

Short Note



Stenodontus Chen & Gong, 1986: an invalid name for Cambrian-Ordovician conodonts

Gabriella BAGNOLI, Eduardo I. FAÚNDEZ & Svend STOUGE

G. Bagnoli, Dipartimento di Scienze della Terra, Università di Pisa, Via S. Maria 53, I-56126 Pisa, Italy; gabriella.bagnoli@unipi.it

E.I. Faúndez, Entomology Department, North Dakota State University, Fargo, ND, USA; ed.faundez@gmail.com

S. Stouge, Natural History Museum of Denmark, Geological Museum, University of Copenhagen, Øster Voldgade 5-7, DK 1350 Copenhagen, Denmark; svends@snm.ku.dk

Apollonov et al. (1984), Chen & Gong (1986) and Bagnoli et al. (1987) independently proposed a new genus name for late Furongian to Early Ordovician conodont specimens that commonly have been assigned to the Late Ordovician genus *Coelocerodontus* Ethington, 1959 (i.e., van Wamel, 1974; Landing, 1983; Andres, 1988; Müller & Hinz, 1991). Apollonov et al. (1984) assigned these specimens to the new genus *Vanwamelodus* based on upper Cambrian to Lower Ordovician material from Kazakhstan. However, *Vanwamelodus* is a nomen nudum because the authors did not provide a diagnosis nor selected a type species to the genus. Chen & Gong (1986) introduced formally the new genus *Stenodontus* based on material from the Cambrian-Ordovician succession at Dayangcha, Jilin Province, North China, and selected *Stenodontus compressus* Chen & Gong, 1986 as type species. Shortly after, Bagnoli et al. (1987) erected the new genus *Diaphanodus* based on material from the Cambrian-Ordovician succession of the Cow Head Group, Newfoundland, Canada, with *Coelocerodontus latus* van Wamel, 1974 as type species. Thus following the principle of priority (Article 23.1) of the International Code of Zoological Nomenclature (ICZN, 1999), *Diaphanodus* Bagnoli, Barnes & Stevens, 1987 became a junior synonym of *Stenodontus*.

Bagnoli & Stouge (2014) recently revised the conodont genus *Stenodontus* in terms of multielement taxonomy.

However, Chen & Gong (1986) and Bagnoli & Stouge (2014) were not aware that the name *Stenodontus* had already been used for an ichneumonid wasp (Insecta, Hymenoptera, Ichneumonidae, Ichneumoninae, Alomyini), *Stenodontus* Berthoumieu, 1896. This genus has an Oriental and Holarctic distribution (Diller & Schonitzer, 2004) and the type species is *Ichneumon marginellus* Gravenhorst, 1829.

The descriptions of both taxa meet the requirements of the ICZN, but according to the Principle of Homonymy (Article 52 of ICZN), the conodont genus *Stenodontus* Chen & Gong, 1986 is a junior homonym of the ichneumonid wasp genus *Stenodontus* Berthoumieu, 1896.

Article 60.1 (Article 60 of the ICZN) states that “a junior homonym ... must be replaced by an available and potentially valid synonym”. In the case presented

here, the first available name for the conodont genus is *Diaphanodus* Bagnoli, Barnes & Stevens, 1987 (for details see Remarks and Discussion in Bagnoli & Stouge, 2014). As mentioned above, the selected type species of *Diaphanodus* was *Coelocerodontus latus* van Wamel, 1974, but according to recommendation 60A (Article 60 of the ICZN “Desirability of objective replacement. Unless the name-bearing type of the nominal taxon denoted by the rejected junior homonym is taxonomically inadequate... authors are advised to use the same type to establish a new replacement name...”), the type species of *Diaphanodus* is *Stenodontus compressus*, Chen & Gong, 1986.

REFERENCES

- Andres D. (1988). Struktur, Apparaten und Phylogenie primitiver Conodonten. *Pälaontographica A*, 200. 105 pp.
- Apollonov M.K., Chugaeva M.N. & Dubinina S.V. (1984). Trilobites and conodonts from the Batyrsbaisai Section (Uppermost Cambrian-Lower Ordovician) in Malyj Karatau Range (Atlas of the palaeontological plates): 48, AN KazSSSR Publishing House, Alma Ata [in Russian].
- Bagnoli G., Barnes C.R. & Stevens R.K. (1987). Lower Ordovician (Tremadocian) conodonts from Broom Point and Green Point, western Newfoundland. *Bollettino della Società Paleontologica Italiana*, 25: 145-158.
- Bagnoli G. & Stouge S. (2014). Upper Furongian (Cambrian) conodonts from the Degerhamn quarry road section, southern Öland, Sweden. *GFF*, 136: 436-458.
- Berthoumieu V. (1896). Ichneumonides d'Europe et des pays limitrophes. *Annales de la Société Entomologique de France*, 65: 285-418.
- Chen J.-Y. & Gong W.-L. (1986). Conodonts. In Chen J.-Y. (ed.), Aspects of Cambrian-Ordovician boundary in Dayangcha, China: 93-223, Beijing, China Prospect publishing House.
- Diller E. & Schonitzer K. (2004). Neue *Stenodontus*-Arten von den Philippinen (Hymenoptera, Ichneumonidae, Ichneumoninae, Alomyini). *Entomofauna*, 25: 373-380.
- Ethington R. (1959). Conodonts from the Ordovician Galena Formation. *Journal of Paleontology*, 33: 257-292.
- Gravenhorst J.L.C. (1829). Ichneumonologia Europaea. Pars I. 827 pp. Bratislaviae.
- International Commission of Zoological Nomenclature (1999). International Code of Zoological Nomenclature, Fourth Edition:

- 1-106. International Trust for Zoological Nomenclature, London, UK (available online: <http://www.iczn.org/iczn/>)
- Landing E. (1983). Highgate Gorge: Upper Cambrian and Lower Ordovician continental slope deposition and biostratigraphy, northwestern Vermont. *Journal of Paleontology*, 57: 1149-1187.
- Müller K.J. & Hinz I. (1991). Upper Cambrian conodonts from Sweden. *Fossils and Strata*, 28. 153 pp.
- Wamel W.A. van (1974). Conodont biostratigraphy of the upper Cambrian and lower Ordovician of north-western Öland, south-eastern Sweden. *Utrecht Micropaleontological Bulletin*, 10. 126 pp.

Manuscript received 6 October 2014
Revised manuscript accepted 4 April 2015
Published online 21 May 2015
Editor Annalisa Ferretti