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Notas Nomenclaturales / *Nomenclatural Notes*

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

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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, 2000) 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; OEPP/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 Hawai (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*

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the original publication itself, without recourse to any external source of information, clear evidence of an inadvertent error, such as a lapsus calami or a copyist's or printer's error, it must be corrected. 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.**

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