

A Revision of the Genus *Eoptychopterina* (Diptera: Eoptychopteridae)

E. D. Lukashevich

Paleontological Institute, Russian Academy of Sciences, Profsoyuznaya ul. 123, Moscow, 117997 Russia

e-mail: elukashevish@hotmail.com

Received March 12, 2003

Abstract—The new species *Eoptychopterina kaluginae* sp. nov., *E. omissa* sp. nov., and *E. petri* sp. nov. are described. *E. abbreviata* is synonymized under *E. karatavica*. A key to the species based on the wing characters is given. Morphological characters of members of the genus are discussed.

Key words: Diptera, Eoptychopteridae, new taxa.

INTRODUCTION

Until today, representatives of the genus *Eoptychopterina* have been known from ten Jurassic and Cretaceous Asian localities (Fig. 1), whereas in Europe they are recorded only from the Lower Cretaceous of England (Lukashevich, 1993; Lukashevich *et al.*, 2001). They seem to have been actually absent in Europe, at least in the Early Jurassic, because this genus is not recorded in rich and taxonomically treated collections from the Upper Liassic of Germany (Braunschweig, Grimmer, and Dobbertin) in which dozens of other eoptychopterid specimens were found (Lukashevich *et al.*, 1998).

Unlike other ptychopteroideans, members of *Eoptychopterina* resemble flies rather than craneflies: these are massive, robust insects with relatively short antennae and stout legs (Fig. 2). Their habitus and venation characters were considered peculiar enough to establish *Eoptychopterina* as a monotypic subfamily (Shcherbakov *et al.*, 1995). Despite being comparatively well studied, this genus is the strangest and most enigmatic of the eoptychopterids.

About twenty more or less complete specimens of *Eoptychopterina* are known (more than the complete specimens of all the other eoptychopterid genera combined); however, we still do not know definitely what the males of this genus looked like. Several female

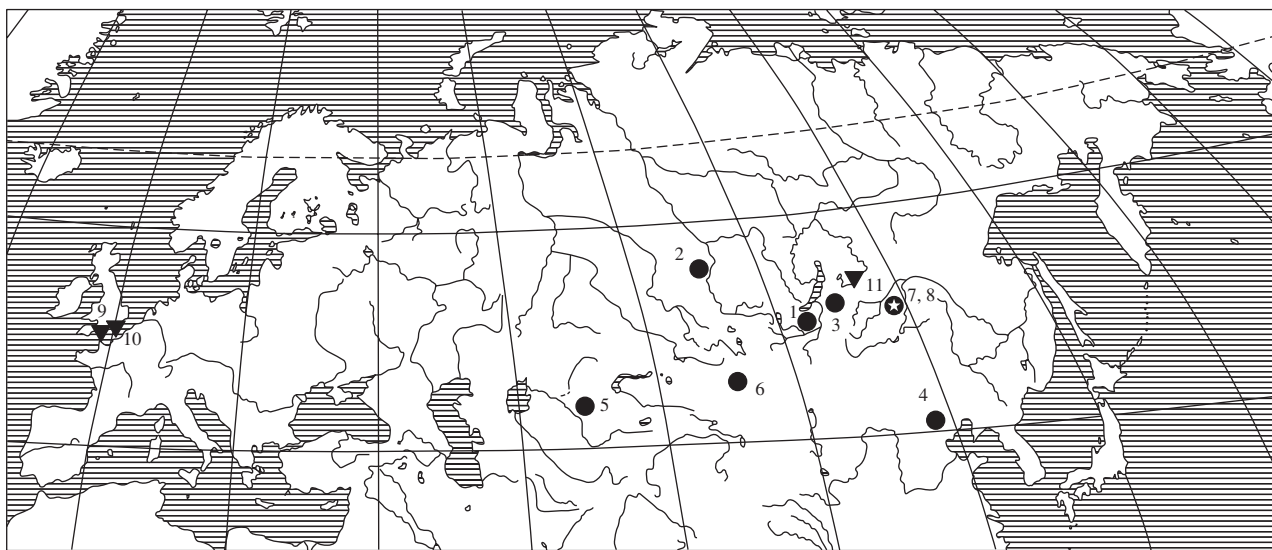


Fig. 1. Geographical distribution of the genus *Eoptychopterina* Kalugina. Localities: (1) Novospasskoe, (2) Kubekovo, (3) Uda, (4) Daohugou, (5) Karatau, (6) Shara-Teg, (7) Daya, (8) Unda, (9) Durlstone Bay, (10) Clockhouse, (11) Baissa.