

Three Falagriini Species New to Korea (Insecta: Coleoptera: Staphylinidae)

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Abstract - A systematic study of the aleocharine tribe Falagriini in Korea is presented. Three species are recognized, all of which are recorded for the first time in Korea [*Falagria sulcata* (Paykull), *Myrmecopora (Lamproxenusia) rufescens* (Sharp), and *Myrmecocephalus sapida* (Sharp)]. A key is provided for separation of the known species of the Falagriini and photographs of habitus are presented. [Coleoptera, Staphylinidae, Aleocharinae, Falagriini, Key, Korea].

INTRODUCTION

The Aleocharinae is the largest subfamily in the Staphylinidae and undoubtedly one of the most systematically difficult groups of Coleoptera. The tribe Falagriini is cosmopolitan and contains about 30 genera. Members of Falagriini are recognized by combination of: tarsal formula 4-4-5 or 4-5-5; head with narrow neck; pronotum narrowed basally with longitudinal sulcus; peritremes present around mesosternal spiracles; velum of paramerite and condylite clearly separated; and anterior margin of abdominal sternite IV with distinctive gland opening (Ahn & Ashe 1995).

No falagriines have been reported in Korea so far. While working on staphylinids collections from institutions, I had the opportunity to study Korean falagriines and found three species new to this country. In this paper I report all of these species, *Falagria sulcata* (Paykull), *Myrmecopora (Lamproxenusia) rufescens* (Sharp), and *Myrmecocephalus sapida* (Sharp) for the first time in Korea, and provide a key and photographs of habitus for identification.

MATERIALS AND METHODS

Preparation of permanent microscopic slides

for specimens was performed by using techniques described by Ashe (1984) and Ahn & Ashe (1996). Terms follows Sawada (1972) and Ashe (1984). Materials for this project are listed in the description section.

RESULTS

Key to the Korean genera and species of the tribe Falagriini

1. Pronotum with medial impression; scutellum not carinate; mesospiracular peritremes limited; occurred in seashore
.....(genus *Myrmecopora*); *Myrmecopora (Lamproxenusia) rufescens* (Sharp)
- Pronotum with deep medial sulcus; scutellum carinate; mesospiracular peritremes large, quadrate; not occurred in seashore 2
2. Scutellum bicarinate; abdominal tergite VIII with comb of minute denticles
... (genus *Falagria*); *Falagria sulcata* (Paykull)
- Scutellum unicarinate; abdominal tergite VIII without comb of minute denticle (genus *Myrmecocephalus*); *Myrmecocephalus sapida* (Sharp)

Tribe Falagriini Erichson 도랑반날개 족 (신칭)
Genus *Myrmecopora* Saulcy 해변도랑반날개 속 (신칭)

1. *Myrmecopora (Lamproxenusia) rufescens* (Sharp) 해변도랑반날개 (신칭) (Fig. 1)

Tachyusa rufescens Sharp 1874: 11.

Myrmecopora (Xenusia) rufescens: Bernhauer & Scheerpeltz 1926: 582.

Myrmecopora (Lamproxenusia) rufescens: Assing 1997: 340.

Diagnosis. Length 2.7–3.2 mm; antennomere 4–6 elongate, 7–8 slightly elongate, 9–10 slightly transverse; pronotum with medial impression; inhabitants of seashore.

Material examined. Korea: Kyöngsangnam-do, Kōjedo, Gabae, 29 VI 1998, K.-J. Ahn (8); Ch'ungch'ōngnam-do, Muchangpo, 28 III 1998, K.-J. Ahn, *ex* under pebbles in high tide zone (5).

Distribution. Korea, Japan.

Remarks. Assing (1997) revised eastern Palaearctic species of *Myrmecopora* Saulcy. Sawada (1971) described this species in detail and presented the drawings of all diagnostic characters. Members of this species have been found under the seaweed or under small pebbles in the intertidal zone (Sawada 1971, pers. obs.).

Genus *Falagria* Leach 도랑반날개 속 (신칭)

2. *Falagria sulcata* (Paykull)

도랑반날개 (신칭) (Fig. 2)

Staphylinus sulcatus Paykull 1789: 32.

Falagria sulcata: Nakane *et al.* 1963: 98; Shibata 1985: 315.

Diagnosis. Length 2.2–3.0 mm; pronotum with deep sulcus; hypomera delimited; scutellum bicarinate; abdominal tergite VIII with comb of minute denticles.

Material examined. Korea: Kyöngsangbuk-do, Kyöngbuk Univ., 18 VII 1996, Y. B. Cho (20); Kyöngsangbuk-do Kyöngbuk Univ., 6 IX 1986, Y. B. Cho (14); Kyöngsangbuk-do, Mt. Juwhang, 28–29 VI 1987, Y. B. Cho (3); Cheju, Sögwipo, 20 VI 1986 (2); Cheju, Sögwipo, 22 X 1985 (1); Cheju, Sögwipo, 26 IX ? (1); Ch'ungch'ōngnam-do, Mt. Chilgap, Janggok-sa, 14 V 1996, Y. B. Cho (1); Ch'ungch'ōngnam-do, Gap-sa, 11 VII 1986 (1); Kangwōn-do, Bokmun-Ri, 30 VII 1995, Y. B. Cho (1); Kyöngsangbuk-do, Chilgokgun, Dongmyong, 23 VII 1986 (2); Kyöngsangbuk-do, Andong-City, Nokjōn, 10 VIII 1986, K.-S. Lee (1); Kyöngsangbuk-do, Mungyong, Suok-Ri, 30 V 1996, Y. B. Cho (2); Ch'ungch'ōngnam-

do, Taejōn-City, Noeundong, 13 IV 1997, Y. B. Cho (2); Ch'ungch'ōngbuk-do, Songgaegaegok, 30 VIII 1996, Y. B. Cho (4); Chōllabuk-do, Chōnju, Pyongchon-Ri, 12 VIII 1996, Y. B. Cho (1); Kangwōn-do, Ssangrong, 29 VIII 1996, Y. B. Cho (1).

Distribution. Korea, Japan, China, northern Siberia, Europe, northern Africa, and America north of Mexico.

Remarks. Hoebeke (1985) studied this species in his revisionary work of the Falagriini of America north of Mexico. Also, Yosii & Sawada (1976) described this species in detail and presented drawings.

Genus *Myrmecocephalus* *sapida* (Sharp)

긴다리도랑반날개 속 (신칭)

3. *Myrmecocephalus sapida* (Sharp)

긴다리도랑반날개 (신칭) (Fig. 3)

Falagria sapida Sharp 1874: 2.

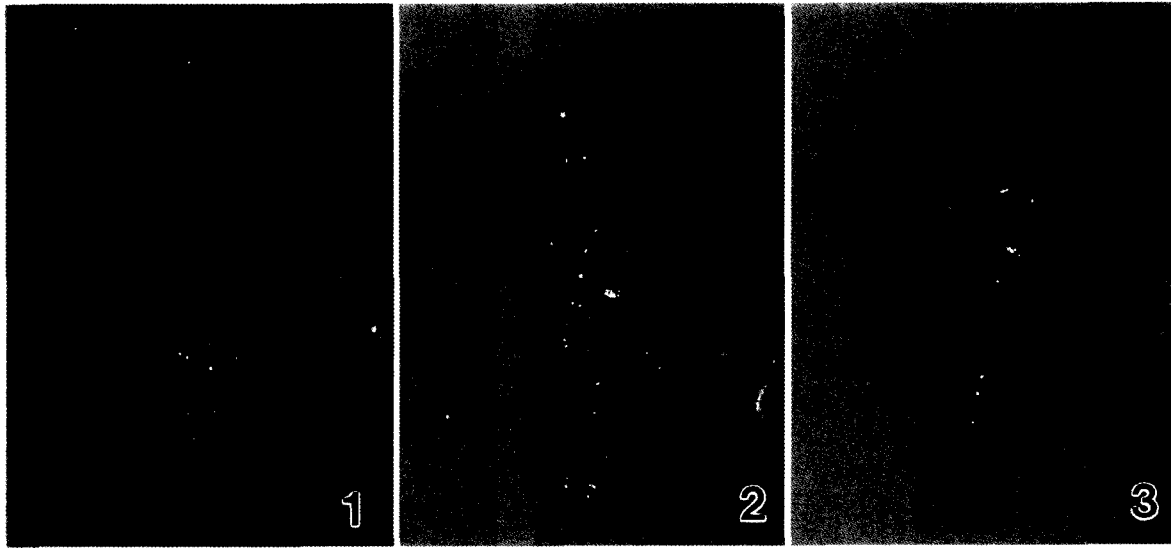
Lorinota sapida: Fenyès 1920: 158.

Myrmecocephalus sapida: Nakane *et al.* 1963: 98.

Stenagria sapida: Shibata 1985: 319.

Diagnosis. Length 3.2–3.4 mm; pronotum deeply sulcate; delimited hypomera; mesospiracular peritremes large, quadrate; mesocoxal cavities not margined posteriorly; scutellum with medial longitudinal carina; legs very long; abdominal tergite VIII without comb of minute denticles.

Material examined. Korea: Cheju, Sögwipo, 15 VII 1985, K.-S. Lee (4); Cheju, Sögwipo, 27 VII 1985, K.-S. Lee (1); Cheju, Sögwipo, 24 XII 1984, G.-S. Lee (1); Cheju, Sögwipo, 25 VII 1995, K.-S. Lee (5); Cheju, ? IX 1985, K.-S. Lee (1); Cheju, Donneko, 5 XI 1985, K.-S. Lee (4); Cheju, Sungpanak, 6 IX 1986, K.-S. Lee (2); Cheju, Gyoraeri, 21 VIII 1985, K.-S. Lee (2); Kyöngsangbuk-do, Kyongbuk Univ., 6 IX 1985, Y. B. Cho (2); Kyöngsangbuk-do, Andong-City, Nokjōn, 10 VIII 1986, K.-S. Lee (1); Kyöngsangnam-do, Sach'ōn, Sanam, 20 VI 1986, K.-S. Lee (2); Kyöngsangnam-do, Sach'ōn, Guam, 25 V 1986, K.-S. Lee (1); Kyöngsangnam-do, Sach'ōn, Suchong, 10 VI 1986, K.-S. Lee (1); Ch'ungch'ōngnam-do, Taejōn-City, Noeundong, 13 IV 1997, Y. B. Cho (1); Chōllabuk-do, Chōnju, Pyongchon-Ri, 12 VIII 1996, Y. B. Cho (2); Ch'ungch'ōngnam-do, Mt. Chilgap, Janggok-sa, 28 VIII 1995 (9); Ch'ungch'ōngnam-do, Mt.



Figs. 1-3. Habitus. 1, *Myrmecopora (Lamproxenusa) rufescens* (Sharp), length 3.0 mm; 2, *Falagria sulcata* (Paykull), length 2.4 mm; 3, *Myrmecocephalus sapida* (Sharp), length 3.2 mm.

Chilgap, 9 VIII 1986 (1); Kyöngsangbuk-do, Mt. Juwhang, 28-29 VI 1987, Y. B. Cho (3); Ch'ungch'öngnam-do, Taejön-City, Wadong, 27 IV 1996 (2); Kyöngsangbuk-do, Kimchön, Gikji-sa, 13 V 1989, K.-J. Ahn (1); Kyöngsangbuk-do, Bonghwagun, Mt. Sundal, 23-25 VI 1998, K.-L. You & H.-J. Lim (3); Kyöngsangnam-do, Mt. Jeongjok, 23 VII 1996, Y. B. Cho (3).

Distribution. Korea, Japan.

Remarks. The genus *Myrmecocephalus* MacLeay has very complex taxonomic history but Hoebeke (1985) made this clear.

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한국산 가는목도랑반날개 족(곤충 강: 딱정벌레 목: 반날개 과)의 미기록 3종

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적 요 - 한국산 가는목도랑반날개 족의 분류학적 연구를 수행하였다. 국내에서 처음으로 보고되는 3종의 [*Falagria sulcata* (Paykull), *Myrmecopora (Lamproxenusa) rufescens* (Sharp), *Myrmecocephalus sapida* (Sharp)] 검색표와 표본사진을 작성하였다.