

REINSTATEMENT OF *CALLIBAETIS ZONALIS* (EPHEMEROPTERA: BAETIDAE) AS A VALID NAME¹

Michael D. Hubbard,² Janice G. Peters,² William L. Peters²

ABSTRACT: *Callibaetis zonalis* is shown to be the valid name for the species from southern South America that contains the nominal species *Baetis opacus*.

Gillies, in his 1990 revision of the *Callibaetis* of Argentina, recognized eight species of Baetidae as synonyms of *Callibaetis zonalis* Navás, 1915a (*Callibaetis vitreus* Navás, 1915b, *Baetis opacus* Navás, 1915a, *Baetis virellus* Navás, 1915b, *Callibaetis sobrius* Navás, 1916, *Callibaetis apertus* Navás, 1917, *Callibaetis vitreus* Navás, 1919, *Callibaetis depressus* Navás, 1922, *Callibaetis amoenus* Navás, 1930). Because the names *Baetis opacus* and *Callibaetis zonalis* were published in the same paper by Navás (1915a), and because *B. opacus* appeared on an earlier page than *C. zonalis* (pages 12 and 13 respectively), McCafferty (1996) concluded that the valid name for this taxon should be *Callibaetis opacus* (Navás) on the grounds of "page priority."

However, Article 24 of the current International Code of Zoological Nomenclature (1985) specifies that if two or more nomenclatural acts are published on the same date and when they are subsequently considered to be synonyms their relative precedence is determined by the first reviser. Page priority is not an issue. Gillies (1990) clearly stated that the description of *Baetis opacus* was inadequate compared with the well-established concept of *Callibaetis zonalis*.

Two other synonyms, *Callibaetis vitreus* Navás, 1915b, and *Baetis virellus* Navas, 1915b, were described the same year but for some reason were not considered by McCafferty as candidates for the valid name of the taxon. (Hubbard and Edmunds (1977) discussed the remarkable nomenclatural history of *C. vitreus*).

It has proven remarkably difficult to establish the publication date for many of Navás' papers. However, Article 21 of the International Code of Zoological Nomenclature specifies that if the date of publication is not completely specified in a work then the last day of the year when only the year is specified or demonstrated is to be adopted as the date of publication. This is the case in these two publications (Navás 1915a, 1915b). Therefore, these two works should be considered as having been published simultaneously on 31 December 1915.

Gillies (1990), acting as "first reviser," clearly determined the prece-

¹ Received March 25, 1999. Accepted May 3, 1999.

² Laboratory of Aquatic Entomology, Florida A&M University, Tallahassee, Florida 32307, USA.

dence of the name *Callibaetis zonalis* over *Baetis opacus*, *Callibaetis vitreus*, and *Baetis virellus*. McCafferty's (1996) assertion that *C. opacus* is the valid name contravenes the rules of the International Code of Zoological Nomenclature. *Callibaetis zonalis* is therefore the valid name for this taxon.

LITERATURE CITED

- Gillies, M. T. 1990. A revision of the Argentine species of *Callibaetis* Eaton (Baetidae; Ephemeroptera). Revista de la Sociedad Entomológica Argentina 48:15-39.
- Hubbard, M. D., and G. F. Edmunds, Jr. 1977. A homonymic synonym in *Callibaetis* (Ephemeroptera: Baetidae). J. N. Y. Entomol. Soc. 85:55.
- International Commission on Zoological Nomenclature. 1985. Int. Code. Zool. Nomenclature, Third Ed.
- McCafferty, W. P. 1996. Emendations to the *Callibaetis* (Ephemeroptera: Baetidae) of South America. Entomol. News 107:230-232.
- Navás, L. 1915a. Neurópteros sudamericanos. Segunda serie. Broteria (Serie Zoologica) 13:5-13.
- Navás, L. 1915b. Neurópteros nuevos o poco conocidos (Sexta Serie). Memorias de la Real Academia de Ciencias y Artes de Barcelona 12:119-136.
- Navás, L. 1916. Neuroptera nova americana. Memorie della Pontificia Accademia Romana dei Nuovi Lincei (2)2:60-80.
- Navás, L. 1917. Algunos insectos Neurópteros de la Argentina. Physis 3:186-196.
- Navás, L. 1919. Algunos insectos Neurópteros de la Argentina. Serie 2. Physis 4:80-90.
- Navás, L. 1922. Efemerópteros nuevos o poco conocidos. Boletín de la Sociedad Entomológica de España 1922:54-63.
- Navás, L. 1930. Insectos de la Argentina. Sexta Serie. Revista de la Sociedad Entomologica Argentina 3:125-132.