Case 2937

Cacoxenus indagator Loew, 1858 (Insecta, Diptera): proposed conservation of the generic and specific names

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Abstract. The purpose of this application is to conserve the generic and specific names of *Cacoxenus indagator* Loew, 1858, a widespread European fly belonging to the DROSOPHILIDAE which is a symbiont of bees of the genus *Osmia* Panzer, 1806. The larvae of some *Cacoxenus* species are predators of coccids and pseudococcids. The original specimens of *Domomyza cincta* Rondani, 1856 are actually specimens of *C. indagator*, but since its establishment *Domomyza* has been placed in the AGROMYZIDAE (usually as a synonym of *Agromyza* Fallén, 1810) and neither it nor the specific name of *D. cincta* have had usage for drosophilids. It is proposed that Rondani's slightly earlier names *Domomyza* and *cincta* be suppressed to conserve *Cacoxenus* and *indagator*.

Keywords. Nomenclature; taxonomy; Diptera; AGROMYZIDAE; DROSOPHILIDAE; Cacoxenus; Domomyza.

- 1. The nominal genus *Domomyza* was established by Rondani (1856, p. 121) in a combined key description of the genus and the new species *D. cincta*; he placed it in the family AGROMYZIDAE. Although under the modern Codes *D. cincta* is by monotypy the type species of *Domomyza*, in 1875 Rondani himself stated (p. 168) that *Agromyza nigripes* Meigen, 1830 was the type; he gave a description of *D. cincta* on p. 175.
- 2. Domomyza has been placed in the AGROMYZIDAE ever since Rondani's time; it has usually been regarded as a synonym of Agromyza Fallén, 1810 (for example by Hendel, 1927, p. 249), and as such it has been very little used. Papp (1984, p. 341) treated Domomyza as a nomen dubium and stated that D. cincta was an unrecognizable species.
- 3. Loew (1858, p. 217) described the nominal genus *Cacoxenus*, containing only the new species *C. indagator* (p. 218); this is therefore the type by monotypy.
- 4. The name *C. indagator* has been used in at least 55 papers (of which seven mention it in the titles); the species, which parasitises bees of the genus *Osmia* Panzer, 1806, is widely distributed in Europe and has been studied in the fields of ecology, morphology, embryology and behaviour (e.g. Osten Sacken, 1892; de Meijere, 1944; Juillard, 1947, 1948; Ashburner, 1981; Olifir, 1990). It appears in the keys to the DROSOPHILIDAE of various regions (for example Duda, 1924, pp. 178 and 225; Kloet & Hincks, 1945, p. 400; Fonseca, 1965, p. 243; Stackelberg, 1970, p. 392).
- 5. Deeming (1988) studied seven original Rondani specimens of *Domomyza cincta* and found that they are not agromyzids but are specimens of the drosophilid

Cacoxenus indagator; he reported that K.A. Spencer had selected a male lectotype for D. cincta from 'Emilia et Etruria', Italy. Spencer & Martinez (1987, p. 267) noted Deeming's finding, then in press, and in their corrections to Papp's (1984) catalogue removed D. cincta from the AGROMYZIDAE.

- 6. Apart from two recent instances by myself (Sidorenko, 1990a, p. 216; 1990b, p. 129) the generic name *Domomyza* has never been used in the DROSOPHILIDAE; the specific name of *D. cincta* has never been used for a drosophilid (nor even in the AGROMYZIDAE for very many years). I now believe that the replacement of *Cacoxenus* by *Domomyza* and of *C. indagator* by *D. cincta* would cause confusion and serve no purpose, and there is a prima facie case for suppression of the earlier generic and specific synonyms.
- 7. The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers to suppress the following names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) the generic name Domomyza Rondani, 1856;
 - (b) the specific name *cincta* Rondani, 1856, as published in the binomen *Domomyza cincta*;
 - (2) to place on the Official List of Generic Names in Zoology the name Cacoxenus Loew, 1858 (gender: masculine), type species by monotypy Cacoxenus indagator Loew, 1858;
 - (3) to place on the Official List of Specific Names in Zoology the name *indagator* Loew, 1858, as published in the binomen *Cacoxenus indagator* (specific name of the type species of *Cacoxenus* Loew, 1858);
 - (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Domomyza* Rondani, 1856, as suppressed in (1)(a) above;
 - (5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *cincta* Rondani, 1856, as published in the binomen *Domomyza cincta* and as suppressed in (1)(b) above.

References

- Ashburner, M. 1981. Entomophagous and other bizarre Drosophilidae. Pp. 395-429 in Ashburner, M., Carson, H.L. & Thompson, J.N. (Eds.), The genetics and biology of Drosophila, vol. 3a. 429 pp. Academic Press, New York.
- Deeming, J.C. 1988. The identity of *Domomyza cincta* Rondani (Diptera): Drosophilidae not Agromyzidae. *Entomologist's Monthly Magazine*, 124: 81.
- Duda, O. 1924. Beitrag zur Systematik der Drosophiliden unter besonderer Berücksichtigung der paläarktischen und orientalischen Arten. Archiv für Naturgeschichte, (A)90(3): 172-234.
- Fonseca, E.C.M. d'Assis. 1965. A short key to the British Drosophilidae, including a new species of *Amiota*. Transactions of the Society for British Entomology, 16: 233-244.
- Hendel, F. 1927. Beiträge zur Systematik der Agromyziden. Zoologischer Anzeiger, 69: 248-271.
- Juillard, C. 1947. Cacoxenus indagator Loew (Dipt. Drosophilidae). Contribution à la biologie d'un parasite d'Osmia rufa L. Mitteilungen der schweizerischen entomologischen Gesellschaft, 20: 587-593.
- Juillard, C. 1948. Le comportement des larves de Cacoxenus indagator dans les nids de l'Osmia rufa. Mitteilungen der schweizerischen entomologischen Gesellschaft, 21: 547-554.
- Kloet, G.S. & Hincks, W.D. 1945. A check list of British insects. lix, 483 pp. Authors, Stockport.

- Loew, H. 1858. Ueber Cacoxenus indagator nov. sp. und seine Verwandten. Wiener entomologischen Monatsschrift, 2: 213-222.
- Meijere, J.C.H. de. 1944. Over de Metamorphose van Metopia leucocephala Rassi, Cacoxenus indagator Löw, Palloptera saltuum L., Paranthomyza nitida Mg. en Hydrellia nigripes Zett. (Dipt.). Tijdschrift voor Entomologie, 86: 57-61.
- Olifir, V.N. 1990. The fly Cacoxenus indagator Loew cleptoparasite of bees of the genus Osmia (Diptera, Drosophilidae; Hymenoptera, Apoidea). Pp. 97–99 in Tobias, V.I. & Lvovsky, A.L. (Eds.), Uspekhy entomologii v SSSR: Nasekomye perepontchatokrylye i tcheshuekrylye. 232 pp. Nauka, Leningrad. [In Russian].
- Osten Sacken, C.B. 1892. On the chaetotaxy of Cacoxenus indagator Lw. Berliner entomologische Zeitung, 36(1891): 411-413.
- Papp, L. 1984. Family Agromyzidae. Pp. 236–414 in Sóos, A. & Papp, L. (Eds.), Catalogue of Palaearctic Diptera, vol. 9 (Micropezidae Agromyzidae). 460 pp. Elsevier, Amsterdam.
- Rondani, C. 1856. Dipterologiae italicae prodromus. 1. Genera italica ordinis Dipterorum ordinatim disposita et distincta et in families et stirpes aggregata. 266 pp. Stoschi, Parmae.
- Rondani, C. 1875. Species italicae ordinis Dipterorum (Muscaria Rndn.) collectae et observatae. Bollettino della Società Entomologica Italiana, 7: 166–191.
- Sidorenko, V.S. 1990a. A review of the Steganinae (Diptera, Drosophilidae) of the south of the Soviet Far East. Second International Congress of Dipterology, Abstracts, p. 216.
- Sidorenko, V.S. 1990b. A new species of the genus *Domomyza* Rondani (Diptera, Drosophilidae) from the Soviet Far East. *Giornale Italiano di Entomologia*, 5: 129–131.
- Spencer, K.A. & Martinez, M. 1987. Additions and corrections to the Agromyzidae section of the Catalogue of Palaearctic Diptera. Annales de la Société Entomologique de France, 23: 253-271.
- Stackelberg, A.A. 1970. Fam. Drosophilidae. Pp. 390–399 in Bey-Benko, G.Ya. (Ed.), Opredelitel nasekomych evropeyskoi tchasti SSSR, vol. 5(2). 943 pp. Nauka, Leningrad. [In Russian].



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