

SHORT COMMUNICATION

D. S. Aristov¹, S. Yu. Storozhenko². THE TAXONOMIC POSITION OF THE GENUS *PARABLATTOGRYLLUS* STOROZHENKO, 1988 (INSECTA) FROM THE CRETACEOUS OF RUSSIA. – Far Eastern Entomologist. 2011. N 236: 14-16.

Summary. The holotype of *Parablattogryllus obscurus* Storozhenko, 1988 from the Lower Cretaceous locality Baissa in East Siberia is re-described and illustrated. The genus *Parablattogryllus* Storozhenko, 1988 is transferred from the family Blattogryllidae of the order Grylloblattida to the infraclass Polyneoptera as the genus of uncertain systematic position.

Key words: Insecta, Polyneoptera, *Parablattogryllus*, taxonomy, Cretaceous, Russia.

Д. С. Аристов¹, С. Ю. Стороженко². Систематическое положение рода *Parablattogryllus* Storozhenko, 1988 (Insecta) из мела России // Дальневосточный энтомолог. 2011. N 236. С. 14-16.

Резюме. Дано переописание голотипа *Parablattogryllus obscurus* Storozhenko, 1988 из нижнемелового местонахождения Байса в Восточной Сибири. Род *Parablattogryllus* Storozhenko, 1988 перенесен из семейства Blattogryllidae (отряд Grylloblattida) в инфракласс Polyneoptera в качестве таксона с неясным таксономическим положением.

INTRODUCTION

Parablattogryllus obscurus Storozhenko, 1988 was described from the Lower Cretaceous locality Baissa (Russia: Buryat Republic) in the family Blattogryllidae of the order Grylloblattida (Storozhenko, 1988). Originally it was misinterpreted as fore wing, but later considered as isolated hindwing (Huang et al., 2008). The re-examination of holotype of this species confirms the latter point of view. The wing-venation of *P. obscurus* is not typical for family Blattogryllidae (fore wings and hindwings of this family are characterized by *RS* closely parallel to *R*, by the base of *M* fused with *CuA*, and by presence of S-shaped cross-veins in the intercubital area). Moreover, the anal area in hindwing of *P. obscurus* is small, the membrane is dark, coriaceous and covered by plaits and wrinkles, which never observed in any known families of the order Grylloblattida, as well as in the other orders of the infraclass Polyneoptera (= Gryllones). Thus, the systematic position of *Parablattogryllus* Storozhenko, 1988 within the infraclass Polyneoptera is unclear. The real taxonomic location of this enigmatic genus may be interpreted only after collecting of new specimens with well preserved fore wings and body.

INFRACLASS POLYNEOPTERA

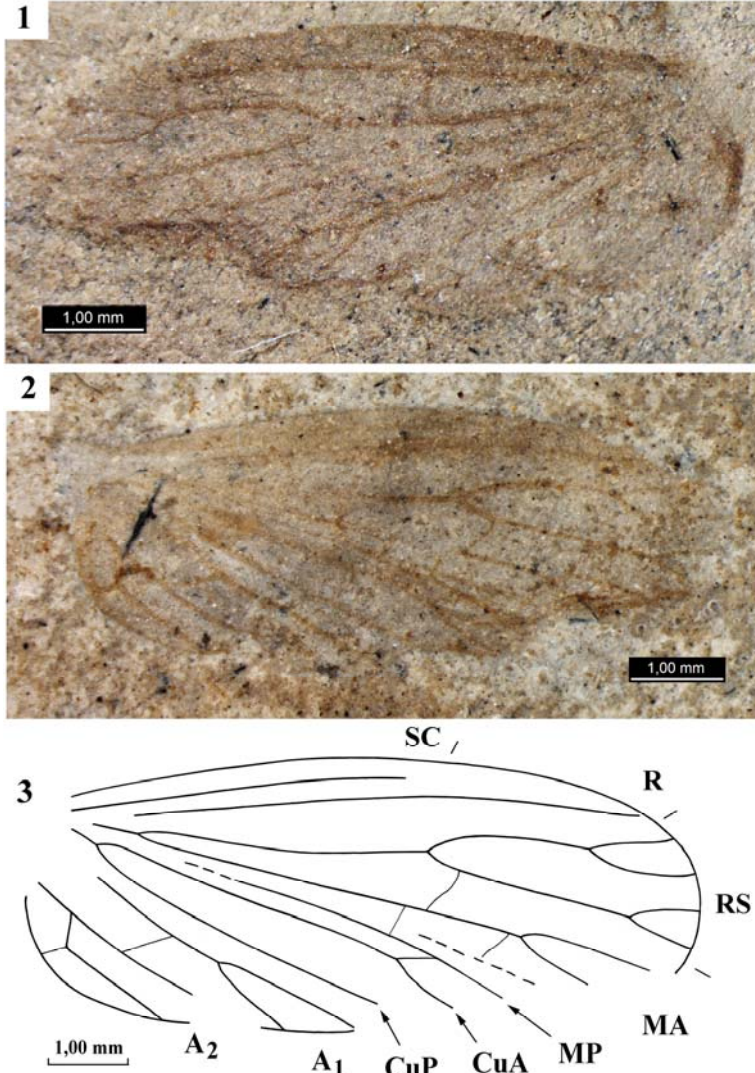
Genus *Parablattogryllus* Storozhenko, 1988

Parablattogryllus Storozhenko, 1988: 51; Storozhenko, 1998: 177; Huang et al., 2008: 21; Aristov, 2011: 60.

Type species: *Parablattogryllus obscurus* Storozhenko, 1988, by original designation.

DESCRIPTION. Medium size, probably brachypterous insects. Hindwing 2.5 times as long as wide, with convex anterior margin and broadly rounded apex. Width of costal area near the mid of wing equal to width of subcostal area. *RS* originated near the base of the wing, its base fused with *M*. *M* divided *MA* and *MP* near the basal quarter of wing. *CuA* and *CuP* simple. Anal field small. Cross-veins simple. Membrane coriaceous, with plaits and wrinkles; hindwing dark, especially around anterior margin.

COMPOSITION. Type species from the Lower Cretaceous of Russia.



Figs. 1-3. Hindwing of *Parablattogryllus obscurus* (holotype, PIN No. 1989/2497). 1 – positive imprint; 2 – negative imprint; 3 – reconstruction. Scale bar: 1 mm.

***Parablattogryllus obscurus* Storozhenko, 1988**

Figs 1–3

Parablattogryllus obscurus Storozhenko, 1988: 51, fig. 1i (holotype – positive and negative imprints of hindwing; Russia: Buryat Republic, Bauntovo District, left bank of the Vitim River downstream of the Baissa River, Baissa locality; Lower Cretaceous, Zaza Formation; in PIN; studied); Storozhenko, 1998: 177, fig. 449; Huang et al., 2008: 21; Aristov, 2011: 60.

MATERIAL. Holotype from Baissa locality.

LOCALITY AND HORIZON. Russia: Baissa locality; the Lower Cretaceous, Zaza Formation.

DESCRIPTION. *RS* with four branches. *MA* forked. Intermedial area with distinct wrinkle. *A*₁ forked. *A*₂ with two branches; basal branch angularly curved and connected with posterior margin of hindwing by simple cross-vein.

MEASUREMENTS. Length of hindwing 7.8 mm.

ACKNOWLEDGEMENTS

This study is supported by the Program ‘Biosphere Origin and Evolution of Geobiological Systems’ of the Presidium of the Russian Academy of Sciences and the Russian Foundation for Basic Research No. 11-04-01712.

REFERENCES

- Aristov, D.S. 2011. New and little known Blattogryllidae (Insecta: Grylloblattida) from the Permian and Triassic of Russia, Kazakhstan, and Kyrgyzstan. *Paleontologicheskii Zhurnal* 1: 59–65 (In Russian; English translation *Paleontological Journal* 45(1): 65–72).
- Huang, D.-Y., Nel, A. & Petrulevičius, J.F. 2008. New evolutionary evidence of Grylloblattida from the Middle Jurassic of Inner Mongolia, North-East China (Insecta, Polyneoptera). *Zoological Journal of the Linnean Society* 152 (1): 17–24.
- Storozhenko, S.Yu. 1988. New and little known Mesozoic grylloblattids (Insecta). *Paleontological Journal* 4: 48–54. (In Russian).
- Storozhenko, S.Yu. 1998. *Sistematics, phylogeny and evolution of the grylloblattids (Insecta: Grylloblattida)*. Vladivostok: Dalnauka. 207 p. (In Russian).

Author's addresses:

- 1) Paleontological Institute RAS,
Profsoyuznaya str., 123, Moscow 117997, Russia.
E-mail: danil_aristov@mail.ru
- 2) Institute of Biology and Soil Science FEB
RAS, Vladivostok-22, 690022, Russia.
E-mail: storozhenko@ibss.dvo.ru

© **Far Eastern entomologist (Far East. entomol.)** Journal published since October 1994.

Editor-in-Chief: S.Yu. Storozhenko

Editorial Board: A.S. Lelej, N.V. Kurzenko, M.G. Ponomarenko, E.A. Beljaev, V.A. Mutin,
E.A. Makarchenko, T.M. Tiunova, P.G. Nemkov, M.Yu. Proshchalykin, S.A. Shabalin

Address: Institute of Biology and Soil Science, Far East Branch of Russian Academy of
Sciences, 690022, Vladivostok-22, Russia.

E-mail: entomol@ibss.dvo.ru

web-site: <http://www.biosoil.ru/fee>