Three New Species of *Pagaronia* Ball (Homoptera, Cicadellidae) from Korea.

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황백매미충屬 新種 3種에 關하여

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ABSTRACT

The paper contains descriptions of three new species: Pagaronia kumsanensis sp.n., P. heu-ksanensis sp. n., and P. hamatus sp.n. from Korea. Figures of male genitalia and female seventh sternum are given for all species.

INTRODUCTION

The genus Pagaronia Ball, 1902, is represented n the Western Nearctic and Eastern Palaearctic. So far as I know, 29 species of the genus Pagaronia Ball have been recorded from the Palaearctic egion. In this paper, three new species are added to them.

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Pagaronia kumsanensis sp.n. (Figs. 1~7)

Similar to *P. continentalis* Anufriev in general ppearance and coloration, but vertex less produced orward and with a small black spot on face.

General body length of male 8.1~8.6mm, female .1~9.5mm. General color light yellow in dried spanners, yellowish green in living ones.

Vertex yellowish green, with three black spots anteriorly; from pale yellow, with a small black spot at apex of frontoclypeus; pronotum and scutellum light yellow; forewing pale yellow, with the inner margin infuscated.

Male. Pygofer without processes; genital plate about 3.3 times as long as basal width; aedeagus in lateral aspect long, curved, tubelike with four terminal processes united in pairs.

Female. Seventh sternum in ventral aspect with caudal margin somewhat convex, notched at middle.

Holotype: 含, Mt. Kum, Gyeongnam Province, July 2, 1975, K.R. Choe leg. Paratypes: 3 含含 &. 2 우우, Geoje Island, Gyeongnam Province, May 18, 1977, K.R. Choe leg.

Differs from *P. continentalis* Anufriev by shape of aedeagus, the former with short aedeagal processes and without lateral secondary processes.

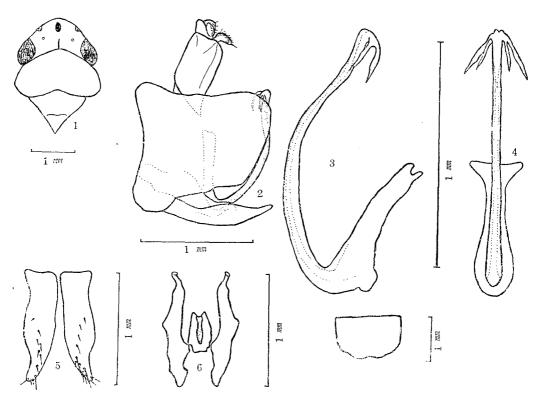
Pagaronia heuksanensis sp.n.

(Figs. 8~14)

The smallest species of the genus with only three black spots on vertex.

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Figs. 1-7. Pagaronia kumsanensis sp.n.: 1-Head, pronotum and scutellum in dorsal aspect, 2-Male genital segments in lateral aspect, 3-Aedeagus in lateral aspect, 4-Aedeagus in caudal aspect, 5-Genital plates in ventral aspect, 6-Genital styli and connective in dorsal aspect. 7-Female seventh sternum in ventral aspect.

General body length of male 6.8~7.1mm, female 7.7~8.1mm. General color light yellow in dried specimens.

Vertex yellowish green, with three black spots anteriorly; frons yellowish green, without black spots on face; pronotum and scutellum light yellow; forewing pale yellow, with the inner margin infuscated.

Male. Pygofer without processes; genital plate about 4times as long as basal width; aedeagus in lateral aspect long, curved, tubelike with pair of prominent terminal processes, each process with lateral secondary process arising near base.

Female. Seventh sternum in ventral aspect with caudal margin somewhat triangulate, notched at middle.

Holotype: 含, Soheuksan Island, Jeonnam Province, June 26, 1974, K.R. Choe leg. Paratypes: 1年, the same locality as the holotype, June 18, 1973, K.R. Choe leg.; 2含含 & 1年, the same locality as

the holotype, June 19, 1973, K.R. Choe leg.; 19, the same locality as the holotype, June 25, 1973, K.R. Choe leg.

Similar to *P. continentalis* Anufriev, but differs from it by structure of male genitalia. Aedeagal processes short and lateral secondary processes arising near base.

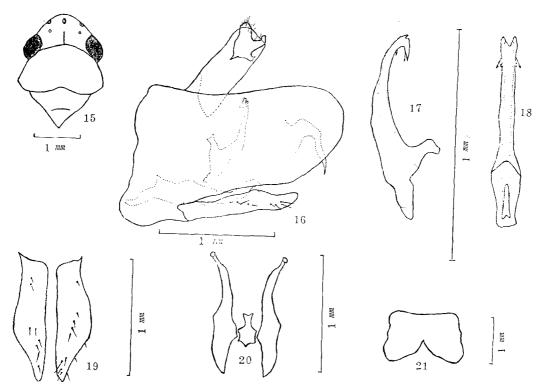
Pagaronia hamatus sp. n.

(Figs. 15~21)

General body length of male 7.6~8.7mm, female 8.4~8.9mm. General color pale yellow in dried specimens.

Vertex yellowish green, with three black spots anteriorly; frons yellowish green, with a black spots at apex of frontoclypeus; pronotum and scutellum brownish green; forewing whitish, with the inner margin not infuscated.

Male. Pygofer with a prominent process on inne middle surface; genital plate about 5 times as long



Figs. 8-14. Pagaronia heuksanensis sp. n.: 8-Head, pronotum and scutellum in dorsal asect, 8-Male genital segments in lateral aspect, 10-Aedeagus in lateral aspect, 11-Aedeagus in caudal aspect, 12-Genital plates in ventral aspect, 13-Genital styli and connective in dorsal aspect, 14-Female seventh sternum in ventral aspect.

as basal width; aedeagus in lateral aspect long, curved, tubular, narrowed apically with pair of terminal processes and one pair of teeth near apex.

Female. Seventh sternum in ventral aspect with audal margin broadly and deeply excavated melially.

Holotype: 含, Mt. Naejang, Jeonbuk Province, fune 10, 1975, K.R. Choe leg. Paratypes: 5 含 念 ,) 우 우, the same as the holotype; 4 含 念 《 7 우 우, the same locality as the holotype, June 12, 1975, K.R. Choe leg.; 1 含 & 2 우 우, Mt. Baekam, Jeonbuk Province, June 11, 1975, K.R. Choe leg.; 1 우, Gwanmeung. Gyeonggi Province, June 10, 1973, K.R. Choe leg.; 1 含 & 2 우 우, Mt. Gyeryong, Chungnam Province June 1, 1975, K.R. Choe leg.

Similar to *P. hallasana* Kwon et Lee with respect o male pygofer structure, but distinguished by ygofer processes not branched at apex and with lack spots on vertex and frons.

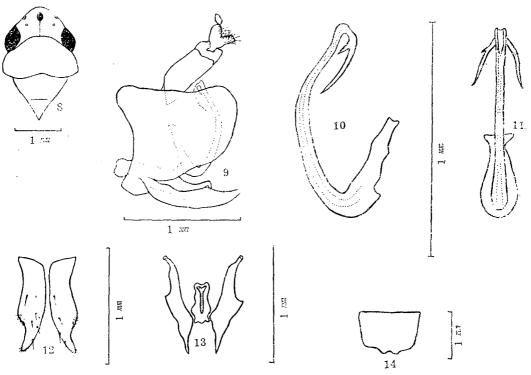
摘要

國內기서 採集된 Pagaronia屬 매미충을 分類同定하

여 새로이 P. kumsanensis(금산황백매미충), P. heuksanensis(흑산황백매미충), P. hamatus(갈구리황백 매미충)의 3新種을 追加하였다.

REFERENCES

- Anufriev, G.A., 1970. Four new species of Pagaronia Ball (Homoptera, Cicadellidae) from the Far East, allied to Tettigonia guttigera Uhler. Bull. Acad. Polon. Sci., (Ser. Sci. Biol.), 18:553-557.
- 1971. New and little known Far
 Eastern species of leafhoppers (Homoptera,
 Cicadellidae) of the genus Pagaronia Ball, 190
 Ibid., 19: 335-339.
- 1971. Six new Far Eastern species of leafhoppers (Homoptera, Auchenorrhyncha).
 Ibid., 19: 517-522.
- 4. ______1978. Les Cicadellides de le Territorire Maritime. Academie des Sciences de 1' URSS, Horae Societatis Entomologicae Unionis Soveticae, vol. 60, Hayka, 216pp.
- 5. Kwon, Y.J. and C.E. Lee, 1978. Revision of



Figs. 15-21. Pagaronia hamatus sp. n.: 15-Head, pronotum and scutellum in dorsal aspect, 16-Male genital segments in lateral aspect, 17-Aedeagus in lateral aspect, 18-Aedeagus in caudal aspect, 19-Genital plates in ventral aspect, 20-Genital styli and connective in dorsal aspect, 21-Female seventh sternum in ventral aspect.

the genus *Pagaronia* of the Palaearctic Region with descriptions of one new subgenus and three new species (Homoptera, Cicadellidae). Korean J. Ent. 8(1): 7-15.

- Nast, J., 1972. Plaearctic Auchenorrhyncha (Homoptera) an annotated check list. Polish Academy of Sciences, Warszawa, 550pp.
- Nielson, M.W., 1968. The leafhopper vectors of Phytopathogenic viruses (Homoptera, Cicad-

- ellidae) taxonomy, biology, and virus transmission. U.S. Dept. Agr. Tech. Bul. 1382, 386pp.
- Okada, T., 1976. Three new species of Pagaronia Ball (Homoptera, Cicadellidae) from Japan. Kontyû, Tokyo, 44(2): 138-141.
- 9. ______ 1978. Twelve new species of Pagaronia Ball (Homoptera, Cicadellidae) from Japan, Ibid., 46(3): 371-384.