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A NEW FAMILY OF EARLY PERMIAN GRYLLOBLATTIDS (INSECTA: GRYLLOBLATTIDA) FROM URAL MOUNTAINS

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A new grylloblattids family *Sylvabestiidae* **fam. n.** with a single species *Sylvabestia tenuis* **gen. et sp. n.** is described from Chekarda locality (Russia: Permskaya oblast').

KEY WORDS: Insecta, Permian, new taxa.

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Из нижнепермского местонахождения Чекарда (Пермская область) описано новое семейство гриллоблаттидовых насекомых *Sylvabestiidae* **fam. n.** с единственным видом *Sylvabestia tenuis* **gen. et sp. n.**

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INTRODUCTION

The numerous grylloblattid insects were found in the vicinities of the Chekarda village (Russia: Permskaya oblast'). In this locality the following 14 families of Grylloblattida were found: Liomopteridae, Lemmatophoridae, Euryptilonidae, Megakhsaridae, Protembaliidae, Permembaliidae, Tillyardembaliidae, Atactophlebiidae,

Ideliidae, Kortshakoliidae, Euremiscidae, and Sylvaphlebiidae (Storozhenko, 1998; Novokshonov, 1999). Recently a grylloblattid specimen clearly distinguished from the representatives of all known families was collected by V.G. Novokshonov. The descriptions of the new species, genus and family are given below. Holotype is deposited in the collection of the Perm University.

ORDER GRYLLOBLATTIDA WALKER, 1914

Family Sylvabestiidae Aristov, fam. n.

Type genus - *Sylvabestia*, gen. n.

DIAGNOSIS. Medium size insect with delicate body. Head prognathous with moderately small eyes. Pronotum elongated, without paranota. Legs cursorial; fore legs stout and long. Meso- and metanotum elongated; abdomen moderately wide, slightly narrowed to apex. Fore wing narrow; *Sc* disappear in distal thirds of wing; *R* straight, curved in distal part; *RS* arising in basal half of wing; *MA* anastomosed with *RS*; free part of *MA* short, S-shaped; *M*₅ present; *CuA* with weak branches, not divided into *CuA*₁ and *CuA*₂; area between *CuA* and *CuP* wide. In hind wing *RS+MA* presents.

GENERA INCLUDED. Type genus only.

RELATIONS. Sylvabestiidae fam. n. belongs to suborder Protoperlina. By shape of the body new family similar to Sojanoraphidiidae, Tillyardemiidae and Protemiidae, but differs from them by stout fore legs and by shape of pronotum. By present of *M*₅ in the fore wing and *RS+MA* complex in both wings Sylvabestiidae fam. n. is well distinguished from all known families of the suborder Protoperlina except Sojanoraphidiidae, but in fore wing of Sojanoraphidiidae *Sc* terminated on *C* and the base of *M* anastomosed with *CuA*.

Genus *Sylvabestia* Aristov, gen. n.

Type species - *Sylvabestia tenuis*, sp. n.

DIAGNOSIS. BODY: Length of head more than its width, antennae filiform, clipeus small. Pronotum trapezoidal, its width less than width of head. Femora with longitudinal ribs, hind femora longer than fore ones, but less stout. Scutum of mesonotum elongated, triangularly-rounded. FORE WING: Anterior margin slightly convex. Costal area as narrow as subcostal one. *RS* arising in basal half of wing. *RS+MA* complex probably with 3–4 branches. *MP* straight. *CuA* in distal half with 3 weak branches. *CuP* simple, straight. Anal area narrow, *A*₁ simple, slightly curved. Cross-veins in all areas simple, but between *CuA* and *CuP* H-shaped. HIND WING: Costal area and *Sc* as in fore wing. *R* slightly S-shaped; *RS+MA* complex probably with 4-5 branches. *CuA*, *CuP* and *A*₁ simple.

ETYMOLOGY. From Sylva River and Latin *bestia* – animal.

SPECIES INCLUDED. Type species only.

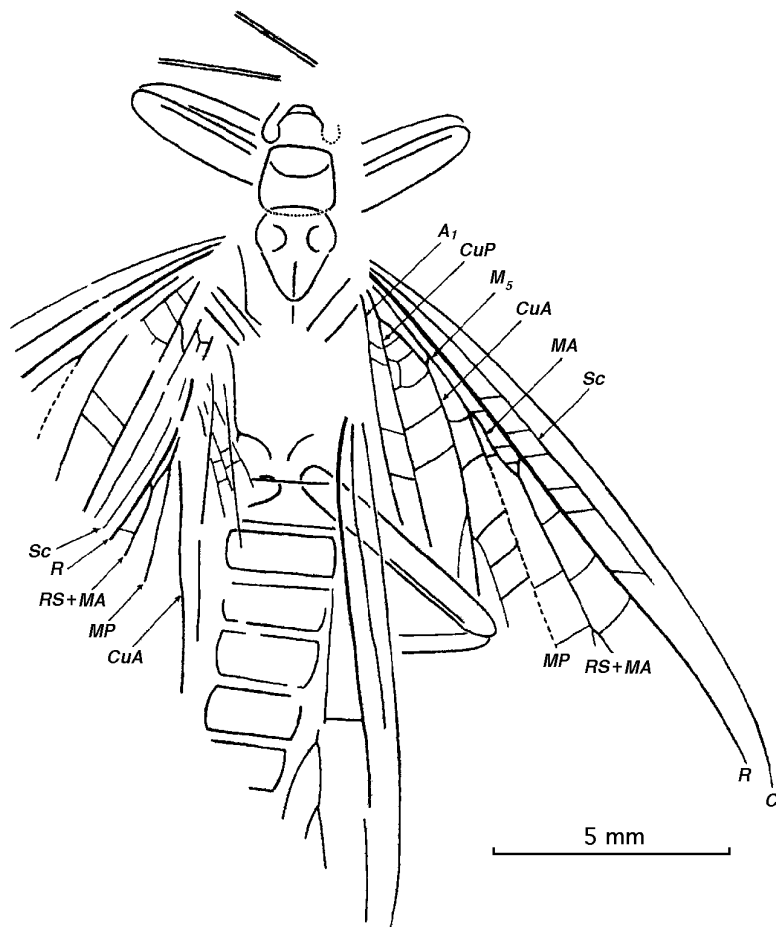


Fig.1. *Sylvabestia tenuis* gen. et sp. n., holotype, specimen N 2/396.

***Sylvabestia tenuis* Aristov, sp. n.**

Fig. 1

MATERIAL. Holotype: imprint of the body and parts of wings, specimen PU N 2/396; Russia: Permskaya oblast', left bank of Sylva River near mouth of Chekarda River; Lower Permian, Kungurian Stage.

DESCRIPTION. Fore wing about 3 times as long as wide; membranous, unicolor light, without hairs. Length of fore wing approximately 16–17 mm. Maximum width of radial area equal to that of cubital area. Length of body (without abdomen) – 9 mm; fragment of abdomen – 5 mm; fore femur – 3.5 mm, hind femur – 5.5 mm.

ETYMOLOGY. From Latin *tenuis* – delicate.

LOCALITY AND OCCURRENCE. Russia: Sylva River (Chekarda); Lower Permian, Kungurian Stage.

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