

***Anthrenus (Anthrenus) angustefasciatus* Ganglbauer, 1904 (Coleoptera: Dermestidae), in the Czech Republic**

***Anthrenus (Anthrenus) angustefasciatus* Ganglbauer, 1904 (Coleoptera: Dermestidae), v České republice**

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Abstract. The first concrete records of *Anthrenus (Anthrenus) angustefasciatus* Ganglbauer, 1904, from the Czech Republic are given with comments on distribution. Older published information about this species from the Czech Republic was based on misidentification.

Key words: Coleoptera, Dermestidae, *Anthrenus*, faunistics, Czech Republic

INTRODUCTION

The genus *Anthrenus* Geoffroy, 1762 contains about 220 species and subspecies worldwide (Háva 2003, 2007, 2010). There are 8 species known from the Czech Republic. They are important pests of dry natural material (skin, insect collection and other). All these species live also in wild nature, especially on blowing trees, shrubs and flowers.

MATERIAL AND METHODS

Specimens of *Anthrenus (Anthrenus) angustefasciatus* Ganglbauer, 1904 was collected in window trap (Theysohn®) with pheromones dispenser Chalcoprax®, which is used commonly in forest protection for catching of *Pityogenes chalcographus* (Linnaeus, 1761). These traps were installed on the border of mixed forest in valley of a small creek. The forest comprises alder, poplar, birch and spruce (bottom of valley, damp part) and pine (on acclivity, dry part). Clearing is overgrown especially by *Cirsium*, *Carex*. Other plants and shrubs are represented especially by *Sambucus*.

Experiment began on half of April and finished on half of September. Specimens from genus *Anthrenus* were caught only during May.

RESULTS AND DISCUSION

Specimens of *Anthrenus (Anthrenus) angustefasciatus* Ganglbauer, 1904 were collected as non-target specimens together with other species from genus *Anthrenus* - *A. (Helocerus) fuscus* Olivier, 1789, *A. (Florilinus) museorum* (Linnaeus, 1761), *A. (Anthrenus) pimpinellae* (Fabricius, 1775) and *A. (Nathrenus) verbasci* (Linnaeus, 1767).

***Anthrenus (Anthrenus) angustefasciatus* Ganglbauer, 1904**

Anthrenus pimpinellae var. *delicatus*: Kalík, 1946: 74.

Material examined: Bohemia centralis, Višňová (6250), E of Příbram, v. 2006, P. Zahradník lgt., J. Háva det., 1 male, 1 female in coll. J. Háva, 1 male in coll. P. Zahradník (Praha).

Other material examined: “ČSR. Moravia, Brno-ok (okolí), Dr. A. Fleischer” / “*Anthrenus festivus*” / “*Anthrenus pimpinellae* var. *delicatus*, V. Kalík det. 1945”, 2 females, J. Háva revid., (coll. Volák, Muzeum Východních Čech v Hradci Králové).

Diagnosis. *Anthrenus (Anthrenus) angustefasciatus* Ganglbauer, 1904 belongs to the *pimpinellae* species-group defined by Kalík & Ohbayashi (1985). Species is visually very similar to *A. (A.) pimpinellae* (Fabricius, 1775) but differs from it by the structure of antennae, male genitalia and color patterns on elytra.

	<i>A. pimpinellae</i>	<i>A. angustefasciatus</i>
white band on elytra	relatively wide, narrow in sutural vicinity (fig. 1)	very narrow, usually breached (fig. 2)
orange scales on elytra	endings of elytra with orange scales, among them some white ones	along the elytral suture patches of orange scales extending to the level of the white stripe; orange scales might also appear beneath the band w in the vicinity of white spots

Distribution. South European species known from Bosnia Herzegovina, Croatia, Italy, Portugal, Serbia and Monte Negro, Spain, Turkey, Algeria and Morocco (Háva 2003, Kadej 2005, Kadej et al. 2007). Kadej et al. (2007) and Háva (2007) mention this species from the Czech Republic but without detailed data, this is first concrete data from the Czech Republic.

The species *Anthrenus (Anthrenus) angustefasciatus* Ganglbauer, 1904 is, similarly as the *A. (A.) pimpinellae* (Fabricius, 1775), eurytopic, silvicole, nidicole, floricole, pollenophagous.

Kalík (1946) published data on the *Anthrenus pimpinellae* var. *delicatus* Kiesenwetter, 1851 (Brno, Fleischer, coll. Volák, coll. Museum Eastern Bohemia in Hradec Králové) and *Anthrenus pimpinellae* var. *goliath* Saulcy in Mulsant et Rey, 1868 (Písek, Dr. Madar). Kalík (1993) considered these varieties as independent species, which do not occur in the Czech Republic. Kalík (personal communication) stated that this was a misidentification and the study of type specimens confirmed that the two species so far in the Czech Republic exist.

Revision of two specimens from Brno, Fleischer, coll. Volák, coll. Museum Eastern Bohemia in Hradec Králové showed they are *Anthrenus (Anthrenus) angustefasciatus*. This is the first concrete data from Moravia.

SOUHRN

Práce předkládá údaje o druhu *Anthrenus (Anthrenus) angustefasciatus* Ganglbauer, 1904, jako nového zástupce fauny České republiky. Jedná se o velmi příbuzný druh k *Anthrenus (Anthrenus) pimpinellae* (Fabricius, 1775), od kterého se liší nejen tvarem tykadla a aedeagu, ale i tvarem bílých a oranžových skvrn na krovkách (Obr. 1-2).

Pro přehled uvádíme následující informace o skupině druhů „*pimpinellae*“ týkající se území České republiky. Kalík (1946) publikoval údaje o *Anthrenus pimpinellae* var. *delicatus* Kiesenwetter, 1851 (Brno, Fleischer, coll. Volák, Muzeum Východních Čech v Hradci Králové) a var. *goliath* Saulcy in Mulsant et Rey, 1868 (Písek, Dr. Madar). Kalík (1993) uvádí tyto variety jako samostatné druhy, které se na území České republiky nevyskytují. Kalík (osobní sdělení) uvedl že se jednalo o chybné determinace a studium typového materiálu potvrdilo, že se oba druhy zatím na území České republiky nevyskytují. Recentní revize dvou kusů z Brna ukázala, že se jedná o druh *Anthrenus (Anthrenus) angustefasciatus*, jedná se tedy o první konkrétní údaj o tomto druhu z území Moravy.

ACKNOWLEDGEMENTS

We are very obliged to M. Mikát (Museum Eastern Bohemia in Hradec Králové, Czech Republic) for loan specimens from Volák collection and to Dr. M. Rakovič (Department of Biophysics, Charles University, Prague, CZ) for valuable comments and for reading the manuscript. This study was supported by the long-term research intention of the Czech Ministry of Agriculture (MZE-0002070201).

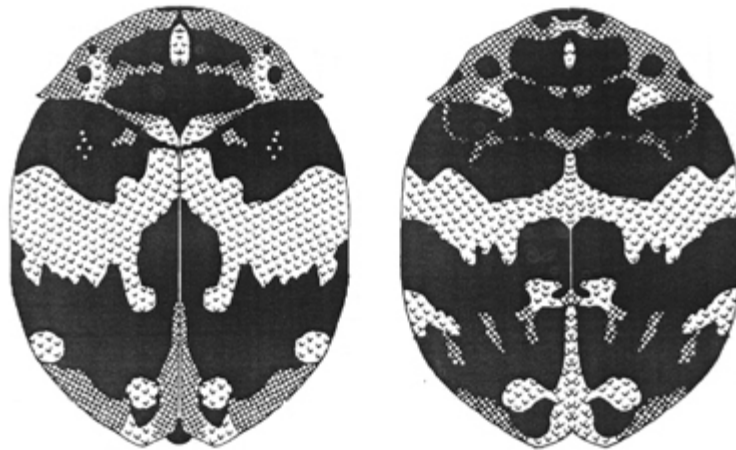


Fig. 1. Colour variability of habitus, dorsal aspect of *Anthrenus (Anthrenus) pimpinellae* (Fabricius, 1775) (according to Kadej 2005)

Obr. 1. Barevná variabilita habitu, dorsální pohled *Anthrenus (Anthrenus) pimpinellae* (Fabricius, 1775) (podle Kadej 2005)



Fig. 2. Colour variability of habitus, dorsal aspect of *Anthrenus (Anthrenus) angustefasciatus* Ganglbauer, 1904 (according to Kadej 2005)

Obr. 2. Barevná variabilita habitu, dorsální pohled *Anthrenus (Anthrenus) angustefasciatus* Ganglbauer, 1904 (podle Kadej 2005)



Fig. 3. *Anthrenus (Anthrenus) angustefasciatus* Ganglbauer, 1904, male (Foto A. Herrmann)
 Obr. 3. *Anthrenus (Anthrenus) angustefasciatus* Ganglbauer, 1904, samec (Foto A. Herrmann)

REFERENCES

- GANGLBAUER L. (1904): Die Käfer von Mitteleuropa. Die Käfer der österreichisch-ungarischen Monarchie, Deutschlands, der Schweiz, sowie des französischen und italienischen Alpengebietes. Vierter Band, erste Hälfte. Dermestidae, Byrrhidae, Nosodendridae, Georyssidae, Dryopidae, Heteroceridae, Hydrophilidae. Wien: Karl Gerold's Sohn, 286 pp.
- HÁVA J. (2003): World Catalogue of the Dermestidae (Coleoptera). *Studie a Zprávy Oblastního Muzea Praha-východ v Brandýse nad Labem a Staré Boleslavi*, Supplementum 1: 1-196. Updates available at World Wide Web electronic publication (open in 2004): <http://www.dermestidae.wz.cz>
- HÁVA J. (2007): Dermestidae pp. 57, 299-320. In: Löbl I. & Smetana A. (eds.): Catalogue of Palearctic Coleoptera. Volume 4. Elateroidea, Derodontoidea, Bostrichoidea, Lymexyloidea, Cleroidea and Cucujoidea. Stenstrup: Apollo Books, 935 pp.
- HÁVA J. (2010): Catalogue of Dermestidae World (Coleoptera). Permanent World Wide Web electronic publication (open in 2004): <http://www.dermestidae.wz.cz>
- KADEJ M. (2005): Morphological variability of pimpinellae-group (Coleoptera: Dermestidae: Anthrenus) with a key to identification. Part 1. *Polskie Pismo Entomologiczne* 74: 117-135.
- KADEJ M., HÁVA J. & KALÍK V. (2007): Review of the *Anthrenus pimpinellae* group from Palearctic region (Coleoptera: Dermestidae: Anthrenini). *Genus* 18: 721-750.
- KALÍK V. (1946): Příspěvek k poznání Československých kožojedů (Dermestidae) [Notice a la connaissance des Dermestides en Tchécoslovaquie]. *Folia Entomologica*, Brno 9: 73-77 (in Czech, French abstr.).
- KALÍK V. (1993): Dermestidae, pp. 84-85. In: Jelínek J. (ed.): Check-list of Czechoslovak insects 4 (Coleoptera). Seznam československých brouků. *Folia Heyrovskyana*, Supplementum 1: 3-172 (in English and Czech).
- KALÍK V. & OHBAYASHI N. (1985): *Anthrenus nipponensis*, a new Dermestid Beetle (Coleoptera, Dermestidae) from Japan, Korea and China. *Elytra*, Tokyo 13: 75-79.