

## First records of chironomids (Diptera, Chironomidae) from Slovakia

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According to the latest checklist, 351 chironomid species are known in Slovakia (BITUŠÍK, 2004). However, since that time, several faunistic records have been published (BITUŠÍK, 2006). This paper refers about eleven chironomid species first recorded from Slovakia.

Chironomid pupal exuviae accumulated along the river bank were collected from the water surface by a drift net (300 µm). Larvae and pupae were collected using a hand net (frame 25 × 25 cm, mesh size 250 µm) disturbing the substrate. The material collected was placed into a plastic bottle, labeled and preserved with 75% ethanol. Pupal exuviae, pupae and larvae were mounted on slides and identified using the key by LANGTON (1991), WIEDERHOLM (1983) and MICHIELS & SPIES (2002). Material is deposited in collections of the first two authors.

Composition of the bottom sediment was estimated based on the criteria defined by the EU Water Framework Directive (AQEM CONSORTIUM, 2002)

Tanypodinae – Pentaneurini

*Ablabesmyia longistyla* Fittkau, 1962

Material examined: C Slovakia, Štiavnické vrchy Mts; all specimens collected from the following man-made reservoirs: Červená studňa (48°28'07" N, 18°53'06" E), shallow reservoir overgrown with macrophytes, 787 m a.s.l., 2 pupal exuviae, 30.V.2004; Klinger (48°27'06" N, 18°53'09" E), dimictic reservoir, max. depth 20 m, 2.1 ha, 682 m a.s.l., 1 pupal exuvium, 31.VIII.2005, leg. M. Čerňanská, det. P. Bitušík; Bakomi (48°26'04" N, 18°51'14" E), 711 m a.s.l., 2 pupal exuviae, 28.VII.2004; Vindšachta (48°26'05" N, 18°51'35" E), dimictic reservoir, max. depth 13.5 m, 4.4 ha, 687 m a.s.l., 2 pupal exuviae, 29.V.2005; Malá Richňava (48°25'47" N, 18°50'44" E), shallow reservoir overgrown with macrophytes, 725 m a.s.l., 1 pupal exuvium, 28.VII.2004; Veľká Richňava (48°25'39" N, 18°50'50" E), dimictic reservoir, max. depth 21.0 m, 8.1 ha, 725 m a.s.l., 2 pupal exuviae, 26.VIII.2004, leg. K. Buchláková, det. P. Bitušík.

Remarks: Common species, larvae mainly in stagnant waters (LANGTON & VISSER, 2003), although they can be found in streams, too (FITTKAU, 1962).

Distribution: Palaearctic species, widely distributed in Europe (SÆTHER & SPIES, 2004).

*Conchapelopia hittmairorum* Michiels et Spies, 2002

Material examined: C Slovakia, the Hron River near Kalná nad Hronom village (48°12'22" N, 18°31'08" E), 160 m a.s.l., riparian and medial zone of the channel with the main width 29 m, main depth 1 m, composition of the bottom sediment: boulders 5%, cobbles 50%, pebbles 20%, gravel 5% and sand 20%, 2 pupae, 15.VI.2005, leg. M. Mláka, det. L. Hamerlík; the Hron River near Žarnovica village (48°30'12" N, 18°44'52" E), 220 m a.s.l., riparian and medial zone of the channel with the main width 25 m, main depth 1 m, composition of the bottom sediment: cobbles 10%, pebbles 50%, gravel 35% and sand with mud 5%, 1 pupa, 30.V.2005, leg. M. Mláka, det. L. Hamerlík. Pupal exuviae (determined as *Conchapelopia* Pel Langton, 1991) were collected from other sites of the Hron River in the past (BITUŠÍK, 1997).

Remarks: Preimaginal stages occur in the lower rhithral to upper potamal regions of summerwarm, mesosaprobic rivers (MICHIELS & SPIES, 2002).

Distribution: Widely distributed in Europe (MICHIELS & SPIES, 2002).

*Hayesomyia tripunctata* (Goetghebuer, 1922)

Material examined: C Slovakia, the Hron River near Kalná nad Hronom village (48°12'22" N, 18°31'08" E), 160 m a.s.l., riparian and medial zone of the channel with the main width 29 m, main depth 1 m, composition of the bottom sediment: boulders 5%, cobbles 50%, pebbles 20%, gravel 5% and sand 20%, 2 pupae, 15.VI.2005, leg. M. Mláka, det. L. Hamerlík.

Remarks: Immature stages are found in running waters, especially in medium sized rivers (FITTKAU & MURRAY, 1986).

Distribution: Western Palaearctic species (SÆTHER & SPIES, 2004).

*Rheopelopia maculipennis* (Zetterstedt, 1838)

Material examined: C Slovakia, channel of the Štiavnica River near the mouth of the Ipeľ River (48°05'23" N, 18°52'14" E), 125 m a.s.l., riparian and medial zone of the channel with the main width 5 m, main depth 0.8 m, composition of the bottom sediment: boulders 5%, cobbles 10%, pebbles 30%, gravel 5% and sand 50%, under industrial and agricultural influences, 2 pupae, 8.VI.2005, leg. M. Mláka, det. L. Hamerlík.

Remarks: Typical dweller of lotic waters (prefers small, fast flowing and montane rivers) however, occurs also in northern and montane lakes, larvae polyoxybiontic and eurythermic (FITTKAU, 1962; FITTKAU & MURRAY, 1986; LANGTON, 1991).

Distribution: Palaearctic species (SÆTHER & SPIES, 2004).

#### Chironominae – Chironomini

##### *Dicrotendipes tritonus* (Kieffer, 1916)

Material examined: C Slovakia, Štiavnické vrchy Mts, pupal exuviae were collected from the following man-made reservoirs: Červená studňa (48°28'07" N, 18°53'06" E), shallow reservoir overgrown with macrophytes, 787 m a.s.l., 1 pupal exuvium, 30.V.2004; Belianska nádrž (48°28'19" N, 18°54'55" E), dimictic reservoir, max. depth 18 m, 2.3 ha, 557 m a.s.l., 1 pupal exuvium, 30.VII.2004, leg. M. Čerňanská; Vindsächta (48°26'05" N, 18°51'35" E), dimictic reservoir, max. depth 13.5 m, 4.4 ha, 687 m a.s.l., 2 pupal exuviae, 26.VIII.2004; Veľká Richňava (48°25'39" N, 18°50'50" E), dimictic reservoir, 725 m a.s.l., 1 pupal exuvium, leg. K. Buchláková, det. P. Bitušík; C Slovakia, Turčianska kotlina basin, pond on an exploited fen near Ivančiná village (48°54'41" N, 18°49'9" E), 459 m a.s.l., 6 pupal exuviae, 14.VII.2005; pool overgrown with macrophytes, exploited fen near Ivančiná village (48°54'44" N, 18°48'11" E), 457 m a.s.l., 2 pupal exuviae, 14.VII.2005, leg. et det. P. Bitušík.

Remarks: Scarcer species than relatives *D. modestus* and *D. nervosus*. Larvae in stagnant, mostly eutrophicated waters, also found in deeper reservoirs (CONTRERAS-LICHTENBERG, 1986).

Distribution: Holarctic species, widely distributed in Europe (SÆTHER & SPIES, 2004).

##### *Lipiniella araneicola* Shilova, 1961

Material examined: W and SW Slovakia, left bank of the Morava River upstream of Kúty village (48°41'12" N, 16°59'22" E), 150 m a.s.l., stretch of the river represents a border between the Czech Republic (Moravia) and Slovakia. The current velocity is moderate, the river bottom consists mainly of fine sediments, 3 pupal exuviae, 19.VIII.2005, leg., det. et coll. L. Hamerlík; the Váh River in Komárno (47°45'32" N, 18°08'39" E), 110 m a.s.l., riparian and medial zone of channel with the main width 60 m, main depth above 2 m, composition of the bottom sediment: boulders 10%, cobbles 30%, pebbles 20%, gravel 20% and sand 20%, 4 larvae, 10.X.2005, leg. M. Haviar, det. L. Hamerlík.

Remarks: Inhabits fresh or brackish stagnant waters with sandy substratum (LANGTON, 1991).

Distribution: Distributed in Palaearctic region (ASHE & CRANSTON, 1990; SÆTHER & SPIES, 2004).

##### *Parachironomus vitiosus* (Goetgheuber, 1921)

Material examined: C Slovakia, Štiavnické vrchy Mts, Evička reservoir (48°26'04" N, 18°51'54" E), dimictic man-made reservoir, max. depth 10.0 m, 2.0 ha, 662 m a.s.l., 1 pupal exuvium, 25.V.2005, leg. K. Buchláková, det. P. Bitušík.

Remarks: Larvae in stagnant and slow flowing waters (LEHMANN, 1970; LANGTON & VISSER, 2003).

Distribution: Holarctic species, widely distributed in Europe (SÆTHER & SPIES, 2004).

##### *Parachironomus tenuicaudatus* (Malloch, 1915)

Material examined: C Slovakia, Turčianska kotlina basin, pond on an exploited fen near Ivančiná village (48°54'41" N, 18°49'9" E), 459 m a.s.l., 1 pupal exuvium, 14.VII.2005, leg. et det. P. Bitušík.

Remarks: Larvae inhabit lakes and small reservoirs, prefer littoral overgrown with macrophytes (LEHMANN, 1970).

Distribution: Holarctic species, widespread in Europe (SÆTHER & SPIES, 2004).

##### *Paralauterborniella nigrohalteralis* (Malloch, 1915)

Material examined: W and SW Slovakia, left bank of the Morava River upstream of Devínska Nová Ves village (48°12'25" N, 16°57'59" E). 136 m. a.s.l., the river stretch represents a border between Austria and Slovakia. The current velocity is moderate, the river bottom consists mainly of fine sediments, 1 pupal exuvium, 19.VIII.2005, leg. et det. L. Hamerlík; the Ipel River near Salka village (47°53'45" N, 18°45'09" E), 110 m a.s.l., main width of the channel 25 m, main depth above 1 m, composition of the bottom sediment: cobbles 10%, pebbles 10%, gravel 30%, sand 30% and mud 20%, 6 larvae, 9.V.2005, leg. M. Haviar, det. L. Hamerlík.

Remarks: Preimaginal stages occur in soft sediment of lake littoral and rivers, to some extent also in aufwuchs of stones (LANGTON, 1991; PANKRATOVA, 1983; PINDER & REISS, 1983).

Distribution: Worldwide – Holarctic, Afro-tropical, Neotropical, and Oriental regions (ASHE & CRANSTON, 1990; SÆTHER & SPIES, 2004).

##### *Tanytarsus lactescens* Edwards, 1929

Material examined: C Slovakia, Štiavnické vrchy Mts, Červená studňa reservoir (48°28'07" N, 18°53'06" E), shallow man-made reservoir overgrown with macrophytes, 787 m a.s.l., 1 pupal exuvium, 30.V.2004, leg. M. Čerňanská, det. P. Bitušík.

Remarks: Preimaginal stages known from lakes (LANGTON & VISSER, 2003).

Distribution: European species (SÆTHER & SPIES, 2004).

##### *Zavrelia pentatoma* Kieffer, 1913

Material examined: C Slovakia, Štiavnické vrchy Mts, Krehcsengrundská nádrž reservoir (48°26'17" N, 18°51'26" E), small, shallow man-made reservoir overgrown with macrophytes, 740 m a.s.l., 1 pupal exuvium, 25.V.2004, leg. K. Buchláková, det. P. Bitušík.

Remarks: Larvae inhabit pools and ditches (LANGTON & VISSER, 2003).

Distribution: Palaearctic species (SÆTHER & SPIES, 2004)

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