

PHAULACRIDIUM VITTATUM (SJÖSTEDT, 1920) (INSECTA,
ORTHOPTERA): PROPOSED CONSERVATION BY
SUPPRESSION OF *ACRIDIUM AMBULANS* ERICHSON, 1842,
TRIGONIZA MANCA BOLÍVAR, 1898 AND *TRIGONIZA*
AUSTRALIENSIS BOLÍVAR, 1898. Z.N.(S.)2524

By K. H. L. Key (*Division of Entomology, CSIRO, Box 1700 Canberra*
2601, Australia)

Key (1938) first identified a species of injurious Australian grasshopper as *Phaulacridium vittatum* (Sjöstedt, 1920). Since that time the species concerned has been shown to be a serious pest and has been the subject of a considerable literature under that name. However, the specific name *vittatum* is threatened by three unused senior synonyms. It is proposed that these should be suppressed under Articles 23b and 79c of the Code.

2. Sjöstedt (1920) described two species in a new genus *Biformalia*: *B. vittata* (p. 49) and *B. gemini* (p. 50). In the following year (Sjöstedt, 1921) he synonymised *Biformalia* with *Phaulacridium* Brunner von Wattenwyl, 1893, transferring to that genus his *vittata* and *gemini*, as well as *Trigoniza manca* Bolívar, 1898 (p. 96). Later he described *Phaulacridium intermedium* Sjöstedt, 1931 (p. 16) and *P. robustum* Sjöstedt, 1932 (p. 15). Key (1938, p. 79) synonymised *vittatum*, *gemini*, *intermedium* and *robustum*. He stated that *vittatum* had priority; although there were no grounds (vis-à-vis *gemini*) for that statement, it has the force of a first-reviser selection of *vittatum* in preference to *gemini*, the two names having been published in the same work on the same day. Key's synonymisation of the four names has never been challenged.

3. Key (1952, p. 127) stated that both *Phaulacridium manca* (Bolívar, 1898) and *Acridium ambulans* Erichson, 1842 (p. 251) were 'probably' (senior) synonyms of *vittatum*, but he retained the name *vittatum* 'for the present' (owing presumably to its already widespread use). Following examination of the type series of *manca* and designation of a lectotype, Key (1981, p. 29) confirmed his earlier conditional synonymy of that name, and this has never been challenged.

4. The type material of *Acridium ambulans* has been considered lost for at least 75 years. This species was not listed by Kirby (1910) and Sjöstedt (1921, 1936) was unable to locate the type material and did not attempt to interpret the name. Recently the type series has been found in the Museum für Naturkunde der Humboldt-Universität in Berlin and I have been able to examine it through the courtesy of Dr K. K. Günther. It consists of five well-preserved females, all of which are clearly conspecific with *Phaulacridium vittatum* (see Key, 1986).

5. I have examined the holotype of *Trigoniza australiensis* Bolívar, 1898 (pp. 95–96) in the Instituto Español de Entomología, Madrid and find that it too is clearly conspecific with *P. vittatum* (see Key, 1986).

6. Since 1938 the name *Phaulacridium vittatum* has been consistently used for the economically important Australian species (the so-called 'Wingless Grasshopper') and it has been the only name applied to that species. A cursory survey shows that it has been used by at least 10 authors in at least 21 papers covering taxonomy, biology, genetics, cytology, ecology and control measures (a list of ten of these papers is held in the offices of the Secretariat). Its senior synonym *ambulans* has not been used as a valid name during the 144 years since its publication in 1842. The senior synonym *Trigoniza manca* has not been used as a valid name since it was transferred to *Phaulacridium* by Sjöstedt in 1921, except for a listing without comment by Sjöstedt (1936). The senior synonym *Trigoniza australiensis* has not been used since its publication in 1898, except for listings without comment by Sjöstedt (1921, 1936).

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

- (1) to use its plenary powers to suppress the following specific names for the purpose of the Principle of Priority but not for that of the Principle of Homonymy:
 - (a) *ambulans* Erichson, 1842, as published in the binomen *Acridium ambulans*;
 - (b) *manca* Bolívar, 1898, as published in the binomen *Trigoniza manca*;
 - (c) *australiensis* Bolívar, 1898, as published in the binomen *Trigoniza australiensis*;
- (2) to place on the Official List of Specific Names in Zoology the name *vittata* Sjöstedt, 1920, as published in the binomen *Biformalia vittata*;
- (3) to place the following names on the Official Index of Rejected and Invalid Specific Names in Zoology:
 - (a) *ambulans* Erichson, 1842, as published in the binomen *Acridium ambulans* and as suppressed under the plenary powers in (1) (a) above;
 - (b) *manca* Bolívar, 1898, as published in the binomen *Trigoniza manca* and as suppressed under the plenary powers in (1) (b) above;
 - (c) *australiensis* Bolívar, 1898, as published in the binomen *Trigoniza australiensis* and as suppressed under the plenary powers in (1) (c) above.

REFERENCES

- BOLÍVAR, I. 1898. Contributions à l'étude des acridiens. Espèces de la faune indo-et austro-malaisienne du Museu Civico di Storia Naturale di Genova. *Ann. Mus. Civ. Stor. nat. Giacomo Doria*, vol. 39, pp. 66–101.
- BRUNNER VON WATTENWYL, C. 1893. Révision du Système des Orthoptères et description des espèces rapportées par M. Leonardo Fea de Birmanie. *Ann. Mus. Civ. Stor. nat. Giacomo Doria*, ser. 2, vol. 13, pp. 1–230.

- ERICHSON, W. F. 1842. Beitrag zur Insecten-Fauna von Vandiemensland mit besonderer Berücksichtigung der geographischen Verbreitung der Insecten. *Arch. Naturgesch.*, vol. 8(1), pp. 83–287.
- KEY, K. H. L. 1938. The regional and seasonal incidence of grasshopper plagues in Australia. *Aust. Commonw. Counc. Sci. Ind. Res. Bull.*, no. 117, pp. 1–87.
- 1952. A provisional check-list of the Acridoidea of Tasmania (Orthoptera). *Pap. Proc. r. Soc. Tasmania*, vol. 86, pp. 127–130.
- 1981. Lectotype designations for Australian Acrididae and Tetrigidae (Orthoptera). *Austr. CSIRO Div. Entomol. tech. Pap.*, no. 17, pp. 1–58.
- 1986. A provisional synonymic list of the Australian Acridoidea (Orthoptera). *Austr. CSIRO Div. Entomol. tech. Pap.*, no. 24, pp. 1–47.
- KIRBY, W. F. 1910. *A Synonymic Catalogue of Orthoptera. Vol. III. Orthoptera Saltatoria. Part II (Locustidae vel Acridiidae)*. 674 pp. London.
- SJÖSTEDT, Y. 1920. Results of Dr E. Mjöberg's Swedish scientific expeditions to Australia 1910–1913. Acridiodes. *Ark. Zool.*, vol. 12 (20), pp. 1–67.
- 1921. Acridiodes australica. Monographie der bisher von Australien bekannten Heuschrecken mit kurzen Fühlern. *K. Sven. Vetenskapsakad. Handl.*, vol. 62(3), pp. 1–318.
- 1931. Acridiodes aus dem Queensland Museum zu Brisbane. *Ark. Zool.*, vol. 23A(11), pp. 1–21.
- 1932. Neue Acridiodes aus dem Museum in Canberra (The Federal Capital Territory, Australia) mit einer *Revision der Gattung Chortoicetes* (Orth. Trux). *Ark. Zool.*, vol. 23A(19), pp. 1–15.
- 1936. Revision der australischen Acridiodes. 2. Monographie. *K. Sven. Vetenskapsakad. Handl.*, ser. 3, vol. 15(2), pp. 1–191 [1935].
- WALKER, F. 1870. *Catalogue of the Specimens of Dermaptera Saltatoria in the Collection of the British Museum. Part III*, pp. 425–604. London.



Key, Kenneth H L. 1986. "Phaulacridium vittatum (Sjöstedt, 1920) (Insecta, Orthoptera): proposed conservation by suppression of *Acridium ambulans* Erichson, 1842, *Trigoniza manca* Bolívar, 1898 and *Trigoniza australiensis* Bolívar, 1898. Z. N. (S.) 2524." *The Bulletin of zoological nomenclature* 43, 303–305. <https://doi.org/10.5962/bhl.part.455>.

View This Item Online: <https://www.biodiversitylibrary.org/item/45868>

DOI: <https://doi.org/10.5962/bhl.part.455>

Permalink: <https://www.biodiversitylibrary.org/partpdf/455>

Holding Institution

Natural History Museum Library, London

Sponsored by

Natural History Museum Library, London

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: International Commission on Zoological Nomenclature

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.