

New faunistic records of Trichoptera (Insecta) from the Czech Republic, III

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CHVOJKA P., KOMZÁK P. & ŠPAČEK J. 2009: New faunistic records of Trichoptera (Insecta) from the Czech Republic, III. *Acta Musei Moraviae, Scientiae biologicae* (Brno) **94**: 81–85. – Three species, *Synagapetus dubitans* McLachlan, 1879, *Apatania carpathica* Schmid, 1954 (both from Moravia), and *Drusus chrysotus* (Rambur, 1842) (from Bohemia), are reported from the Czech Republic for the first time, while *Hydroptila occulta* (Eaton, 1873), *Hydropsyche tenuis* Navás, 1932, *Setodes punctatus* (Fabricius, 1793), and *Oecetis testacea* (Curtis, 1834) are new records for Moravia. New faunistic data on several rare species are also provided.

Key words. Trichoptera, Czech Republic, Bohemia, Moravia, faunistics, new records

Introduction

Two hundred and fifty-two species of caddis flies have been recorded from the territory of the Czech Republic to date (CHVOJKA & KOMZÁK 2008). Extensive faunistic research in the Czech Republic has resulted in the discovery of three additional species as well as records of some rare species. The main object of this paper is to present these new records in detail. Codes of the central European mapping grid (EHRENDORFER & HAMANN 1965) follow PRUNER & MÍKA (1996)

Synagapetus dubitans McLachlan, 1879

Eastern Moravia: source area, Bílé potoky Nature Reserve 3 km SE Valašské Klobouky (6874), 450 m a.s.l., Malaise trap, 25.vi.–19.vii.2006, 1 ♀, M. Omelková et J. Bojková leg., P. Komzák det. et coll.; source area 3 km ESE Nedašov (6874), 630 m a.s.l., 24.viii.2006, 3 ♂ 3 ♀, P. Chvojka leg. et det., coll. National Museum, Prague.

Southern Moravia: source area near Trstná brook 1 km NW Vápenice (7072), 450–480 m a.s.l.: 18.vi.2007, 1 ♀, P. Chvojka leg. et det., coll. National Museum, Prague; 18.x.2008, 1 ♂, P. Komzák leg., det. et coll.; source area 1.6 km N Mikulčín hill (7072), 585 m a.s.l.: 31.v.2008, 3 ♂ 1 ♀; 27.vi.2008, 2 ♂; all P. Komzák leg., det. et coll.; source area, V Krátkých Nature Monument, Vápenice (7072), 490 m a.s.l.: 31.v.2008, 2 ♂ 1 ♀; 10.viii.2008, 1 ♀; all P. Komzák leg., det. et coll.; source area Hrubý Mechnáč 1 km SW Mikulčín hill (7072), 640 m a.s.l., Malaise trap, 22.vii.–12.viii.2007, 1 ♀, M. Omelková et J. Bojková leg., P. Komzák det. et coll.; source area, Vyškovec (7073), 600 m a.s.l.: 24.vi.2007, 5 ♂ 6 ♀, P. Komzák leg., det. et coll.; 13.vii.2007, 1 ♀, P. Chvojka leg. et det., coll. National Museum, Prague.

Remarks. New species for the Czech Republic. Known from central and western Europe, including Germany, Austria, Slovenia, northern Italy, Switzerland, and France. New findings extend the range towards the north-east.

***Ptilocolepus granulatus* (Pictet, 1834)**

Eastern Moravia: Burkov – fen meadow (6477), 610 m a.s.l., Malaise trap, 9.vi.–10.vii.2006, 1 ♀, M. Omelková et J. Bojková leg., P. Komzák det. et coll.; Morávka stream above Uspolka (6477), 535 m a.s.l., 25.vi.2006, 1 ♂; Morávka stream above Juřičuna (6477), 605 m a.s.l., 12.vi.2007, 1 ♂; both J. Kroča leg. et coll., P. Komzák det.

Remarks. Known from central Europe, the Pyrenees, and the Apennine Peninsula; also widely distributed in Bohemia, but has not been published from Moravia so far. SÝKORA (1954) mentioned this species from the Moravskoslezské Beskydy Mts., however this unpublished report was omitted from previous checklists. The occurrence of this species in the Moravskoslezské Beskydy Mts. is now proven by other findings.

***Hydroptila occulta* (Eaton, 1873)**

Eastern Bohemia: Divoká Orlice river, Orlické Záhoří-Trčkov (5664), 695 m a.s.l., at light, 17.vii.2007, 4 ♂ 2 ♀, P. Chvojka et J. Špaček leg., P. Chvojka det., coll. National Museum, Prague.

Southern Moravia: Velička river above Javorník-Petruchovy Mlýny (7171), 345 m a.s.l., at light, 14.ix.2009, 1 ♂, P. Chvojka leg. et det., coll. National Museum, Prague.

Remarks. New species for Moravia. Species widely distributed in Europe and Turkey, also known from Central Asia. Very rare species in the Czech Republic, formerly known only from Bohemia (critically endangered species – CHVOJKA *et al.* 2005); it has not been found there since the 1960s (NOVÁK in litt.).

***Wormaldia copiosa* (McLachlan, 1868)**

Northern Moravia: Branná stream above Petříkov (5768), 850 m a.s.l., 2.viii.2008, 1 ♂, P. Komzák leg., det. et coll.

Remarks. Known from central Europe and northern Italy. Rare species in the Czech Republic (endangered species – CHVOJKA *et al.* 2005), no recent findings from Bohemia; from Moravia it has been recorded to date only in the Moravskoslezské Beskydy Mts. (KOMZÁK *et al.* 2006).

***Wormaldia subnigra* McLachlan, 1865**

Central Bohemia: Vůznic stream NW Nižbor (5949), 250 m a.s.l., 15.ix.2006, 5 ♂, P. Chvojka leg. et det., coll. National Museum, Prague.

Remarks. A European species, known also from Turkey and Lebanon. Very rare species in the Czech Republic (critically endangered species – CHVOJKA *et al.* 2005), last known

records from Bohemia and Moravia are from the middle of the 20th century (CHVOJKA & NOVÁK 2001).

***Hydropsyche tenuis* Navás, 1932**

Northern Moravia: Krupá stream above Nová Seninka (5767), 630 m a.s.l., at light, 31.vii.2008, 1 ♂, P. Komzák leg., det. et coll.

Remarks. New species for Moravia. Distributed in central Europe and the Apennine Peninsula, published for the first time only recently from the Czech Republic (Bohemia) (CHVOJKA & NOVÁK 2001).

***Apatania carpathica* Schmid, 1954**

North-eastern Moravia: Morávka stream 0.4 km NW Sulov hill (6477), 830 m a.s.l., 2.ix.2006, 4 ♂ 8 ♀, J. Kroča leg., P. Komzák det. et coll.; Oldřichovický brook 0.9 km NE Javorový hill (6377), 700 m a.s.l., Malaise trap: viii.–ix.2007, 2 ♂; ix.–x.2007, 1 ♂; spring area of Bučací brook (6476), 1050 m a.s.l., 7.viii.2007, 3 ♂ 4 ♀; all J. Kroča leg. et coll., P. Komzák det.

Remarks. New species for the Czech Republic. This species, known from the Carpathians and Bosnia, reaches the western limit of its distribution in north-eastern Moravia.

***Drusus chrysotus* (Rambur, 1842)**

Southern Bohemia: tributary of Černé jezero lake (6845), 1015 m a.s.l., 15.v.2007, 1 ♂ 2 ♀, P. Chvojka leg. et det., coll. National Museum, Prague.

Remarks. New species for the Czech Republic. Widely distributed in the Alps, known also from the Bayerischer Wald Mts., Fichtelgebirge Mts., and Thüringer Wald Mts. New record extends its range to the Bohemian Forest Mts. (Šumava Mts.).

***Annitella thuringica* (Ulmer, 1909)**

Western Bohemia: Černá voda stream below Kovářská (5544), 772 m a.s.l., 4.x.2007, 1 ♂, J. Bojková leg., P. Komzák det. et coll.

Remarks. Known from Germany, Austria, Czech Republic, Slovakia, and Poland. Rare species in the Czech Republic; there are only three published records from northern Bohemia and northern Moravia (NOVÁK 1964, OBR 1969).

***Acrophylax sowai* Szczęsny, 2007**

Northern Moravia: headwater stretch of the River Morava below Mt. Králický Sněžník (5867), 1100 m a.s.l.: 29.v.2003, 1 ♀; Malaise trap, 12.v.–3.vi.2004, 1 ♂; all P. Chvojka leg. et det., coll. National Museum, Prague.

Remarks. SZCZĘSNY (2007) revised original material of *Acrophylax vernalis* Dziędzielewicz, 1912 from the type locality in the Eastern Carpathians and revealed differences between these specimens and those from the Western Carpathian populations, which were subsequently described as *A. sowai* Szczęsny, 2007. An isolated population from Mt. Králický Sněžník (Eastern Sudetenland) (formerly reported as *A. vernalis* by CHVOJKA & NOVÁK (2001)) also belongs to this taxon (the new material cited above).

***Acrophylax zerberus* Brauer, 1867**

Southern Bohemia: tributary of Laka Lake (6845), 1090 m a.s.l., 15.v.2007, 1 ♂, P. Chvojka leg. et det., coll. National Museum, Prague.

Remarks. Species known from mountain ranges in Austria, Germany, Switzerland, France, Italy, Czech Republic (Bohemia), Slovakia, and Poland. In the Czech Republic, only two specimens have been collected, in the Bohemian Forest Mts. (Šumava Mts.) to date (NOVÁK 1964).

***Ylodes simulans* (Tjeder, 1929)**

Northern Bohemia: Ploučnice river N Žizník (5353), 250 m a.s.l., 2.viii.2007, 1 ♂ 1 ♀, J. Bojková leg., P. Komzák det. et coll.

Remarks. This species, known from most of Europe, was once considered regionally extinct in the Czech Republic (CHVOJKA *et al.* 2005). However, it was very recently rediscovered in the Smědá river (CHVOJKA 2008) and new findings have been made from the Ploučnice river in northern Bohemia.

***Setodes punctatus* (Fabricius, 1793)**

Eastern Bohemia: Labe river, Němčice (5960), 220 m a.s.l., 8.vi.2009, 1 larva, V. Havlíček leg., J. Špaček det. et coll.

Southern Moravia: 3.5 km SE Břeclav (7267), 155 m a.s.l., at light, 16.vii.2004, 2 ♀; Dyje river 3.75 km S Břeclav (7267), 155 m a.s.l.: 2.x.2006, 1 larva; 27.iv.2007, 14 larvae; all P. Komzák leg., det. et coll.; 1 km N Hnanice (7161), 310 m a.s.l., light trap: 5.vii.2004, 1 ♂ 1 ♀; 8.vii.2004, 4 ♂ 3 ♀; 9.vii.2004, 3 ♂ 4 ♀; 10.vii.2004, 1 ♂; 18.vii.2004, 3 ♂; 21.vii.2004, 1 ♂; 13.viii.2004, 1 ♀; 20.viii.2004, 1 ♂; all J. Šumpich leg., P. Komzák det. et coll.

Remarks. New species for Moravia, rediscovered in Bohemia. This species, widely distributed from Europe through Turkey, Iran, Russia to northern China, was also once considered regionally extinct in the Czech Republic (CHVOJKA *et al.* 2005).

***Oecetis testacea* (Curtis, 1834)**

Western Moravia: Herálec-Kocanda (6361), 654 m a.s.l., light trap, 19.vii.2003, 1 ♂, P. Bína leg., P. Komzák det. et coll.

Eastern Moravia: Moravice river 2.5 km S Žimrovice (6173), 305 m a.s.l.: 22.iv.2007, 1 larva; 22.ix.2007, 8 larvae; all P. Komzák leg., det. et coll.

Remarks. New species for Moravia. Widely distributed throughout most of Europe, eastwards to Far East. Rare species in Bohemia (CHVOJKA 2008, CHVOJKA & KOMZÁK 2006, CHVOJKA & NOVÁK 2001).

Acknowledgements

We are very grateful to Pavel Bína, Jindřiška Bojková, Jiří Kroča, Markéta Omelková, and Jan Šumpich for valuable Trichoptera material. Their collections resulted from research projects supported by grants GACR 206/06/1133 (to J. Bojková), MSM 0021622416 (to J. Bojková and M. Omelková) and MZP 0002071101 (to J. Kroča). The study carried out by P. Chvojka was supported by the Ministry of Culture of the Czech Republic (project No. MK00002327201).

References

- CHVOJKA P. 2008: Chrostíci (Trichoptera) Jizerských hor a Frýdlantska (Trichoptera of the Jizerské hory Mts and Frýdlant region (northern Bohemia, Czech Republic)). *Sborník Severočeského Muzea, Přírodní Vědy* (Liberec) **26**: 49–77 (in Czech, Engl. summ.).
- CHVOJKA P. & KOMZÁK P. 2006: Chrostíci (Trichoptera) CHKO Kokořínsko (Caddisflies (Trichoptera) of Kokořínsko Protected Landscape Area). *Bohemia centralis* (Praha) **27**: 355–363 (in Czech, Engl. abstr.).
- CHVOJKA P. & KOMZÁK P. 2008: The history and present state of Trichoptera research in the Czech Republic. *Ferrantia, Travaux scientifiques du Musée national d'histoire naturelle Luxembourg* **55**: 11–21.
- CHVOJKA P. & NOVÁK K. 2001: Additions and corrections to the checklist of Trichoptera (Insecta) from the Czech and Slovak Republics. *Acta Musei Nationalis Pragae, Series B, Historia Naturalis* **56**[2000]: 103–120.
- CHVOJKA P., NOVÁK K. & SEDLÁK E. 2005: *Trichoptera (chrostíci) [třída/class: Insecta; řád/order: Trichoptera]*. Pp 168–171. In: FARKAČ J., KRÁL D. & ŠKORPÍK M. (eds): *Červený seznam ohrožených druhů České republiky. Bezobratlí (Red List of Threatened Species in the Czech Republic. Invertebrates)*. Agentura ochrany přírody a krajiny ČR, Praha, 760 pp (in Czech and English).
- EHRENDORFER F. & HAMANN U. 1965: Vorschläge zu einer floristischen Kartierung von Mitteleuropa. *Berichte der Deutschen Botanischen Gesellschaft* **78**: 35–50.
- KOMZÁK P., KROČA J. & BOJKOVÁ J. 2006: Faunisticky zajímavé nálezy chrostíků (Insecta: Trichoptera) Moravskoslezských Beskyd (Interesting faunistic records of caddisflies (Trichoptera) from the Moravskoslezské Beskydy Mountains (Czech Republic)). *Časopis Slezského Zemského Muzea* (Opava), *Série A* **55**: 73–76 (in Czech, Engl. abstr.).
- NOVÁK K. 1964: Beitrag zur Kenntnis der Köcherfliegen Böhmens (Trichoptera). *Časopis Československé Společnosti Entomologické* **61**: 279–283.
- OBR S. 1969: Zur Kenntnis der Köcherfliegen (Trichoptera) der Tschechoslowakei I. Neue and wenig bekannte Trichoptera Mährens. *Folia Facultatis Scientiarum Naturalium Universitatis Purkynianae Brunensis* **10**(8), *Biologia* **25**: 67–76.
- PRUNER L. & MIKA P. 1996: Seznam obcí a jejich částí v České republice s čísly mapových polí pro síťové mapování fauny. (List of settlements in the Czech Republic with associated map field codes for faunistic grid mapping system). *Klapalekiana* **32** (Supplement): 1–115 (in Czech, English summary).
- SÝKORA J. 1954: 16. *Trichoptera*. Pp. 275–300. In: STRAŠKRABA M. (ed.): *Sborník o fauně a flóře řek Lučiny a Morávky se zvláštním zřetelem ke stavbě přehrad na těchto řekách: soubor prací kolektivu mladších pracovníků biologické fakulty Karlovy university v Praze, díl 1*. 300 pp (in Czech) (Unpublished report deposited in Ústřední knihovna Slezského zemského muzea v Opavě).
- SZCZĘŚNY B. 2007: *Acrophylax sowai* sp. n. (Trichoptera: Limnephilidae) from the Western Carpathians. *Aquatic Insects* **29**: 131–137.