

## Case 3120

**ISCHNURAINAE Fraser, 1957 (Insecta, Odonata): proposed conservation as the correct spelling of ISCHNURINAE to remove homonymy with ISCHNURIDAE Simon, 1879 (Arachnida, Scorpiones)**

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**Abstract.** The purpose of this application is to remove the homonymy between the damselfly subfamily name ISCHNURINAE Fraser, 1957 (type genus *Ischnura* Charpentier, 1840; family COENAGRIONIDAE) and the scorpion family name ISCHNURIDAE Simon, 1879 (type genus *Ischnurus* C.L. Koch, 1837, a junior subjective synonym of *Liocheles* Sundevall, 1833). It is proposed that the entire generic name of *Ischnura* should be adopted as the stem, so that the correct spelling of the damselfly subfamily will be ISCHNURAINAE Fraser, 1957.

**Keywords.** Nomenclature; taxonomy; Odonata; Scorpiones; COENAGRIONIDAE; ISCHNURAINAE; ISCHNURINAE; ISCHNURIDAE; *Ischnura*; *Ischnurus*; *Liocheles*; damselflies; scorpions.

1. The scorpion family name ISCHNURIDAE was based by Simon (1879, p. 92) on the type genus *Ischnurus* C. L. Koch, 1837 (p. 69). This name has been widely used at family rank (e.g. Kraepelin, 1913; Tikader & Bastawade, 1983; Francke, 1985); although the taxon has sometimes been regarded as a subfamily of SCORPIONIDAE Latreille, 1802 its treatment as a separate family is now generally accepted (see Sissom, 1990 and Fet, 2000).

2. None of the recent authors who have used the name ISCHNURIDAE in scorpion taxonomy has noticed the fact (Fet, 2000, p. 383) that it is based on a junior generic synonym. This synonymy was noted indirectly by two authors: Karsch (1880, p. 408), who synonymized *Hormurus* Thorell, 1876 with *Liocheles* Sundevall, 1833 (p. 31), and Pocock (1902, p. 364), who synonymized *Hormurus* with *Ischnurus* C.L. Koch, 1837. *Liocheles* (type species by monotypy *Scorpio australasiae* Fabricius, 1775 (p. 399)) is the generic name currently used (e.g. L.E. Koch, 1977; Tikader & Bastawade, 1983; Francke, 1985; Lourenço, 1989; Sissom, 1990), but ISCHNURIDAE (or ISCHNURINAE) is in general use and under the Code (Article 40.1 of the 1999 edition) there is no need to create a new name 'LIOCHELIDAE'.

3. The damselfly subfamily name ISCHNURINAE Fraser, 1957 (p. 49; Odonata, family COENAGRIONIDAE) is based on the genus *Ischnura* Charpentier, 1840 (p. 20; type

species *Agrion elegans* Van der Linden, 1823 (p. 104) by the subsequent designation of Selys-Longchamps (1850, p. 182)). This well-known genus not only includes common species of damselflies throughout the Nearctic and Palaearctic, but probably represents the most truly cosmopolitan genus of Zygoptera, occurring almost wherever Odonata are found (Westfall & May, 1996). The name ISCHNURINAE Fraser, 1957 has no synonyms and has been widely used (always at subfamily rank) in taxonomic works on Odonata (see for example Davies & Tobin, 1984 and Bridges, 1994).

4. Under Article 55.3.1 of the Code the homonymy between ISCHNURIDAE Simon, 1879 (for scorpions) and ISCHNURINAE Fraser, 1957 (for damselflies) must be referred to the Commission. In accordance with Recommendation 29A we propose that the entire generic name *Ischnura* should be used as the grammatical stem, so that the damselfly subfamily name would be ISCHNURAINAE and the homonymy would be removed.

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

- (1) to use its plenary power to rule that for purposes of Article 55.3.1 of the Code the stem of the generic name *Ischnura* Charpentier, 1840 (Insecta, Odonata) is ISCHNURA-;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Ischnura* Charpentier, 1840 (gender: feminine), type species *Agrion elegans* Van der Linden, 1823 by subsequent designation by Selys-Longchamps (1850);
  - (b) *Liocheles* Sundevall, 1833 (gender: masculine), type species *Scorpio australasiae* Fabricius, 1775 by monotypy;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *elegans* Van der Linden, 1823, as published in the binomen *Agrion elegans* (specific name of the type species of *Ischnura* Charpentier, 1840);
  - (b) *australasiae* Fabricius, 1775, as published in the binomen *Scorpio australasiae* (specific name of the type species of *Liocheles* Sundevall, 1833);
- (4) to place on the Official List of Family-Group Names in Zoology the following names:
  - (a) ISCHNURAINAE Fraser, 1957 (type genus *Ischnura* Charpentier, 1840) (correct original spelling of ISCHNURINAE by the ruling in (1) above);
  - (b) ISCHNURIDAE Simon, 1879 (type genus *Ischnurus* C.L. Koch, 1837, a junior subjective synonym of *Liocheles* Sundevall, 1833).
- (5) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name ISCHNURINAE Fraser, 1957 (spelling emended to ISCHNURAINAE by the ruling in (1) above).

## References

- Bridges, C.A. 1994. *Catalogue of the family-group, genus-group and species-group names of the Odonata of the world* (ed. 3). Author, Urbana.
- Charpentier, T. 1840. *Libellulinae Europaeae descriptae ac depictae*. 182 pp. Voss, Lipsiae.
- Davies, D.A.L. & Tobin, P. 1984. The dragonflies of the world: a systematic list of extant species of Odonata. Vol. 1, Zygoptera, Anisozygoptera. *S.I.O. Rapid Communications Supplement*, 3: 127 pp.

- Fabricius, J.C. 1775. *Systema entomologiae*, ... 832 pp. Libraria Kortii, Flensburg & Leipzig.
- Fet, V. 2000. Family Ischnuridae. Pp. 383–408 in Fet, V., Sissom, W.D., Lowe, G. & Braunwalder, M.E., *Catalog of the scorpions of the World (1758–1998)*. 690 pp. New York Entomological Society, New York.
- Francke, O.F. 1985. *Conspectus genericus scorpionorum 1758–1982 (Arachnida: Scorpiones)*. *Occasional Papers of the Museum, Texas Tech University*, 98: 1–32.
- Fraser, F.C. 1957. *A reclassification of the order Odonata*. 134 pp. Royal Zoological Society of New South Wales, Sydney.
- Karsch, F. 1880. Arachnologische Blätter. X. Scorpionologische Fragmente. *Zeitschrift für die Gesellschaft der Naturwissenschaften*, 53: 404–409.
- Koch, C.L. 1837. *Die Arachniden*, vol. 4. Zeh'sche Buchhandlung, Nürnberg.
- Koch, L.E. 1977. The taxonomy, geographic distribution and evolutionary radiation of Australo-Papuan scorpions. *Records of the Western Australian Museum*, 5(2): 83–367.
- Kraepelin, K. 1913. Neue Beiträge zur Systematik der Gliederspinnen. III. *Mitteilungen aus dem Naturhistorischen Museum, Hamburg (2. Beiheft zum Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten, 1912)*, 30: 123–196.
- Lourenço, W.R. 1989. Rétablissement de la famille des Ischnuridae, distincte des Scorpionidae Pocock, 1893, à partir de la sous-famille des Ischnurinae, Pocock, 1893. *Revue Arachnologique*, 8(10): 159–177.
- Pocock, R.I. 1902. A contribution to the systematics of scorpions. *Annals and Magazine of Natural History*, (7)10: 364–380.
- Selys-Longchamps, M.E. de. 1850. Revue des Odonates ou Libellules d'Europe. *Mémoires de la Société des Sciences de Liège*, vol. 6. xxii, 408 pp.
- Simon, E. 1879. 3e Ordre. — Scorpiones. Pp. 79–115 in: *Les Arachnides de France. VII. Contenant les Ordres des Chernetes, Scorpiones et Opiliones*. 332 pp. Roret, Paris.
- Sissom, W.D. 1990. Chapter 3. Systematics, biogeography and paleontology. Pp. 64–160 in Polis, G.A. (Ed.), *Biology of Scorpions*. 587 pp. Stanford University Press, Stanford.
- Sundevall, C.J. 1833. *Conspectus Arachnidum*. 39 pp. Berling, Londini Gothorum.
- Tikader, B.K. & Bastawade, D.B. 1983. *The Fauna of India. Scorpions (Scorpionida: Arachnida)*, vol. 3. 671 pp. Zoological Survey of India, Calcutta.
- Van der Linden, P.L. 1823. *Agriones Bononienses descriptae*. Opusculi Scientifici, Bologna.
- Westfall, M.J., Jr. & May, M. 1996. *Damselflies of North America*. 649 pp. Flora & Fauna Books, Gainesville.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).