

## New Record of *Ptecticus sinchangensis* Ôuchi, 1938 (Diptera, Stratiomyidae, Sarginae) in Korea

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### Abstract

In Korea, species of the genus *Ptecticus* Loew, 1855 (Family Stratiomyidae) have been known as three species, *P. aurifer* (Walker, 1854), *P. matsumurae* Lindner, 1936 and *P. japonicus* (Thunberg, 1789) (= *P. tenebrifer* (Walker, 1849)). Additionally, an unrecorded species, *P. sinchangensis* Ôuchi, 1938, was found in Korea. We therefore report the species for the first time in Korea with morphological diagnosis and key for the identification of the Korean species of the genus. In total, the members of the genus *Ptecticus* are officially recognized as four species in Korea.

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### Introduction

The genus *Ptecticus* Loew, 1855 is distinguished from the other genera of Sarginae by the shape of the antennae and head, the position of vein R<sub>2+3</sub>, and the form of the thoracic calypter (James, 1952; Nagatomi, 1975; Rozkošný and Hauser, 2009). The congeners of *Ptecticus* are known to be 6 species in Palaearctic region (Nagatomi, 1975), 4 species in Nearctic region (McFadden, 1971), and 52 species in Oriental region (Rozkošný and Hauser, 2009).

In Korea, *Ptecticus tenebrifer* (Walker, 1849), which is currently recognized as a junior synonym of *P. japonicus* (Thunberg, 1789) by Rozkošný and Hauser (2009), was firstly recorded by Doi (1938). And then, *P. aurifer* (Walker, 1854) and *P. matsumurae* Lindner, 1936 were recorded by Kim (1971). These three species are listed in the check list of Korean insects (ESK

and KSAE, 1994; Paek et al., 2010; Kim, 2013). In this study, we report an unrecorded species, *Ptecticus sinchangensis* Ôuchi, 1938, for the first time in Korea with diagnostic characters and key to Korean species of *Ptecticus*.

### Materials and Methods

#### Sample collection and identification

Ten specimens of *Ptecticus sinchangensis* were collected at Anmyeon-do Island, Taean-gun, Chungcheongnam-do, South Korea (Fig. 1). For specimen examinations, the general features of the specimens were observed under a stereoscopic microscope (MZ 16A and MZ 6; Leica, Solms, Germany). The species identification was determined according to the previous work

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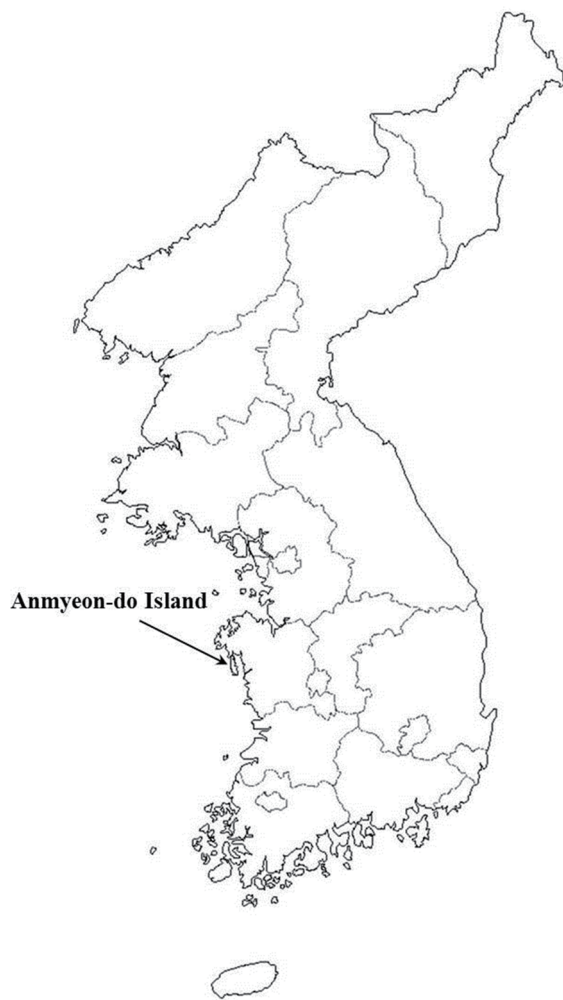
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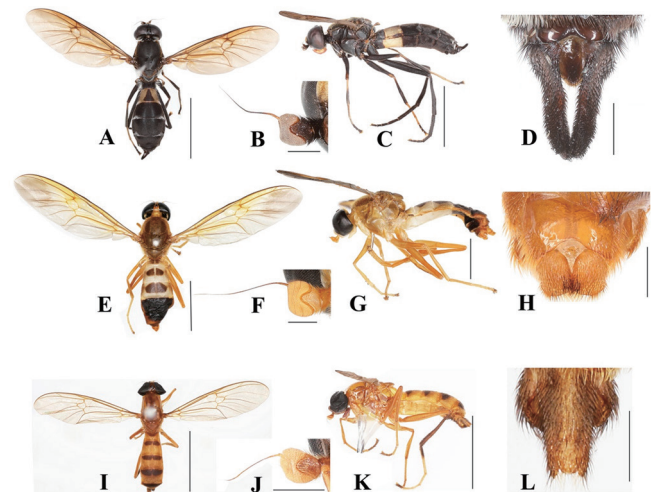
**Fig. 1.** The collecting site (Anmyeon-do Island) of *Ptecticus sinchangensis* in Korea.

(Ôuchi, 1938; Nagatomi, 1975). Morphological terms are used in accordance with Nagatomi (1975). The examined materials are preserved in the insect collection at the National Institute of Agricultural Science (NIAS), Wanju, Korea.

## Results

### Key to species of the genus *Ptecticus* in Korea

1. Mesonotum and scutellum dusky brownish to blackish or metallic purplish.....2
  - Mesonotum and scutellum yellowish brown.....3
2. Pleura, legs and abdomen largely dark brownish to blackish, but abdominal segment 2 largely whitish (Fig. 2A–D).....  
 ..... *P. japonicus* (Thunberg, 1789)



**Fig. 2.** *Ptecticus* spp. from Korea. A–D: *P. japonicus* (Thunberg, 1789) collected from Namyangju, Gyeonggi-do, Korea; E–H: *P. aurifer* (Walker, 1854) collected from Jinan, Jeollabuk-do, Korea. I–L: *P. sinchangensis* Ôuchi, 1938 collected from Is. Anmyeon, Taean-gun, Chungcheongnam-do, Korea. A, E, I: male adults in dorsal view (scales: 5.0 mm); B, F, J: antenna in inner view (scales: 0.5 mm); C, G, K: male adults in lateral view (scales: 5.0 mm); D, H, L: epandrium, proctiger and cerci (scales: 0.5 mm).

– Pleura and legs yellowish brown to brown, abdomen metallic purplish (specimen unavailable in this study).....

..... *P. matsumurae* Lindner, 1936

3. Body larger (20–21 mm in length); 3<sup>rd</sup> antennal segment truncated at apex; terga 1–3 with blackish maculae on median part of disc, terga 4–5 almost wholly blackish; hind leg wholly yellowish; wing strongly tinged with brown but apically darkened (Fig. 2E–H)..... *P. aurifer* (Walker, 1854)

– Body smaller (7–9 mm in length); 3<sup>rd</sup> antennal segment rounded at apex; abdominal terga 2–5 with blackish bands anteriorly; hind tibia and anterior part of hind tarsal segment 1 blackish; wing evenly tinged with pale brown (Fig. 2I–L).....

..... *P. sinchangensis* Ôuchi, 1938

### Systematic accounts

Family Stratiomyidae Latreille, 1802 동애등에과  
 Subfamily Sarginae Walker, 1834 멧동애등에아과  
 Genus *Ptecticus* Loew, 1855 동애등에속  
*Ptecticus sinchangensis* Ôuchi, 1938 배검은띠동애등에 (신칭) (Fig. 2I–L)

*Ptecticus sinchangensis* Ôuchi, 1938: 51 (Type-locality: Sinchang, Zhejiang Province, China)

**Diagnosis.** This yellowish species can be easily distinguished from the other Korean *Ptecticus* species by having the evenly tinged brown wings, the 3<sup>rd</sup> antennal segment with round apex, the hind tibia and the anterior part of hind tarsal segment I blackish, and the abdominal terga 2–5 with anterior black bands.

**Specimen examined.** 2♂♂, 8♀♀, the beach of Baekripo, Sowon-myeon (Amyeon-do Island), Taeon-gun, Chungcheongnam-do, Korea. 8. VII–11. VIII. 2007. Kim T. W., Kang T. H. and Lee J. G. [Malaise trap].

**Distribution.** New to Korea, Japan and China.

**Remarks.** The male genitalia were completely illustrated by Natatomi (1975: 345).

## Acknowledgements

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