



***Drosophila hydei* Sturtevant, 1921 (Insecta, Diptera): proposed conservation of the specific name**

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Abstract. The purpose of this application is to conserve the specific name of *Drosophila hydei* Sturtevant, 1921. *D. hydei* is widespread and is important in the field of genetics. It is threatened by the essentially unused senior subjective synonym *Drosophila marmorata* Hutton, 1901.

1. The name *Drosophila marmorata* was published by Hutton (1901, p. 91) with a short accompanying description. The holotype is a female collected in Auckland, New Zealand, and is deposited in the collections of the Canterbury Museum, Christchurch, New Zealand. The name was used in an additional paper by Hutton (1904, p. 129).

2. *Drosophila marmorata* Hutton, 1901 was considered by Bezzi (1910, p. 67; 1912, p. 2) and Sturtevant (1921, p. 99) to be a doubtful synonym of *D. repleta* Wollaston, 1858 (p. 117). It was also considered a synonym of *D. hydei* Sturtevant, 1921 by Harrison (1952, p. 511; 1959, p. 303) and Wheeler (1959, p. 193). The former synonymy was followed by nearly all authors and since Sturtevant (1921) *D. marmorata* has been cited as a valid name only by Miller (1950; p. 113), who probably overlooked the work of earlier authors. In a revision of the *D. repleta* species group (Vilela, 1983, pp. 31, 88) it was listed as a probable synonym both of *D. repleta* and of *D. hydei*.

3. The type specimen of *D. marmorata* was thoroughly studied by us, including dissection of the abdomen, and found to be a specimen of *D. hydei* Sturtevant, 1921 (Vilela & Bächli, 1990, p. 93). Although female, the type specimen does not leave any doubt as to the specific identity.

4. The name *Drosophila hydei* was published by Sturtevant (1921, p. 101) with an accompanying description; he also entered it in a key to the DROSOPHILIDAE of North America (1921, p. 68).

5. The name *D. hydei* Sturtevant, 1921 has been used in the title of at least 140 papers and a total of more than 800 publications dealing with this species have been found in the relevant literature. A separate subgroup of seven species, the *hydei* subgroup, was proposed by Wharton (1944, p. 178) within the *D. repleta* species group. Although such subgroups are not recognized as formal taxonomic categories, loss of usage of the name would create confusion in referring to these flies.

6. *Drosophila hydei* is cosmopolitan in its distribution and has been studied in the fields of genetics, population genetics, cytology, physiology, behavior, ecology, phylogeny and molecular biology (see, for example, Spencer, 1927; Stone, 1942; Chu, 1945; Wasserman, 1962; Berendes, 1963; Hess, 1976; Hennig, 1978; Wasserman, 1982; Johnston & Templeton, 1982; Arthur & Middlecote, 1984a, 1984b; Atrian & Gonzalez-Duarte, 1985; Markov, 1985; Rypstra & Gregg, 1986; Pecsénye, 1988 and Lankenau, Huijser & Hennig, 1989).

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the specific name *marmorata* Hutton, 1901, as published in the binomen *Drosophila marmorata*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *hydei* Sturtevant, 1921, as published in the binomen *Drosophila hydei*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *marmorata* Hutton, 1901, as published in the binomen *Drosophila marmorata* and as suppressed in (1) above.

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