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**SYSTEMATIC POSITION OF THE GENUS *VOLOGDOPTERA*  
ARISTOV, 2009 (ORTHOPTERA: PRUVOSTITIDAE) FROM  
UPPER PERMIAN OF RUSSIA**

**D. S. Aristov<sup>1,2)</sup>, A. V. Gorochov<sup>3)</sup>**

1) *Borissak Paleontological Institute of the Russian Academy of Sciences, Profsoyuznaya str. 123, Moscow, 117997, Russia. E-mail: danil\_aristov@mail.ru*

2) *Cherepovets State University, Lunacharsky prospect 5, Cherepovets, 162600, Vologda region, Russia.*

3) *Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St Petersburg, 199034, Russia. E-mail: orthopt@zin.ru*

**Summary.** The monotypic genus *Vologdoptera* Aristov, 2009 of uncertain taxonomic position from Upper Permian of Russia and its type species *V. maculosa* Aristov, 2009 are redescribed. They are attributed to subfamily Maculoedischiinae of the family Pruvostitidae (Orthoptera: Oedischioidea).

**Key words:** Insecta, Orthoptera, taxonomy, Permian.

**Д. С. Аристов, А. В. Горохов, Систематическое положение рода *Vologdoptera* Aristov, 2009 (Orthoptera: Pruvostitidae) из верхней перми России // Дальневосточный энтомолог. 2019. N 382. С. 10-12.**

**Резюме.** Переописан монотипный род прямокрылых насекомых неясного положения *Vologdoptera* Aristov, 2009 из верхней перми России и его типовой вид *V. maculosa* Aristov, 2009. Эти таксоны отнесены к подсемейству Maculoedischiinae семейства Pruvostitidae (Orthoptera: Oedischioidea).

**INTRODUCTION**

The monotypic genus *Vologdoptera* from Severodvinian locality Isady of Vologda region (Upper Permian of Russia) was described in the family Kortshakoliidae Storozhenko, 1997 of the order Grylloblattida (Aristov, 2009). During the revision of this order, the Kortshakoliidae was synonymized with the family Permothermopsidae Martynov, 1937, and *V. maculosa* Aristov, 2009 was attributed to Orthoptera incertae sedis (Aristov, 2015).

Herein these genus and species are redescribed, and their attribution to Maculoedischiinae Gorochov, 1987 (Orthoptera: Pruvostitidae) is justified.

**TAXONOMY**

**Order Orthoptera Olivier, 1789**

**Family Pruvostitidae M. Zalesky, 1929**

**Subfamily Maculoedischiinae Gorochov, 1987**

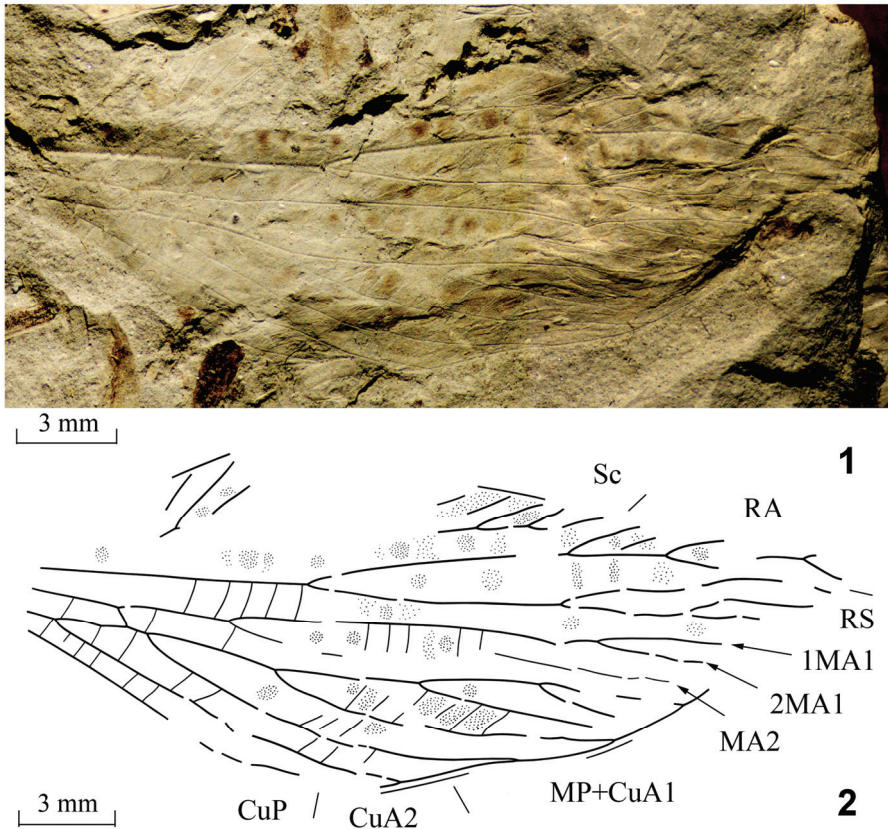
**Genus *Vologdoptera* Aristov, 2009**

*Vologdoptera* Aristov, 2009: 21; Aristov *et al.*, 2013: 666; Aristov, 2015: 28.

Type species: *V. maculata* Aristov, 2009, by original designation.

DIAGNOSIS. Sc ending near wing distal quarter. RA with several anterior branches. Pseudotransverse vein between 1MA1 and RS absent.

COMPARISON. *Vologdoptera* is attributed to the subfamily Maculoedischinae because of lacking pseudotransverse vein between MA1 and RS. In other two subfamilies of Pruvostitidae (Pruvostitinae and Sylvoedischinae), similar with *Vologdoptera*, this anastomosis remains as pseudotransverse oblique vein. S-shaped curve of MP+CuA1 stem of *Vologdoptera* is not characteristic of Maculoedischinae (but peculiar to Pruvostitinae) and may be a result of host rock deformation.



Figs 1, 2. Forewing of *Vologdoptera maculata* Aristov, 2009. 1 – holotype PIN, No 3840/50, 2 – reconstruction.

The *Maculoedischiinae* includes only the type genus *Maculoedischia* Gorochov, 1987 from Lower Kazanian locality Soyna (Middle Permian, Arkhangelsk region, Russia). From this genus, *Vologdoptera* differs in short Sc, R with several anterior branches, and long branches of MP+CuA1. In *Maculoedischia*, Sc ends in the distal quarter of wing, R has a single anterior branch, and MP+CuA1 branches are short (Gorochov, 1987).

SPECIES INCLUDED. Type species only.

#### ***Vologdoptera maculata* Aristov, 2009**

Figs 1–2

*Vologdoptera maculata* Aristov, 2009: 22, figs 13, 14; Aristov *et al.*, 2013: 666; Aristov, 2015: 28.

MATERIAL. Holotype PIN, No 3840/50, positive and negative imprints of forewing; Russia, Vologda Region, Veliky Ustyug District, left bank of Sukhona River, 1 km upstream from Isady village, Isady locality; Upper Permian, Upper Severodvinian Substage, Poldarsa Fm.; deposited in Paleontological Institute of the Russian Academy of Sciences (Moscow).

REDESCRIPTION. Sc with numerous anterior branches. RA stem straight, RA with 5–6 anterior branches, base of proximal one located prior to apex of Sc. RS branching antieriad, with three or more apices; interradial field rather narrow. MA1 branching in distal quarter of wing, with two or more branches; MA2 simple in prior to wing distal quarter, somewhat thinner than MA1. MP entering in CuA1 from some distance between CuA1 and CuA2. MP+CuA1 with five branches. Apex of CuP located at level of RS base. Transverse vein rather scarce; coloration present in form of small spots between transverse veins. Enclosing vein running along wing posterior margin and connecting apices of MP+CuA1 branches.

MEASUREMENTS. Forewing length about 35 mm.

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