

First Record of the Genus *Neomegacoelum* Yasunaga (Hemiptera: Heteroptera: Miridae) from the Korean Peninsula

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한반도 미기록속 *Neomegacoelum* Yasunaga (노린재목: 노린재아목: 장님노린재과)에 대한 보고

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대전광역시 충남대학교 농업생명과학대학 농생물학과 곤충분류학실험실, ¹경기도 인천시 국립생물자원관 동물자원과, ²서울특별시 서울대학교 수의과대학 수의내과학교실

ABSTRACT: A monotypic genus, *Neomegacoelum* Yasunaga (Hemiptera: Heteroptera: Miridae: Mirinae), is reported from the Korean Peninsula for the first time with a species of *Neomegacoelum vitreum* (Kerzhner, 1988). The morphological information such as description and diagnoses are provided with the photographs of adult specimen and genitalia.

Key words: Miridae, Mirinae, *Neomegacoelum*, New records, Korean Peninsula.

초록: 한반도 장님노린재과의 미기록속 *Neomegacoelum* 속을 처음으로 확인하고 *Neomegacoelum vitreum* (Kerzhner, 1988)의 한반도 분포를 보고한다. 성충과 생식기의 사진 등의 형태학적 정보와 생태학적 정보가 함께 제공된다.

검색어: 장님노린재과, 장님노린재아과, *Neomegacoelum*, 미기록속, 한반도

The subfamily Mirinae (Hemiptera: Heteroptera: Miridae) is the largest group of Miridae, commonly called plant bugs (Cassis and Schuh, 2012). Among the mirine genera, a monotypic genus *Neomegacoelum* was proposed by Yasunaga (1998) to accommodate for the species, *Creontiades vitreus* (Kerzhner, 1988) because of its unique morphological characters such as parameres and genitalia from the genus *Creontiades*.

In this study, the genus *Neomegacoelum* is reported from the Korean Peninsula for the first time based on *N. vitreum* (Kerzhner, 1998). Re-descriptions and diagnoses of the genus

and the species are provided with photographs of dorsal habitus and genitalia based on the Korean specimens.

All measurements in this paper are given in millimeters (mm). Terminology mainly follows Yasunaga (1991) and Braimah et al. (1982). Depository of specimens is Chungnam National University, Daejeon, Korea. Distribution with an asterisk means its new record in this area.

Taxonomy

Genus *Neomegacoelum* Yasunaga, 1998

Neomegacoelum Yasunaga, 1998: 63. Type Species: *Neomegacoelum vitreum* Kerzhner, 1988.

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Received October 27 2014; Revised January 15 2015

Accepted January 30 2015

Diagnoses.

Recognized by body elongated oval, somewhat wide vertex, somewhat thick collar, hemelytra glabrous and hyaline, left paramere somewhat long and thin, hypophysis small and blunt, sensory lobe somewhat narrow, right paramere generally angulated; vesica membranous, with one long and thick spicule.

***Neomegacoelum vitreum* (Kerzhner, 1988)**

홍색유리날개장님노린재 (신칭) (Figs. 1, 2)

Creontiades vitreus Kerzhner, 1988: 32.

Neomegacoelum vitreum Yasunaga, 1998: 63.

Diagnoses. See the genus diagnoses.

Description.

Male: Body generally reddish brown, elongated oval (Fig. 1A).

Head reddish brown to fuscous, with sparse short pubescences; vertex somewhat wide, with longitudinal groove; ocelli absent; tylus dark brown; Antennae generally reddish brown, first antennal segment somewhat thicker; 1/2 basal part of second antennal segment pale brown; apex of base of third and fourth segment pale brown. Rostrum generally brown, first and fourth rostral segments dark brown, reaching to hindcoxae, proportion

of each rostral segment as 0.6: 0.6: 0.6: 0.7.

Pronotum generally reddish brown to dark brown, glossy, posterior margin narrowly yellowish brown, calli somewhat reddish brown; collar pale brown, somewhat wide; scutellum entirely shiny dark brown. Hemelytra generally reddish pale brown, glabrous and hyaline; posterior apex of clavus dark brown; posterior margin of corium dark brown; outer embolial margin reddish brown or sometimes dark brown; cuneus generally red, anterior margin of cuneus dark brown; membrane grayish brown. Legs generally pale brown, hindfemur reddish brown or dark brown; hindtibia reddish brown or dark brown, with dark brown spines in a row; third segment of tarsus dark brown.

Abdomen generally reddish brown or dark brown, left paramere somewhat long and thin hypophysis small and blunt, sensory lobe somewhat narrow (Fig. 2A); right paramere generally angulated (Fig. 2B); vesica membranous with one long and thick spicule (Fig. 2C, D).

Female: as in male except for somewhat yellowish pronotum; more rounded than male (Fig. 1B).

Measurements (in mm). Male (n = 3)/female (n = 1): body length: 5.85-5.96/6.66; head length, excluding neck: 0.45-0.47/0.55; head width, including compound eyes: 1.01-1.04/1.14; vertex width: 0.4-0.41/0.46; 1st antennal segment length: 0.91-

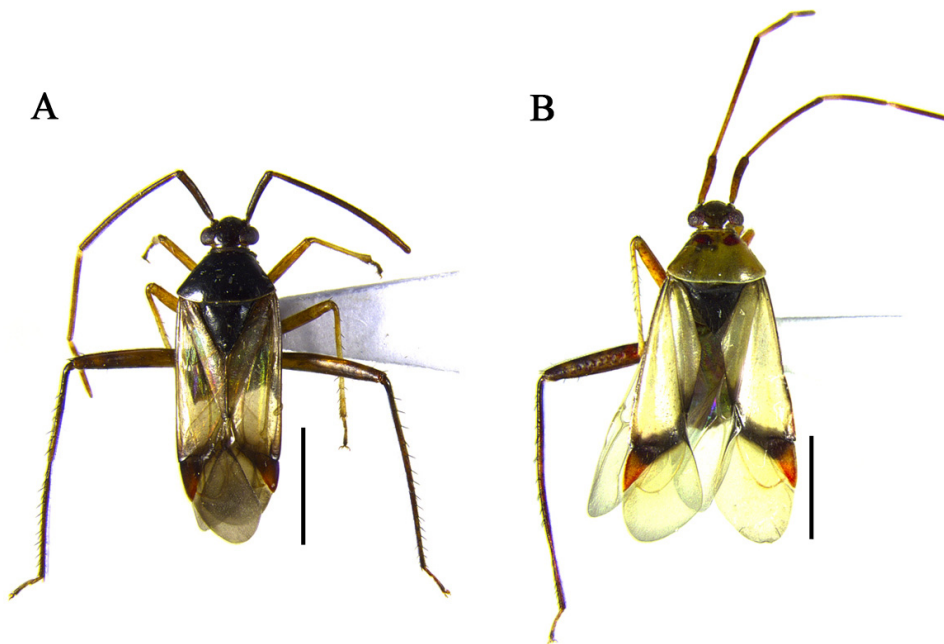


Fig. 1. *Neomegacoelum vitreum* (Kerzhner, 1988). A: Adult male; B: Adult female. Scale bar: 2 mm.



Fig. 2. Male genitalia and parameres of *Neomegacoelum vitreum* (Kerzhner, 1988). A: left paramere in dorsal view; B: right paramere in lateral view; C: vesica in dorsal view; D: vesica in ventral view. Scale bar: 0.1 mm.

1.00/0.98; 2nd antennal segment length: 2.38-2.36/1.84; 3rd antennal segment length: 1.63-1.65/1.27; 4th antennal segment length: 0.91-1.07/1.32; total antennal length: 5.09-6.08; 1st rostral segment length: 0.59-0.63/0.67; 2nd rostral segment length: 0.53-0.63/0.65; 3rd rostral segment length: 0.55-0.58/0.60; 4th rostral segment length: 0.63-0.73/0.65; total rostral length: 2.30-2.57/2.47; anterior pronotal margin width (straight): 0.72-0.73/0.80; mesal pronotal length: 0.97-0.79/0.98; basal pronotal margin width (straight): 1.67-1.75/1.97; embolial outer margin length (straight): 2.95-3.01/3.22; cuneal outer margin length (straight): 0.64-0.82/0.92; maximum width across hemelytra: 0.89-0.90/1.12; foreleg each parts length (femur: tibia: tarsus): 1.43-1.43:1.45-1.71:0.52-0.53/1.64:1.85:0.58; midleg each parts length (femur: tibia: tarsus): 1.56-1.64:2.00-2.08:0.53-0.55/1.87:2.25:0.56; hindleg each parts length (femur: tibia: tarsus): 2.54-2.63:3.68-3.70:0.67-0.68/3.02:4.55:0.69.

Specimen examined. [CNU] 3♂♂, 1♀, Sodong-ri, Ilun-myun, Geoje-si, Kyeongsangnam-do, Korea, 22.VII.2014, JG Kim; [CNU] 1♂, Chungnam National Univ., Gung-dong, Yuseong-gu, Daejeon, Korea, 1.VII.2014, HD Lee.

Distribution. Russia, Japan, Korea (Central)*.

Biology. This species is mostly found on *Quercus* spp.

2014-02-001), and was supported by research fund of Chungnam National University.

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Acknowledgements

This work was supported by a grant from the National Institute of Biological Resources (NIBR), funded by the Ministry of Environment (MOE) of the Republic of Korea (NIBR No.