# DESCRIPTION OF THE LARVA OF CAUCASIAN SPECIES PONTOPERLA KATHERINAE BALINSKY (PLECOPTERA, CHLOROPERLIDAE)

L.A. Zhiltzova<sup>1</sup>, S.K. Cherchesova<sup>2</sup>, S.V. Kataev<sup>2</sup>, & V.O. Biasov<sup>2</sup>

<sup>1</sup> Zoological Institute, Russian Academy of Science, St. Petersburg, Russia E-mail: baris@zin.ru

<sup>2</sup> North Ossetian State University after K.L. Kchetagurov, Vladikavkaz, Russia E-mail: cherchesova@yandex.ru

## **ABSTRACT**

For the first time the larva of *P. katherinae* from the Caucasus is described. It differs from the larva of *P. teberdinica* in a more uniformly pigmented body color and in peculiarity of setae on body and cerci.

Keywords: Pontoperla, larval description, Chloroperlidae, Caucasus

### **INTRODUCTION**

Family Chloroperlidae is represented by five species in the fauna of the Caucasus. All were included earlier in the genus Chloroperla, but this genus was divided by Zwick (1967) into several closely related genera: Plesioperla, Pontoperla, Isoptena, Siphonoperla, Xantoperla, Chloroperla. Currently five species of Chloroperlidae are known from the Caucasian fauna (Plesioperla sakartvella Zhiltzova, Pontoperla teberdinica Balinsky, P. katherinae Balinsky, Siphonoperla hajastanica Zhiltzova, Chloroperla zhiltzovae Zwick), but the larva is known for only one of these, P. teberdinica, described by Zwick (1971). In this study we describe the larva of Pontoperla katherinae. This species, based on our data, is a Caucasian endemic. It is very widely distributed in rivers along northern and southern slopes of the Great Caucasus and has a flight period of July -August.

Pontoperla katherinae Balinsky 1950 (fig. 1-3)

Material examined. 1 larva, North Ossetia, river

Kauridon, tributary of Fiagdon (basin of Terek), 9 V 2010, leg. L. Zhiltzova; 2 larvae, North Ossetia, river Kauridon, tributary of Fiagdon (basin of Terek), 11 VI 2010, leg. M. Shioloshvili, S. Cherchesova.

Mature larva. Length of body 11 mm. Color of body dark brown or blackish, wing pads and legs paler. Head slightly transverse, its width 1.2 times greater than length; epicranial suture very clear, nearly reaching to occiput; coronal suture very short or reduced, on available larvae it is indistinct. Ocelli small, situated in isosceles triangle. Compound eyes convex, their length approximately equal to length of occiput behind the eyes. Pronotum transverse, its width exeeds length about 1.7 times. Disc of pronotum dark, medial stripe light, narrow; lateral margins of pronotum completely pale. Border setae (bristles) rather short and not dense, situated uniformly along borders, on anterior angles they are noticeably denser. Wing pads distinctly rounded, with rounded apex, lateral border and apex pale. Anterior wing pads with light markings in anterior half. Legs pale, with dense setae along anterior edge of femur and along hind border and on surface of tibia.

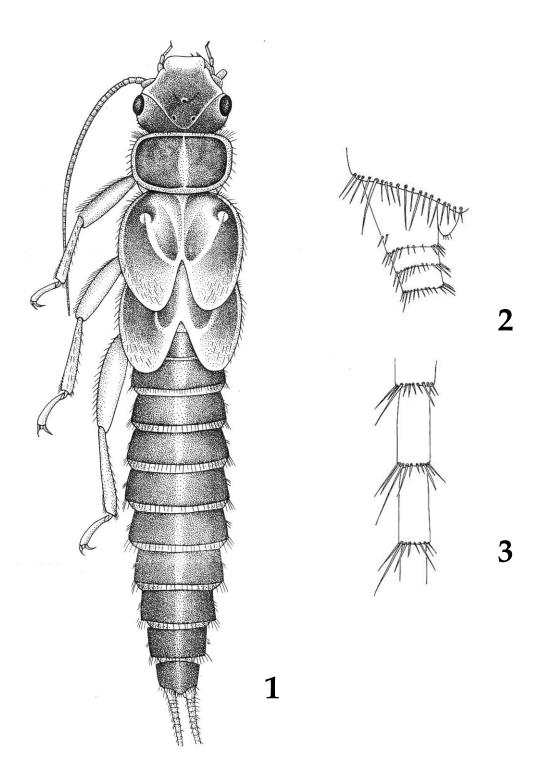


Fig.1-3. Larva of *Pontoperla katherinae* Balinsky. 1. Habitus of the larva. 2. Tergite 10 of abdomen and base of cercus. 3. Segment 9 and 10 of cercus.

Abdomen dark, with only narrow light longitudinal stripe medially.

Tergites of abdomen with dense border setae along hind margin and with several hairs laterally. Tergite 10 of abdomen slightly elongated, triangular. Hind margin of tergite 10 with uniformly spaced long setae, but of diverse length, longer setae alternate with 1-4 shorter setae.

Cerci pale, basal segment with short dense setae around hind margin; 9 and 10 segments are elongated, their length 2,6-2,7 times width; there are 2-3 long seta on apex, with one especially long seta; on segment 10 this seta is equal to 4/5of its length, and nine additional short setae of different length form the apical corona.

Diagnostic characters for *P. katherinae* and *P. teberdinica*: 1) Greater length of body – 11 mm (*P. teberdinica* – 7 mm). 2) Color of body more uniformly pigmented; body of *P. teberdinica* conspicuously patterned, with dark and light spots on the head, pronotum and abdomen. 3) Setae on the body of *P. katherinae* are shorter and less dense.

#### ACKNOWLEDGMENTS

We thank Prof. Dr. Bill Stark for linguistic help.

## **REFERENCES**

Zwick, P. 1967. Revision der Gattung *Chloroperla* Newman (Plecoptera). Mittelungen der. Schweizerischen. Entomologischen Gesellschaft, (Lausanne), 40:1-26.

Zwick, P. 1971. Plecoptera aus Anatolien und benachbarten Gebieten. Mittelungen der. Schweizerischen. Entomologischen Gesellschaft, (Lausanne), 44:233-264.

Received 19 February 2011, Accepted 21 February 2011, Published 5 April 2011