

## A new species in the genus *Glyptotendipes* (Chironomidae: Chironomini): *Glyptotendipes (Caulochironomus) nagorskayae*

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With 7 figures

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**Schlagwörter:** *Caulochironomus*, *Glyptotendipes*, Chironomidae, Diptera, Insecta, Weißrussland, Morphologie, Taxonomie, Erstbeschreibung, Larve

The larva of the species *Glyptotendipes (Caulochironomus) nagorskayae* is described. In Moller Pillot et al. (2000) the species is named *Glyptotendipes (Caulochironomus) spec. Belarus*.

### 1 Introduction

In 1996 some larvae were collected in Belarus by Dr. Liuba Nagorskaya. Because of the very specific morphology of the larval ventromental plate it is certain that this species is unknown as larva. It is possible that it belongs to a species given as nomen dubium in Ashe and Cranston (1990: 284-285). The larva can be identified as *Glyptotendipes (Caulochironomus) spec. Belarus* using Moller Pillot et al. (2000), or a translation of it later made by the author.

### 2 Material and methods

The larvae were found in ditches in the area of Volchkovichy near Minsk, Belarussia (53° 45' N - 27° 20' E). Neither imagines nor pupal exuviae were collected. The morphology of the larva places the species in the subgenus *Caulochironomus*. Larvae of the species in this subgenus probably all mine in submerged stems and leaves of waterplants. During May 2013 Nagorskaya went back to the area to collect larvae for rearing to adult. She found that houses had been built and the original site was no more. In a pool larvae were collected and reared to adult but the species was not one of them.

### 3 Description (n = 2)

The larvae can easily be recognised as a *Glyptotendipes* by the concave anterior rim of the frons (Fig. 1 and 2: rim) in combination with the large triangulum occipitale (Fig. 1: TO) in the subgenera *Glyptotendipes* and *Caulochironomus*. Some characters for separating both subgenera are:

Subgenus *Glyptotendipes* (Fig. 1): Head capsule elongate; head dorsally with obvious pigmentation pattern; the posterior rim of the clypeus is straight (Fig. 1: Cl).

Subgenus *Caulochironomus* (Fig. 2): Head capsule roundish; head dorsally without a pattern, some weak pigmentation can be present; the posterior rim of the clypeus is concave (Fig. 2: Cl).

Morphological details and a key to all species will be provided in the forthcoming publication on the larvae of all genera in Chironomini (spring 2014). The morphological terminology used follows Cranston (2012, 2013).

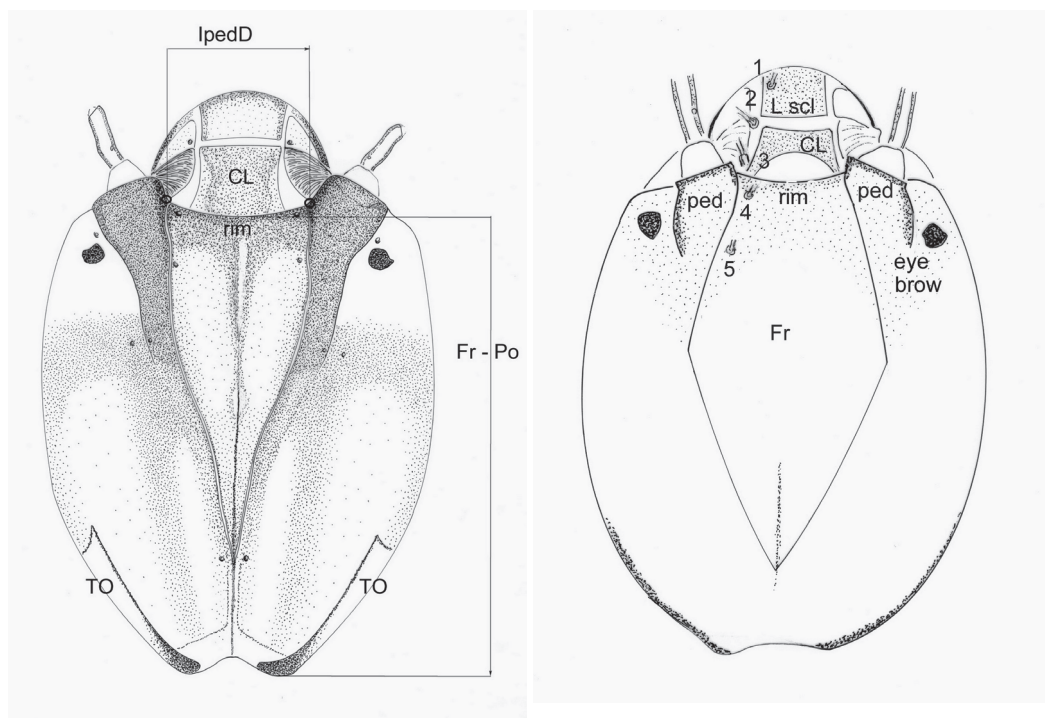


Fig. 1: *Glyptotendipes pallens* aggregate. Head dorsal. Fig. 2: *Glyptotendipes scirpi*, head dorsal

**Body.** Total length maximum 10,5 cm. No ventral tubules.

**Head capsule.** The colour of the capsule is dark yellow and without obvious pigmentation. The frons and the submentum are darkened. The clypeus is light brown and the labral sclerite is brownish. Eye brow pigmentation present but weak and relatively short (Fig. 2: eye brow). Anterior rim of the frons concave (Fig. 2: IS). Seta S1 next to the labral sclerite (Fig. 2: L scl); S2 between the labral sclerite and the lateral sclerites; S3 arises from a pedestal anterior to the antennal pedestal (Fig. 2: 1–5). Interdistance of the eye spots: 1.5–2x width of the lower spot. Total head length: 600–610  $\mu\text{m}$ . Head length Fr-Po: 350–390  $\mu\text{m}$  (Fig. 1: Fr-Po). Head width: 520–540  $\mu\text{m}$ . Width frons: 200–230  $\mu\text{m}$  (Fig. 2: Fr). Inter pedestal distance: 170–200  $\mu\text{m}$  (Fig. 1: IpedD). Length basal antennal segment: 80–90  $\mu\text{m}$  and its width: 25–30  $\mu\text{m}$ . Length of the flagellum: 68–76  $\mu\text{m}$ . Length antennal segment 2: 25–30  $\mu\text{m}$ . Width of the triangulum occipitale: 210–250  $\mu\text{m}$  and its length 50–60  $\mu\text{m}$  (Fig. 1 and 3: TO). Anterior rim of the maxillary plate straight (Fig. 4: MxPl).

**Labrum.** Clypeus posteriorly strongly concave (Fig. 2: Cl). The pecten epipharyngis consists of one plate with about 24 teeth unequal in length (Fig. 5: PE).

**Mouth parts.** The central mental tooth does not have accessory teeth nor is it crenated laterally. The lateral mental teeth gradually slope where tooth 4 is not lower than 5 (this tooth is usually lower in the whole genus) (Fig. 6). Width of the mentum: 125  $\mu\text{m}$ . Width of the central mental tooth: 23  $\mu\text{m}$ . Width of the first lateral mental tooth: 12.5  $\mu\text{m}$ . Mandible with 3 light brown inner teeth (Fig. 7: MiT). Apical mandibular tooth dark brown (Fig. 7: MaT). Dorsal mandibular tooth dark yellow (Fig. 7: MdT).

**Postmentum.** Length of the postmentum: 280–300  $\mu\text{m}$  (Fig. 4: PM). The anterior margin of the ventromental plate is smooth. Width of the ventromental plate: 224–250  $\mu\text{m}$ . There is no

inter ventromental plate distance because both median ends are overlapping (Fig. 6: IPD), a character unique within this genus (possibly within all Chironomini).

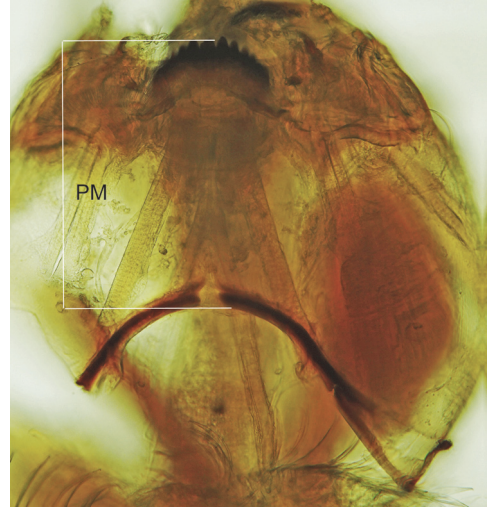


Fig. 3: *Glyptotendipes nagorskayae*. Head dorsal.

Fig. 4: *Glyptotendipes nagorskayae*. Postmentum

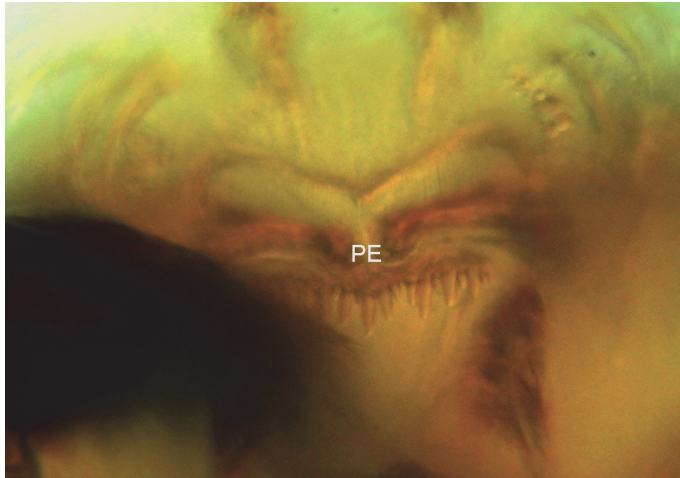


Fig. 5: *Glyptotendipes nagorskayae*. Pecten epipharyngis

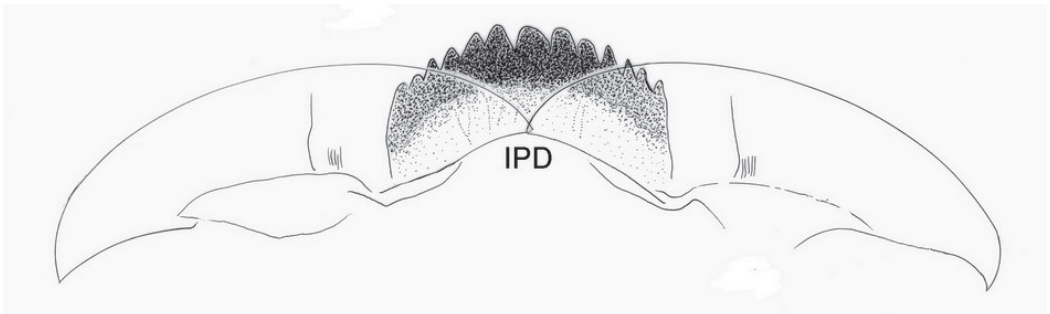
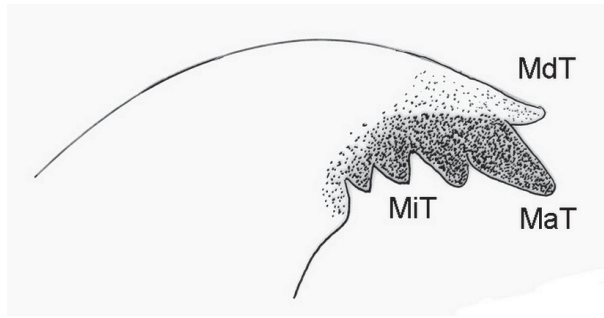


Fig. 6: *Glyptotendipes nagorskayae*. Median ends of ventromental plates overlapping



**Fig. 7: *Glyptotendipes nagorskayae*. Mandible**

#### **4 Derivatio nominis**

The new species is dedicated to the finder Dr. Liuba Nagorskaya.

The type material is stored in the collection of the Zoologische Staatssammlung München (Germany).

#### **5 Discussion**

Unfortunately only the larva is known up to now. It is needed to rear larvae for finding the other stages.

#### **Acknowledgements**

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