hungary, Ireland, Poland, Slovakia, Sweden, Switzerland, United Kingdom.

Host. Unknown.

Acknowledgments

The authors thank Dr. Jan Macek (National Museum, Praha, Czech Republic) for kindly reading and providing comments on the manuscripts. This work was supported by a grant from the National Institute of Biological Resources (NIBR), funded by the Ministry of Environment (MOE) of the Republic of Korea (NIBR201601203 and NIBR201601207).

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