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## Contribution to the caddis fauna (Trichoptera) of the Vologda Region, Russia.

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The Vologda Region is a large territory (total area 145.700 km<sup>2</sup>) situated in northwestern Russia. It stretches from north to south for 385 km and from west to east 650 km. This region is thus comparable to a country such as Greece. The predominant type of relief in this territory is plain with occasional hills and heights. The area has a wealth of water resources, which are represented by 1287 rivers and 4240 lakes with an total area of 294 km<sup>2</sup>. The largest water reservoirs belong to the Atlantic and Arctic Ocean Basins, and the Caspian Sea Basin, with the North Dvina River, Onega Lake, and Rybinsk Reservoir systems as the main water collectors. There are more than 18000 brooks in this region. The area is located in the zone of middle and southern taiga (Reference information 2017; Vologda region 2017).

Despite the relative accessibility and position close to major scientific centres in Russia, this territory is almost unexplored in relation to the fauna of Trichoptera. The Red Data Book of this area (BOLOTOVA & al. 2010) includes only one Trichoptera species (*Semblis phalaenoides*). Apparently, there are some samples of Trichoptera hidden in the local high schools and awaiting determination. Areas adjacent to the Vologda Region are studied quite well. For comparison: the fauna of the Leningrad region has 177 species and that of Karelia 188 species (IVANOV 2011).

This short publication is the contribution to the fauna of all three major basins: Vytegra belongs to Onega Lake (Atlantic Basin), Ferapontovo and Kirillov to Caspian, and Totma to Arctic Basin; 24 species of caddisflies from 11 families were noted in these localities. The material was collected in August 2011 and June 2013. The material is stored in the collections of the Zoological Institute of the Russian Academy of Sciences in Sankt Petersburg.

### Sampling localities in Russia, Vologda Region:

Loc.1: 25 km N from settlement Vytegra, Onega Lake, 2 km from the village Ustie, 61.206299°N, 36.422159°E, 14.8.2011, UV light traps, altitude 35m, leg. Melnitsky

Loc.2: 25 km N from settlement Vytegra, village Shchekino, Tudoszero Lake, 61.190605°N, 36.472898°E, 14.8.2011, UV light traps, altitude 40m, leg. Melnitsky

Loc.3: Kirillov, NE Siverskoe Lake, 59.857792°N, 38.364667°E, 11.8.2011, UV light traps, altitude 115m, leg. Melnitsky

Loc.4: Ferapontovo, Borodaevskoe lake, 59.955238°N, 38°56'40.77"E, 12.8.2011, UV light traps, altitude 125m, leg. Melnitsky

Loc.5: Ferapontovo, stream, 59.955345, 38.569141°E, 12.8.2011, UV light traps, altitude 130m, leg. Melnitsky

Loc.6: Totma, river Kovda, 59.974298°N, 42.734921°E, 3.6.2013, altitude 110m, leg. Melnitsky

### The list of species:

#### Hydropsychidae

*Hydropsyche angustipennis* Loc.5 – 36♂, 23♀

#### Ecnomidae

*Ecnomus tenellus* Loc.1 – 2♂, 1♀; loc.2 – 1♂; Loc.3 – 1♂, 6♀; Loc.4 – 1♂, 1♀

#### Psychomyiidae

*Psychomyia pusilla* Loc.5 – 2♂, 2♀

#### Polycentropodidae

*Cyrnus flavidus* Loc.1 – 5♂, 7♀; Loc.2 – 4♂

*Polycentropus flavomaculatus* Loc.1 – 5♂, 3♀; Loc.3 – 1♀

#### Rhyacophilidae

*Rhyacophila nubila* Loc.1 – 6♂, 13♀

#### Hydroptilidae

*Agraylea multipunctata* Loc.2 – 1♂

*Agraylea sexmaculata* Loc.2 – 2♂

*Oxyethira flavicornis* Loc.1 – 16♀; Loc.4 – 1♂, 2♀

#### Phryganeidae

*Agrypnia obsoleta* Loc.2 – 7♂; Loc.4 – 1♂

*Phryganea grandis* Loc.2 – 2♀

#### Lepidostomatidae

*Lepidostoma hirtum* Loc.1 – 1♀

#### Limnephilidae

*Asynarchus thedenii* Loc.1 – 1♂

*Limnephilus extricatus* Loc.3 – 2♂, 1♀

*Limnephilus rhombicus* Loc.6 – 1♀

#### Molannidae

*Molanna angustata* Loc.2 – 5♂

#### Leptoceridae

*Athripsodes cinereus* Loc.6 – 1♀

*Athripsodes commutatus* Loc.1 – 2♂

*Ceraclea annulicornis* Loc.1 – 2♀

*Ceraclea dissimilis* Loc.1 – 23♂, 16♀; Loc.4 – 6♂, 5♀; Loc.5 – 2♀

*Ceraclea senilis* Loc.4 – 1♂

*Mystacides longicornis* Loc.3 – 2♂, 1♀

*Oecetis lacustris* Loc.2 – 6♂; Loc.3 – 1♂; Loc.4 – 2♂

*Oecetis ochracea* Loc.2 – 41♂; Loc.4 – 1♂

**Discussion.** The above list represents generally the most common species in this region because both the number of localities and the sampling time were low. These species belong to the typical European boreal fauna of Trichoptera widespread across northern Europe (DE MOOR & IVANOV 2008). Most of them occur also in the Leningrad district except for *Asynarchus thedenii* which is the northern component of the fauna known also from Karelia and Kola peninsula (IVANOV 2011) and the Vologda Region is the most southern point of its extension. There is only one species of *Hydropsyche* recorded in the list of potential eight species probably living in the region; these species have rather short flight periods so can be occasionally missing. The sample

from Onega Lake gave a number of *Rhyacophila nubila* apparently adapted for living on the lakeshore. This species is known also from Ladoga Lake. The number of Leptoceridae species exceeds that in other families. These 24 species are just a fraction of the potential 200 species expected from the Vologda Region.

## References

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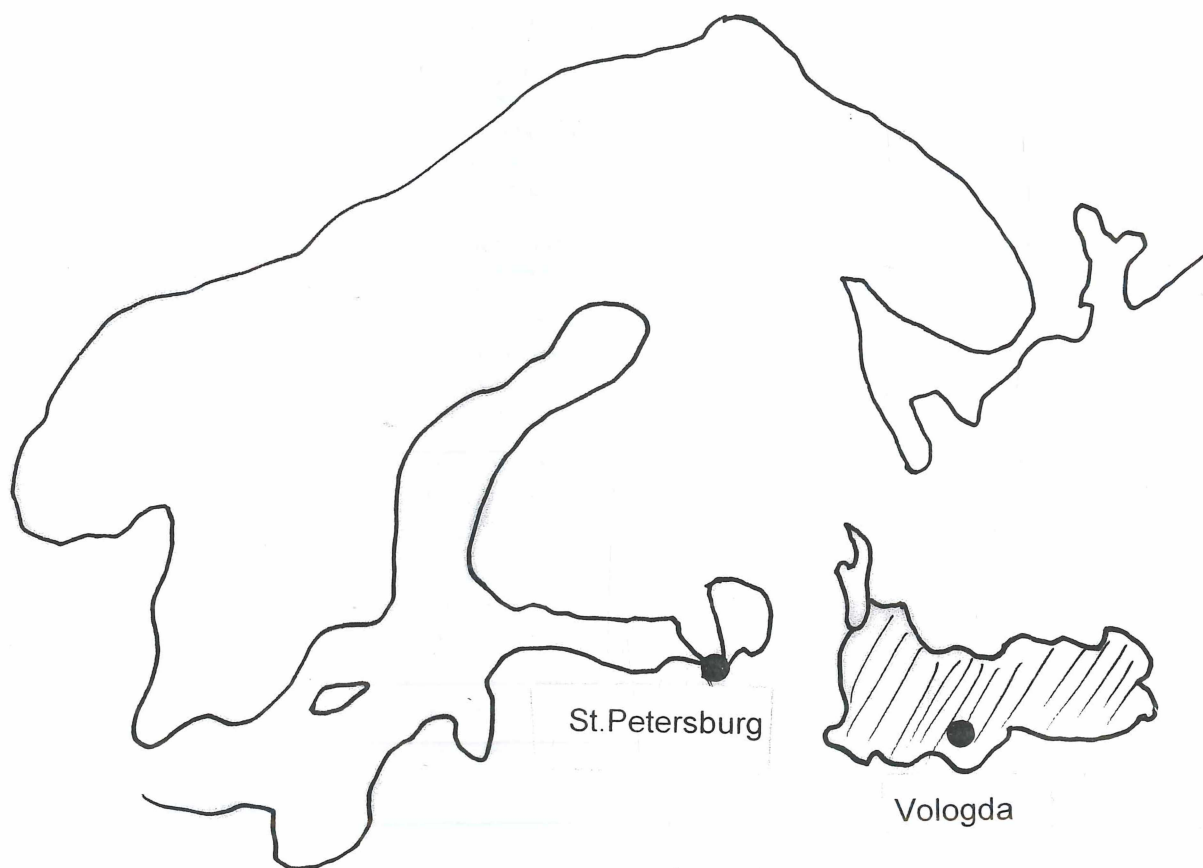
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