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Description of *Osorius mujechiensis* n. sp. (Coleoptera, Staphylinidae) from Korea

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ABSTRACT

A new species, *Osorius mujechiensis*, is described based on SEM microphotographs of the external structures and illustrations of the aedeagus. This new species was collected at Mujechi Moor, Mt. Chŏngjoksan, Ulsan, Korea. The subfamily Osoriinae in Korea now comprises two recorded species of the genus Osorius.

Key words: new species, *Osorius*, Osoriinae, Staphylinidae, Korea.

INTRODUCTION

Almost members of the subfamily Osoriinae are distributed in subtropical and tropical regions (Naomi, 1986). This subfamily is easily recognized by the lack of paratergites on the abdomen, cylindrical body, and the forecoxae about as long as fore femora (McColl, 1982; Naomi, 1986).

Only one species, *Osorius taurus* Sharp, 1889, of this subfamily has been recorded in Korea (Paik, 1985; Yuh *et al*, 1985). I collected some individuals of *O. mujechiensis n.* sp. in the litter associated with *Pogonia japonica* (Graminales, Gramineae) community at Mujechi Moor, Mt. Chŏngjoksan, Ulsan, Korea. The new species is described herein with photographs of the external characters by using SEM and illustrations of the aedeagus. The type material settled in this paper is preserved in the Natural History Museum, Hannam University, Korea(NHMHU).

DESCRIPTION

***Osorius mujechiensis* n. sp.** 작은투구반날개 (신칭)

Type specimens. Holotype: ♂, Korea, Mujechi Moor, in Mt. Chŏngjoksan, Ulsan, 23 July 1996,

Y. B. Cho. Paratypes: 1♂, same data as holotype; 1♂, 1♀, same locality as holotype, 23 March 1996, Y. B. Cho.

Description. Body length 4.5-5.0mm, entirely dark red, elongate, cylindrical, shinny; antenna, palpi, and legs yellowish brown.

Head (Fig. 1) dark red but about anterior 1/4 of epicranium from antennal insertions area to anterial margin reddish brown, head slightly narrower than pronotum; frons around eyes narrowed toward anteriorly and slightly deflected before antenal insertions; surface with coarse and irregular punctures, microsculptures, suberect yellowish setae, and longitudinal rugoses irregularly; vertex with irregular, slightly broad, and elevated longitudianl portion; middle area just behind vertex with smooth and transverse area without microsculptures and punctures; eyes small, oval, moderately convex, about a half as long as temporal regions. Antennae 11- segmented; 1st segment slender, with basal area swollen and middle area constricted, as long as the length of 2nd to 5th combined, 2nd slightly longer than 3rd (ratio 6:5), 6th slightly broader than 5th (ratio 3:2), 6th to 10th moniliform, 11th longer than 10th (ratio 8:5) and pointed. Labrum reddish brown with microsculptures, parallel-sided, anterial margin broadly and shallowlly emarginate, bearing yellow setae along margin, satae of antero-lateral corner longer than on middle area. Maxillary palpi 4-segmented; 4th segment slender and pointed apically, the ratio in length of each segment from 1st to 4th 7:3:3:3.

Pronotum (Fig. 2) as wide as elytra, slightly shorter than elytra (ratio 12:13), weakly narrowing posteriorly but lateral-basal sides constricted, dorsal surface punctured coarsely with setae except

for middle longitudinal portion, posterial margins straight, sides weakly narrowing posteriorly but 1/3 postero-lateral margin strongly constricted, surface of postero-lateral area concave moderately. Meso-scutellum triangular, with tip rounded morderately, surface shinny without punctures and setae.

Elytra (Fig. 3) dark but anterior and sutural areas more bright, sides almost parallel, Setiferous punctures similar to those on pronotum, with a pair of shallow grooves along suture.

Abdomen (Fig. 4) broadened posteriorly, microscuptures of each segment becoming gradually weaker toward 7th segment, surface sparsely punctures and setous, setae yellow and suberect, posterial margin of each segment lighter in color.

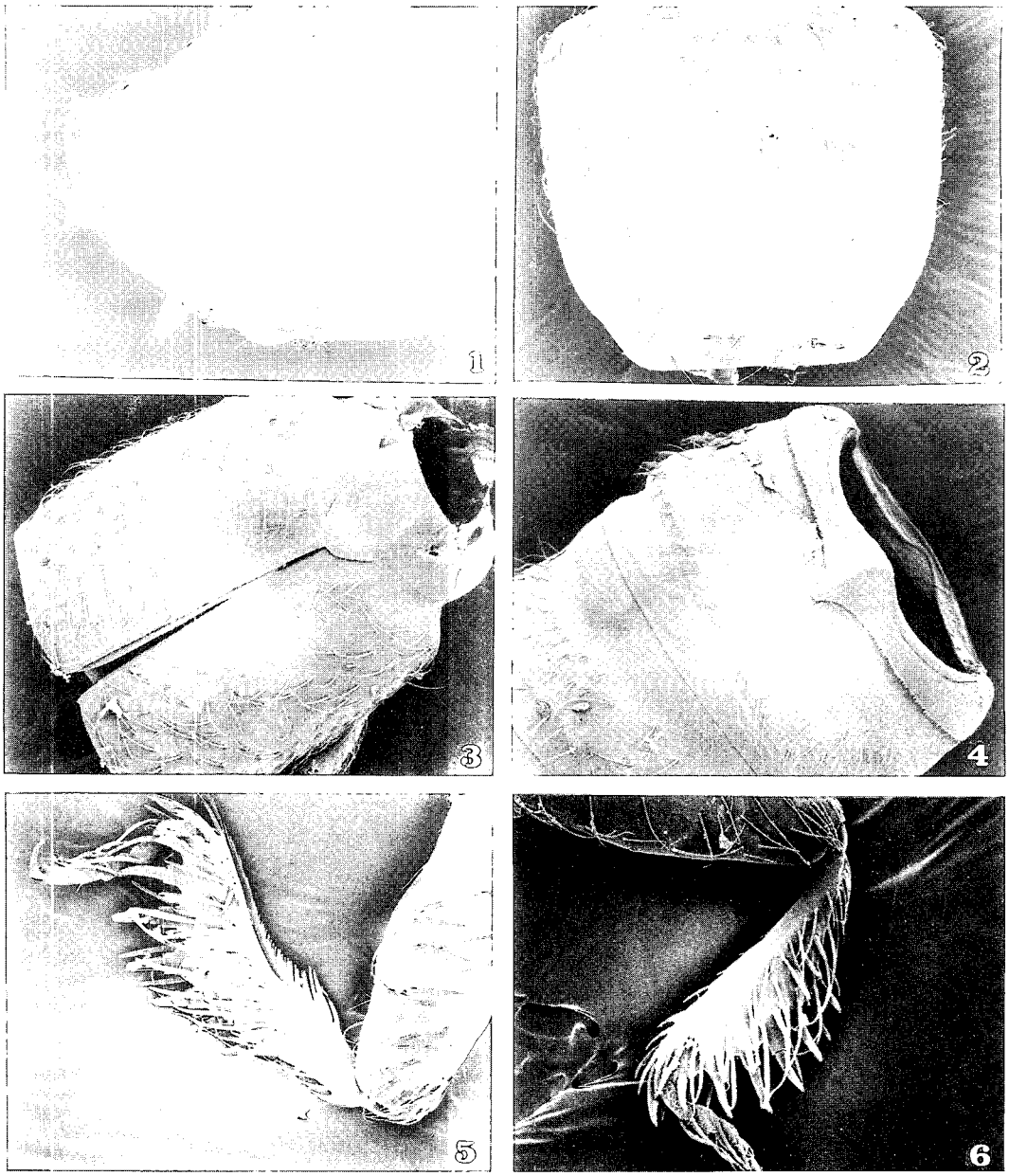
Legs robust; fore tibia (Fig. 5) weakly curved inward and with a line of dense setae along inner margin, becoming shorter gradually toward anteriorly, about 7 denticles each with spur along external margin and several small denticles on internal surface; outer margin of mid tibia with setiferous denticles, inner margin without compact setae; outer margin of hind tibia (Fig. 6) with setiferous denticles, inner margin with compact setae along apical area. Tarsal formula 5-5-5.

Male: 8th sternum very slightly sinuate in latero-apical margin, baso-median area without setae (Fig. 7), longitudinal median portion of 8th tergum smooth without setae (Fig. 8). Aedeagus weakly sclerotized, and ventral area membranous, basal part bulbous, dorsal median area strongly emarginate, apical area bent dorsally almost 90 degree and sharply narrowing toward tip (Figs. 9-10).

Female: Spermatheca elongate-spherical in shape (Fig. 11). 9th tergum of female widely separated, composed of a pair of plates, apical area with long setae, setae on sides longer than those on middle (Fig. 12), apical margin of 10th tergum entire smoothly with long setae (Fig. 13).

Distribution. Korea.

Remarks. This new species is separated easily from *O. taurus* Sharp, by the lack of horns at frons and the smaller body. This new species is similar to *O. angustulus* Sharp (see Naomi, 1986) in



Figs. 1-6. *Osorius mujechiensis* n. sp., 1, Head in dorsal view; 2, pronotum in dorsal view; 3, elytra; 4, 3rd and 4th abdominal sterna; 5, fore leg; 6, hind leg.

external features but the apex of genitalia is very sharply pointed and that of the latter species is very blunt in lateral view.

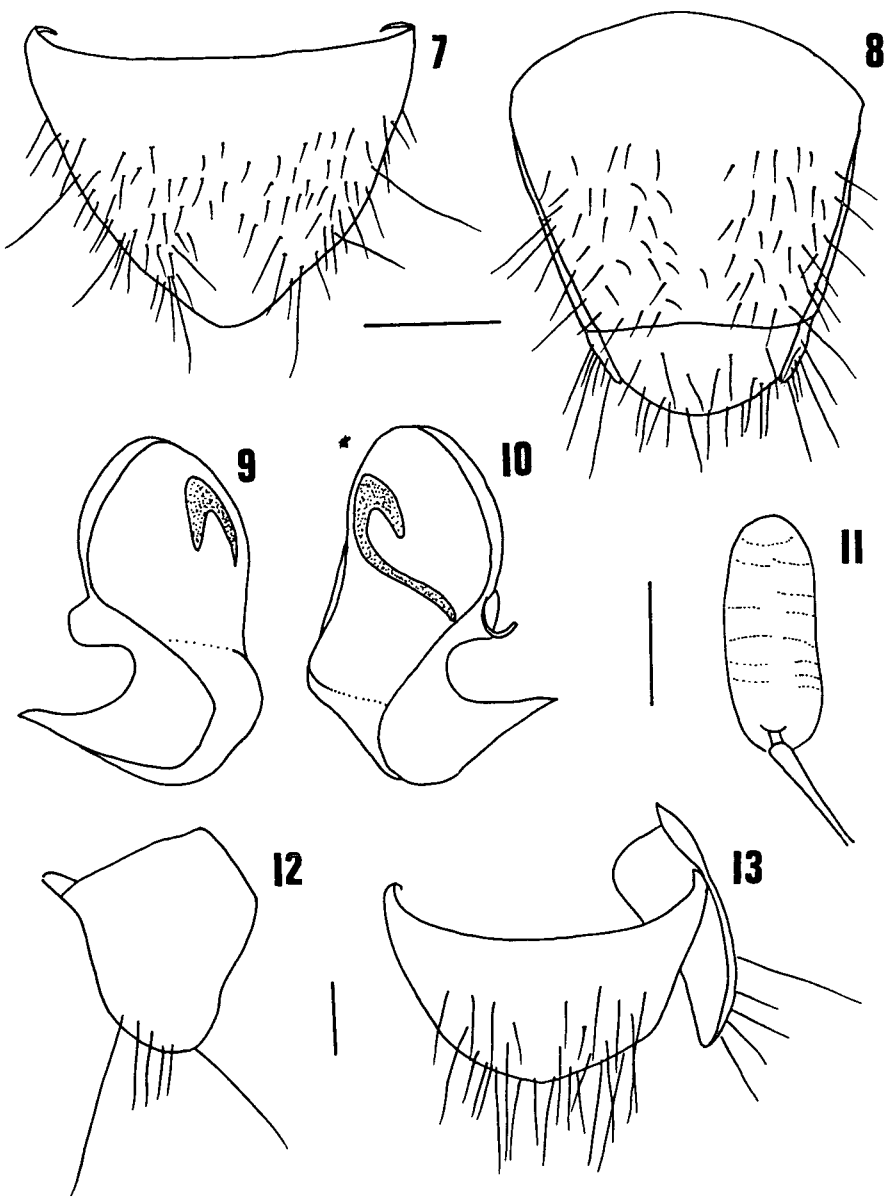


Fig. 7-13. *Osorius mujechiensis* n. sp., 7-10, Male: 7, 8th abdominal sternum; 8, 8th to 10th abdominal terga; 9-10, right and left sides of aedeagus; 11-13, Female: 11, spermatheca; 12, 9th abderminal tergum; 13, 9th to 10th abdominal terga (scales of figs. 7-8 & 12-13, 0.22 mm; scale of figs. 9-11, 0.1 mm).

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한국산 투구반날개 속(딱정벌레 목, 반날개 과)의 1신종

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요 약

울산 정족산의 무제치늪에서 채집된 투구반날개속의 1신종 *Osorius mujechiensis* n. sp.에 대하여 주사전자현미경을 이용한 외부구조와 생식기관의 구조 그림을 통해 기재하였다. 1신종 추가로 한국산 투구반날개아과는 1속 2종이 된다.