Toxoptera citricida or Toxoptera citricidus? The validity of a specific name (Hemiptera, Aphididae, Aphidini)*

J. M. Nieto Nafría**, M.A. Alonso-Zarazaga*** y N. Pérez Hidalgo**
** Departamento de Biología Animal; Universidad de León; 24071 León (Spain). e-mail: dbajnn@unileon.es / dbanph@unileon.es
*** Departamento de Biodiversidad y Biología Evolutiva; Museo Nacional de Ciencias Naturales (Consejo Superior de Investigaciones Científicas); José Gutiérrez Abascal, 2; 28006 Madrid (Spain). e-mail: mcnaz39@mncn.csic.es

The “tropical citrus aphid”, “oriental black citrus aphid” or “brown citrus aphid” —in Spanish: “pulgón café de los cítricos”, in Portuguese: “pulgão preto dos citros”, in French “puceron tropical de l’oranger”— is now a very important pest on Citrus spp. and other species of the family Rutaceae and can live also on other wild and cultivated plants. It presumably originated in South-East Asia but its mainly tropical (EPPO/CABI, 1996; Blackman & Eastop, 1994, 1994) distribution area is very large due to anthropic dispersion. It has been recently recorded from the Iberian Peninsula (Ilharco et al., 2005).

The species is frequently named both Toxoptera citricida (Kirkaldy) and Toxoptera citricidus (Kirkaldy); for example Blackman & Eastop (1994, 2000) use citricidus, Remaudière & Remaudière (1997) record citricida, and the EPPO publications use both names (EPPO/CABI, 1996; OEEP/EPPO, 2004). Recent research on the web has produced 1,215 to 1,277 references for T. citricidus or Toxoptera citricidus and 1,490 to 1,866 for T. citricida or Toxoptera citricida.

The species was described from Hawaii (USA) on Citrus by Kirkaldy (1907) as Myzus citricidus. Other available names are: Aphis tavaresi Del Guercio, 1908, Aphis nigricans van der Goot, 1917, Aphis aeglis Shinji, 1922 and Paratoxoptera argentinensis E.E. Blanchard, 1944 (Blanchard, 1944; Remaudière & Remaudière, 1997; Shinji, 1922; Tavares, 1908 and van der Goot, 1917). The respective synonymies were established years ago and they are not discussed.

The specific name by Kirkaldy has been combined with Toxoptera Koch, 1856 by Takahashi (1938) as Toxoptera citricidus.

But Stoetzel (1994, page 179) concluded that “the correct scientific name for the brown citrus aphid is T. citricida (Kirkaldy)”, because “Kirkaldy [with citricidus] intended “citrus-killer”. […] The spelling of citricida is like that fratricida, homicida, patricida, and suicida which are all nouns derived from verbs, which do not change for gender accord, […] However, Kirkaldy used citricidus which is a latinized adjective with a masculine ending to agree with the genus Myzus; […] The genus Toxoptera […] is feminine […]»

However on the basis of articles 31.2.2 [Where the author of a species-group name did not indicate whether he or she regarded it as a noun or as an adjective, and where it may be regarded as either and the evidence of usage is not decisive, it is to be treated as a noun in apposition to the name of its genus (the original spelling is to be retained, with gender ending unchanged)] and 32.5.1 [If there is in
Incorrect transliteration or latinization, or use of an inappropriate connecting vowel, are not to be considered inadvertent errors of the International Code of Nomenclature, fourth edition (International Commission of Zoological Nomenclature, 2000) we think that the original spelling *citricidus* was neither a lapsus calami nor a copyist’s or printer’s error, but rather an incorrect latinization (*citricidus* is not an original Latin word, but a neologism), even if the author intended a 1st declension adjective.

The spelling *Toxoptera citricida* could be preserved only by using article 33.3.1 of the Code [(the) spelling is in prevailing usage and is attributed to the publication of the original spelling], but this is not the situation, since records of *citricida* on the web are 55-60% of the total records of the species.

In conclusion: the correct spelling of the species name is *Toxoptera citricidus* (Kirkaldy).

Additionally, on the basis of articles 33.2.3 [Any other emendation is an “unjustified emendation”; the name thus emended is available and it has its own author and date and is a junior objective synonym of the name in its original spelling; it enters into homonymy and can be used as a replacement name] and 50.5 [An unjustified emendation is attributed to the author who first publishes it] of the ICZN, Dr. Stoetzel with her unjustified emendation, involuntarily established another species name: *Toxoptera citricida* Stoetzel, 1994, which is an objective synonym of *Toxoptera citricidus* (Kirkaldy, 1907), nov. syn.

**References**


Recibido, 3-III-2005
Aceptado, 13-IV-2005
Publicado, 14-VII-2005