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First Record of *Pristiphora apricoti* Zinovjev (Hymenoptera: Symphyta: Tenthredinidae: Nematinae), pest of *Prunus armeniaca* var. *ansu* from South Korea

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살구나무 해충 *Pristiphora apricoti* Zinovjev (벌목: 잎벌아목: 잎벌과: 수염잎벌이과)에 대한 보고

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ABSTRACT: *Pristiphora* (*Pristiphora*) *apricoti* Zinovjev, 1993, pest of *Prunus armeniaca* var. *ansu* Max, belonging to Nematinae of Tenthredinidae is newly recognized in South Korea. The host plant is recorded for the first time from South Korea. Diagnosis, rearing notes, and photographs of the diagnostic characters and oviposition are provided.

Key words: New record, Pest, Prunus armeniaca var. ansu, Sawfly, South Korea, Taxonomy

초록: 한국산 수염잎벌아과의 미기록종인 살구나무테두리잎벌(신칭)을 확인하고 처음으로 보고한다. 본 종은 2016년 처음 국내에서 발견되어 살 구나무를 가해하는 해충으로 보고되었고, 본 연구를 통해 최초로 종을 규명하고자 한다. 살구나무테두리잎벌의 생활사 및 생태사진과 기재 및 주요 형질 사진을 제공한다.

검색어: 미기록종, 해충, 살구나무, 잎벌류, 한국, 분류

Pristiphora Latreille, 1810 is the second largest genus in Nematinae of Tenthredinidae, consisting of more than 240 species (Taeger et al., 2010). Although they are common nematine sawflies, it is difficult to identify because of the large number of species and a lack of discrete diagnostic characters for species identification (Prous et al., 2017). Coloration is the easiest character for identification, but it often varies greatly within species. In some species the head coloration tends to be extensively pale around the eyes, but black or small pale spot

is general. Leg coloration can also vary extensively within species, but can be used for identification (Prous et al., 2017). This genus can be distinguished from other nematine genera by the following characteristics: clypeus usually truncate; apex of vein C usually swollen; claws often with small subapical tooth or simple; in most males, posterior margin of tergum 8 without apical projection (Prous et al., 2017). *Pristiphora apricoti* has been described by Zinovjev (1993) from *Armeniaca mandshurica* or *A. sibirica* in Russia. We collected some larvae of this species from Gayasan National Park (Gyeongsangnam-do, South Korea) in 2016 from *Prunus armeniaca* var. *ansu* which is a new host plant of *P. apricoti*.

In the present study, Pristiphora apricoti is newly recognized

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and its host plant, Prunus armeniaca var. ansu, is also newly reported from South Korea. Diagnosis and photographs of this species are provided.

Materials and Methods

The images were captured with an AxioCam MRc5 camera attached to a stereo microscope (Zeiss SteREO Discovery, V20; Carl Zeiss, Gttingen, Germany), processed using AxioVision SE64 software (Carl Zeiss), and optimized with a Delta imaging system (i-solution, IMT i-Solution Inc. Vancouver, Canada). Images of the female's lancet were obtained with an Olympus BX53 microscope and i-Solution IMTcamCCD5 PLUS. All the rearing data newly published here are given in the 'Materials examined' and 'Rearing notes'

sections. Our intention was to confirm the position of the female's laid eggs. Ovipositing experiments were carried out indoors, at room temperature. All examined specimens are deposited in Yeungnam University (YNU), Gyeongsan, South Korea and Senckenberg Deutsches Entomologisches Institut in Germany (SDEI).

Systematic accounts

Family Tenthredinidae 잎벌과 Subfamily Nematinae 수염잎벌아과 Genus Pristiphora Latreille, 1810 테두리잎벌속 Pristiphora (Pristiphora) apricoti Zinovjev, 1993 살구나무 **테두리잎벌(신칭)**(Figs. 1, 2)

Pristiphora apricoti Zinovjev, 1993: 33.

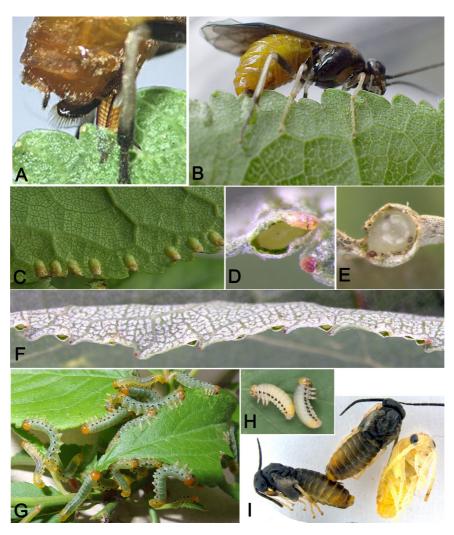


Fig. 1. Pristiphora apricoti Zinovjev, 1993. A, B: Oviposition; C-F: Eggs; G, H: Larvae; I: Pupae.

Diagnosis based on South Korean specimens

Female. Body 6.1-6.3 mm. Clypeus truncate; postocellar area about 2.1 times as long as diameter of lateral ocellus; claws with large subapical tooth clearly separated from apical one; lancet with numerous setae on annuli; serrulae protruding, circle form, and with numerous denticles on ventro-apical surface (Fig. 2D). Body mostly brown to dark brown; head in dorsal view reddish brown; labial and maxillary palps brown; mandible brown, reddish brown at apex; flagellum ventrally slightly paler than dorsally; tibia and tarsi of fore and middle legs yellowish brown; apex of femora pale; metatibia and metatarsomere 1 yellowish brown with small dark brown area at apex; all trochanters and trochantelli mainly yellowish brown.

Male. Similar to female except body color. Body color mostly black; tegula brown to black (Fig. 2A).

Materials examined (11 \heartsuit \diamondsuit 1\sigma). South Korea: $10 \heartsuit \diamondsuit$, GN, Hapcheon-gun, Gaya-myeon, Maehwasan-ro 670, Gayasan

National Park, 35.7719 N, 128.1101 E, collecting larvae, 21.V.2016, J.W. Lee leg. (25-27.V.2016, pupation; 2-3.VI.2016, ex. from pupae) (10 \mathbb{Q} in YNU; 1 \mathbb{Q} in SDEI); 1 \mathbb{C} , ditto (SDEI).

Distribution. Eastern Palaearctic: South Korea (new record), Russia (Primorsk. Terr.).

Host plants. Apricot, *Armeniaca mandshurica* or *A. sibirica* from Russia (Zinovjev, 1993), *Prunus armeniaca* var. *ansu* Max.from South Korea (new record).

Rearing notes. Some larvae of *P. apricoti* were collected from Gayasan National Park, South Korea on 21.V.2016. Among them, some larvae were fully grown rapidly on 2-3.VI.2016 and one reared female laid (Fig. 1A) more than 30 eggs in pockets through margins of the leaves (Fig. 1C-F). In some larvae cases, eight *Olesicampe* sp. were emerged from the pupae of *P. apricoti*.

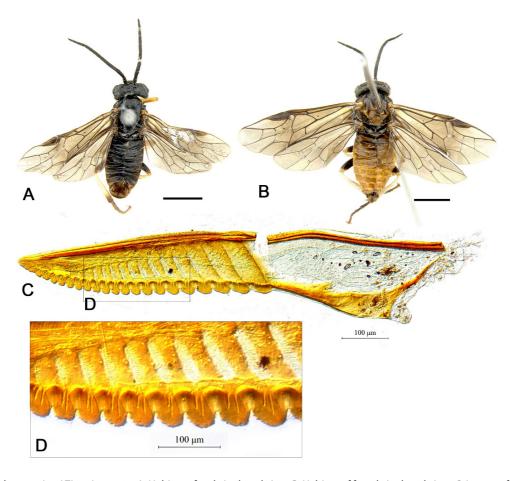


Fig. 2. Pristiphora apricoti Zinovjev, 1993. A, Habitus of male in dorsal view; B, Habitus of female in dorsal view; C, Lancet of saw; D, Middle serrulae. Scale bars: A, B = 2 mm.

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