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## FIRST RECORDS OF SEVERAL TANYPODINAE SPECIES (DIPTERA, CHIRONOMIDAE) FROM UKRAINE

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**First Records of Several Tanypodinae Species (Diptera, Chironomidae) from Ukraine. Baranov V. A.** — Three species of Tanypodinae: *Conchapelopia melanops* (Meigen, 1818), *Paramerina* cf. *cingulata* (Walker, 1856), *Procladius* (*Psilotanypus*) *flavifrons* Edwards, 1929 are recorded for the first time for Ukraine. Notes on morphology of *P.* cf. *cingulata* are given.

**Key words:** Chironomidae, Tanypodinae, *Conchapelopia*, *Paramerina*, *Procladius*, new records, Ukraine.

**Новые находки некоторых видов Тануподинае (Diptera, Chironomidae) из Украины. Баранов В. А.** — Три вида Тануподинае *Conchapelopia melanops* (Meigen, 1818), *Paramerina* cf. *cingulata* (Walker, 1856), *Procladius* (*Psilotanypus*) *flavifrons* Edwards, 1929 указаны впервые для Украины. Даны комментарии по поводу странной морфологии крыла *P.* cf. *cingulata*.

**Ключевые слова:** Tanypodinae, *Conchapelopia*, *Paramerina*, *Procladius*, новые находки, Украина.

### Introduction

In the subfamily Tanypodinae there are currently 57 genera and 575 species in the world fauna, and is the largest after Orthocladiinae and Chironominae (Ashe, O'Connor, 2009). Up to now only 27 species of Tanypodinae were recorded from Ukraine (Baranov, 2011 a, b). Tanypodinae are common in lentic communities of lakes and lowland Rivers of Ukraine (Polishuk, 1974.), however, no comprehensive taxonomic review and distribution have been undertaken of the Ukrainian Tanypodinae (Baranov, 2011 b).

The current study of the chironomids in Ukraine, particularly in the Crimea, Kharkiv and Chernihiv regions, found three species and two genera previously not unknown from Ukraine.

These species were collected in the city of Kharkiv and from at the Pakulske reservoir in the Chernihiv region by author, and in Crimea by Mr. Grigory Prokopov (Tavrida National University of V. I. Vernadsky, Simferopol).

### Material and methods

Adults were collected mainly with sweeping nets and pan traps placed along the shoreline. The specimens were preserved in 70 % ethanol and then slide-mounted in Canada balsam using the technique described by Wirth and Marston (1968) and modified by Gilka (2011). Morphological terminology follows Sæther (1980). The measurements are given as ranges. All examined material has been deposited in the private collection of author. Species are determined using keys of Pinder (1978), Fittkau (1962), Murray and Fittkau (1989).

### *Paramerina* Fittkau, 1962

This genus belongs to the tribe Pentaneurini that includes 7 Palearctic species, of which one is restricted to Japan (Ashe, O'Connor, 2009: 187). One adult was collected at the mouth of the Uchan-Su River (Crimea, Yalta), but the specimen was poorly preserved and could not be identified definitively (Baranov, 2011 c: 409).

### *Paramerina* cf. *cingulata* (Walker, 1856) (fig. 1, I; 2, 3)

**Locality.** Ukraine: Crimea, Kokkozka river, 20.08.2000, 1 pharate male (Prokopov). Kharkiv Region, Kharkiv, small pond in the Kharkiv city forest-park near Sarzhinka River. 50°01' N, 36°13' E. 29–30 April 2012, 5 males (Baranov).

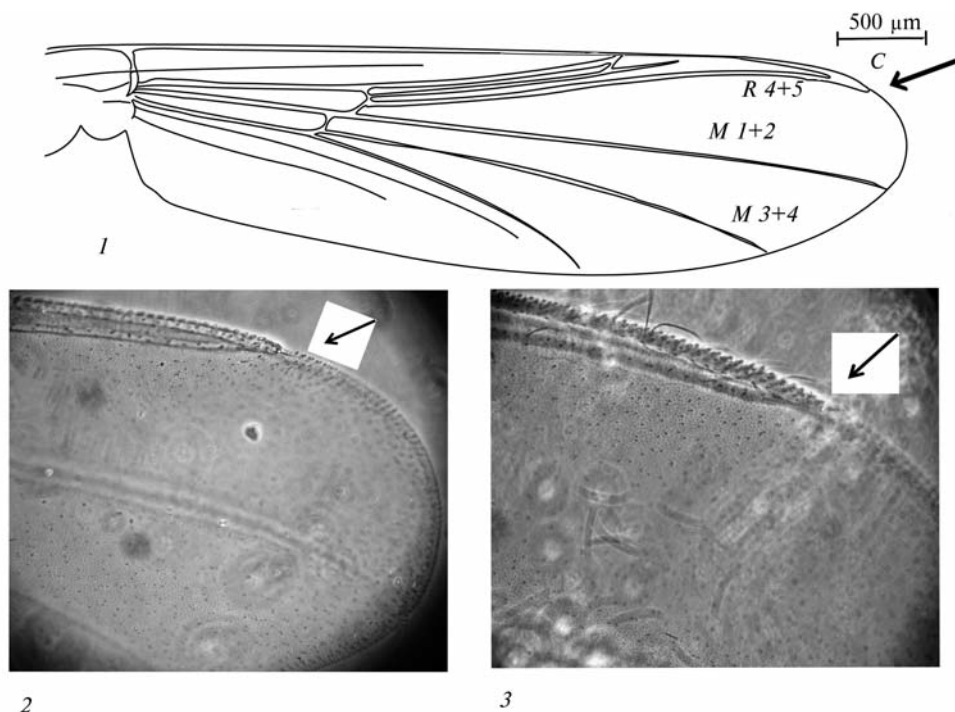


Fig. 1. *Parmerina* wings: 1 — *Parmerina* cf. *cingulata*; 2 — *P. minima* (Bergen University Museum ref. Chi/5365, Seychells, 29.08.02); 3 — *P. vallianti* (Bergen University Museum ref. Ch/10025, UAE Saharaj desert park 7.05.2005). Arrow indicates costal extension.

Рис. 1. *Parmerina*, крыло: 1 — *Parmerina* cf. *cingulata*; 2 — *P. minima* (Bergen University Museum ref. Chi/5365, Сейшельские о-ва, 29.08.02); 3 — *P. vallianti* (Bergen University Museum ref. Ch/10025, ОАЭ Сахарай пустыня 7.05.2005). Стрелка указывает на костальное расширение.

**Remarks.** Five males were collected along the shore of a small pond in an old clay pit, approximately 500 meters east from the Sarzhinka River. The adult males are morphologically in agreement with the description given by Fittkau (1962: 330), except for the presence of a long costal extension, which is uncommon unusual for this genus (Murray, Fittkau, 1989). Identification based on pharate male, on characters of hypopigium and pupal characters. Pupae of *Parmerina* is easy distinguishable from other Pentaneurini, based on the long genital sacs extended beyond the anal lobe (Valenduuk, Moller Pillot, 2007). The costal extension (about 200  $\mu\text{m}$ ) (fig. 1, 1) was observed in all five specimens. Study of Tanypodinae collection in the Bergen University Museum, shown, that males of some *Parmerina* species: *P. cf. testa* (Bergen University Museum ref. Ch/5362, Saether, Majorca); *P. minima* Kieffer, 1911 (Bergen University Museum ref. Chi/5365, Seychells, 29.08.02) (fig. 1, 2) and *P. vallianti* Fittkau 1962 (Bergen University Museum ref. Ch/10025, UAE Saharaj desert park 7.05.2005) (fig. 1, 3) also posses short to medium costal extension, however no such observation was done for *P. cingulata*. We will need to examine associated immature stages plus collect from other regions of Ukraine to determine if they represent new species.

**Distribution.** *P. cingulata* occurs in Europe, Middle East, Northern Africa, and Asia (Ashe, O'Connor, 2009).

### Genus *Procladius* Skuse, 1889

Genus *Procladius* is represented in Ukraine by 2 subgenera — *Holotanypus* and *Psilotanypus*, and 6 species (Baranov, 2011 a: 15). During this study we have collected one additional species of the subgenus *Psilotanypus*, from the Chernihiv Region.

***Procladius (Psilotanypus) flavifrons* Edwards, 1929 (fig. 2, 1)**

Locality. Ukraine: Chernihiv Region, Pakulske reservoir, near Lineja village. 50°01' N 36°13' E. 24.03.2011, 10 males; 21.04.2012, 51 males (Baranov).

Remarks. The species has the distinctive rounded outer basal margin of the gonostyle. Specimens were collected at along the shore of reservoir near (Pakulka River). Species is univoltine emerging in the spring, from March to April. Although, according to literature *P. flavifrons* is not always univoltine and can fly in Europe until August (Vallenduuk, Moller Pillot, 2007: 106)

Distribution. Europe and Russian Siberia (Ashe, O'Connor, 2009).

***Conchapelopia* Fittkau, 1957**

This genus of belongs to the tribe Pentaneurini and includes 16 Palearctic species, of which 8 have been reported from Europe (Ashe, O'Connor, 2009). This is the first record of the genus from Ukraine (Baranov, 2011 a).

***Conchapelopia melanops* (Meigen, 1818) (fig. 2, 2)**

Locality. Ukraine: Crimea, Bakhchisaray District, Belbek River near Aromat village, 44°57' N, 33°93' E, 21.08.2000, 1 pharate male (Prokopov); Kharkiv Region, Kharkiv, Sarzhinka River, Near Sarzhin Jar tract. 50°01' N, 36°13' E. 30.04.2012, 4 males (Baranov).

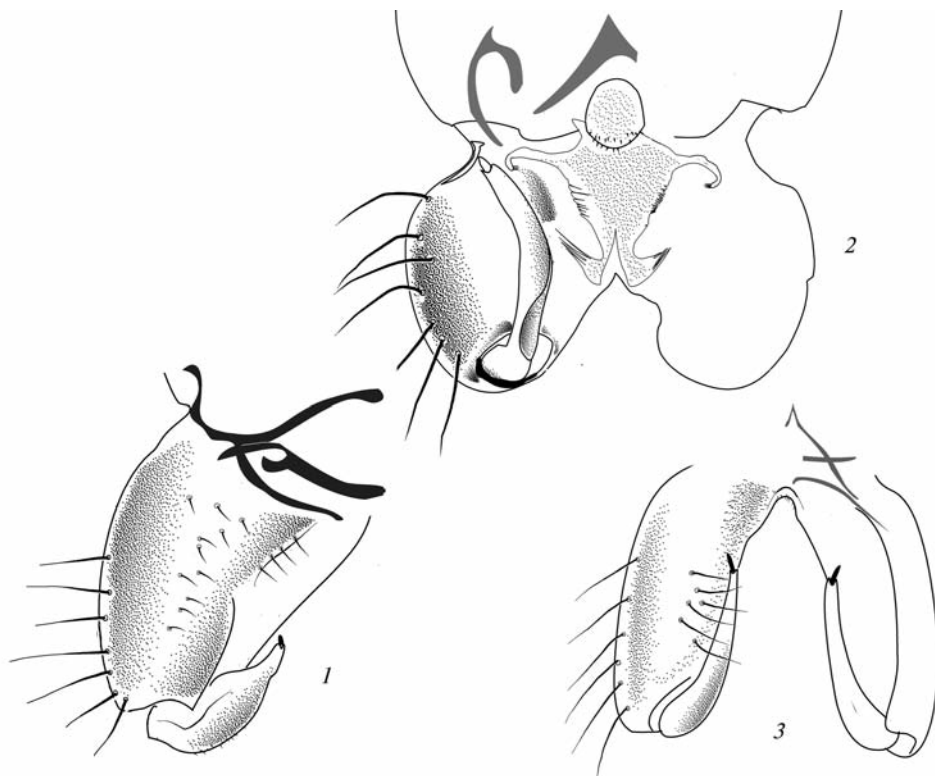


Fig. 2. Male hypopygium: 1 — *Procladius (Psilotanypus) flavifrons*; 2 — *Conchapelopia melanops*; 3 — *Paramerina* cf. *cingulata*.

Рис. 2. Гипопигий самцов: 1 — *Procladius (Psilotanypus) flavifrons*; 2 — *Conchapelopia melanops*; 3 — *Paramerina* cf. *cingulata*.

Remarks. A common and widely distributed species in central Europe. Specimens were collected next to a small pond near the bank of the Sarzhinka River. In Crimea, pupa was collected in the methartral zone of Belbek River. The pond shore has an extensive vegetation, *Phragmites australis* mainly. *C. melanops* could be distinguish from related species *Conchapelopia aagaardi* Murray, 1987 based on pale coloration of the body, and distally curved lateral arm of gonocoxite lobe (Langton, Pinder, 2007).

Distribution. Europe, Russian Siberia, Japan (Ashe, O'Connor, 2009).

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