

The First Record of the Family Blasticotomidae (Hymenoptera: Symphyta) from Korea

한국산 고사리줄기잎벌과(Symphyta: Blasticotomidae)의 분류

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ABSTRACT *Blasticotoma filiceti pacifica* Malaise, 1931, is recognized from Korea based on a female specimen collected at Mt. Odae-san, Kangwon-do. This is the first record of the family Blasticotomidae from Korea.

KEY WORDS Systematics, Hymenoptera, Blasticotomidae, *Blasticotoma filiceti pacifica*, new distribution record

초 록 강원도 오대산에서 한국 미기록과인 Blasticotomidae를 채집하였다. 이는 고사리줄기잎벌과 고사리줄기잎벌속 고사리줄기잎벌(신칭), *Blasticotoma filiceti pacifica* Malaise, 1931(Blasticotomidae)으로 동정되어 보고한다.

검색어 분류, 벌목, 고사리줄기잎벌과, 고사리줄기잎벌속, 고사리줄기잎벌, 미기록종

INTRODUCTION

The Blasticotomidae are a small family of sawflies, represented by ten Palearctic species and subspecies in three genera in the Recent fauna and one Nearctic species in the Tertiary fauna (Smith, 1978; Shinohara, 1983; Togashi, 1989). All the Recent forms occur in East Asia, with the exception of one species known from Europe. The adult blasticotomids are small to medium-sized sawflies (length 5~10 mm), easily recognized on their four-segmented antenna (three-segmented in *Runaria* and *Bohea*, but the rudiment of the fourth is apparent), large, thick, nearly semicircular stigma, and presence of a long stem of the first section of Sc vein ("first discoidal cell petiolate") in the forewing, and mainly black, cylindrical body. The known larvae are fern-stem borers.

In East Asia, blasticotomids have been recorded from Primorsky Territory in Russia, Fujian Province in

China, Taiwan, and Japan, but not yet from Korea. In the wetland on Mt. Odae, Kangwon-do, the first author recently collected a female blasticotomid, which represents the first record of the family from Korea.

DESCRIPTION BASED ON A FEMALE SPECIMEN FROM KOREA

Blasticotoma filiceti pacifica Malaise, 1931 (Fig. 1)

Length (excluding sawsheath), 8.2 mm; forewing length, 6.7 mm. Head black with palpi and mandibles partly pale brown. Antenna black with brownish black apex. Thorax black. Legs yellow except coxae, trochanters and extreme bases of femora black. Wings hyaline with broad outer margin infuscated; veins and stigma blackish brown. Abdomen black with anterior margin of each tergum and part of each sternum more or less pale brown; sawsheath black with extreme apex pale.

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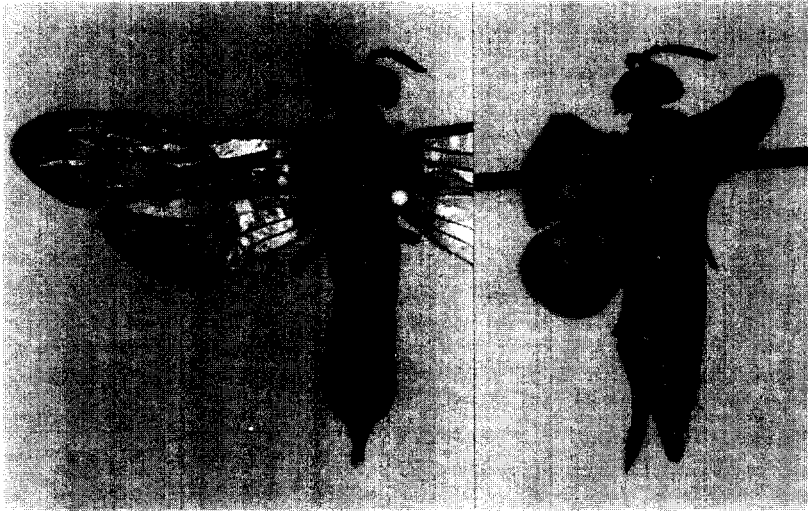


Fig. 1. *Blasticotoma filiceti pacifica* Malaise, 1931, female, dorsal(left) and lateral view (right).

Postocellar area smooth and shining. OOL:POL:OCL 1.3:1.0:1.2. Frons and clypeus reticulated. Supraclypeal fovea deep and distinct. Anterior margin of clypeus very shallowly emarginated. Ratio of 3rd antennal segment width to 4th antennal segment length 1.00 : 0.67. Cervical sclerite with small and dense punctures. Pronotum coriaceous with small punctures and hairs. Mesonotum smooth and shining with sparse punctures. Mesepisternum with dense punctures except posterior 1/3. Abdominal segments coriaceous with 1st and 2nd terga most heavily coriaceous and 8th and 9th segments nearly smooth.

Material examined. 1 female, 500 m alt., Mt. Odae, Kangwon-do, Korea, 7. VI. 1995, Jung-Wook Kim leg. Deposited in the College of Agriculture and Life Sciences, Seoul National University, Suwon.

DISCUSSION

We have determined the Korean specimen as *Blasticotoma filiceti pacifica* Malaise, 1931, previously known from Primorsky Territory and Japan (Hokkaido, Honshu, southern Kuriles), though its identity is not perfectly clear. In Takeuchi's (1938) key, it runs to "*B. filiceti* var. *pacifica*", except in one character, the infuscation of the wings; *B. filiceti pacifica* should have un-

iformly infuscated wings, whereas the Korean specimen has hyaline wings with broad outer margin distinctly infuscated. In a more recent key by Togashi (1989), it may go to *B. warabii* Togashi, 1989, a very close relative of *B. filiceti pacifica* from Japan, but, if we disregard the infuscation of the wings, it would key to *B. filiceti pacifica*. A comparison of the Korean specimen with a series of specimens of *B. filiceti pacifica* from Japan has revealed that 1) the Korean specimen agrees well with the Japanese specimens of *B. filiceti pacifica* in all respects except for slight difference in the color of the wings and abdominal segments, the latter being partly brownish (maybe due to the teneral condition of the specimen), and 2) the infuscation of the wings shows some variation in the Japanese series, varying from uniformly blackish infuscated to partly weakly infuscated (basal half of the wings in particular, the borders not as clear as in *B. nipponica* Takeuchi, 1938), and the wings of the Korean specimen are only slightly paler than those of the palest Japanese specimen. On the other hand, the Korean specimen does not fit the description of *B. warabii* in the OOL: POL: OCL ratio (1.3:1.0:1.2 in the Korean specimen; 0.7:1.0: 0.8 in *B. warabii*) and in the shape of the inner tibial spur of the foreleg (apical furcations are subequal in length in the Korean specimen, while they are clearly

different in *B. warabii*, see Fig. 15 in Togashi, 1989), besides the different pattern of infuscation of the forewing. We conclude that the Korean specimen is best treated as a pale specimen of *B. filiceti pacifica* for the moment.

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