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Publisher Taylor & Francis

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Alcheringa: An Australasian Journal of Palaeontology

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t770322720>

***Belowicysta* nom. nov., a new name for the Jurassic dinoflagellate cyst *Belowia* Riding & Helby, 2001**

James B. Riding^a; Gea Zijlstra^b

^a British Geological Survey, Keyworth, Nottingham, UK ^b Nationaal Herbarium Nederland, Utrecht University Branch, Utrecht, The Netherlands

To cite this Article Riding, James B. and Zijlstra, Gea(2006) '*Belowicysta* nom. nov., a new name for the Jurassic dinoflagellate cyst *Belowia* Riding & Helby, 2001', *Alcheringa: An Australasian Journal of Palaeontology*, 30: 2, 313 – 314

To link to this Article: DOI: 10.1080/03115510608619319

URL: <http://dx.doi.org/10.1080/03115510608619319>

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NOMENCLATURAL NOTE

Belowicysta nom. nov., a new name for the Jurassic dinoflagellate cyst *Belowia* Riding & Helby, 2001

JAMES B. RIDING and GEA ZIJLSTRA

RIDING, J. B. & ZIJLSTRA, G., 29.9.2006. *Belowicysta* nom. nov., a new name for the Jurassic dinoflagellate cyst *Belowia* Riding & Helby, 2001. *Alcheringa* 30, 313-314. ISSN 0311 5518.

The Jurassic dinoflagellate cyst genus *Belowia* Riding & Helby, 2001 is a junior homonym of *Belowia* Moquin-Tandon, 1849, a genus of the Chenopodiaceae. The new generic name *Belowicysta* is proposed here to replace *Belowia* Riding & Helby, 2001.

James B. Riding [jbri@bgs.ac.uk], British Geological Survey, Keyworth, Nottingham NG12 5GG, UK; Gea Zijlstra [g.zijlstra@bio.uu.nl], Nationaal Herbarium Nederland, Utrecht University Branch, Heidelberglaan 2, 3584 CS Utrecht, The Netherlands; received 10.12.2005, accepted 11.12.2005.

The dinoflagellate cyst genus *Belowia* and its type species *Belowia balteus* were established by Riding & Helby (2001, pp. 189-195); the type species is a highly distinctive fossilised resting cyst of an apparently extinct, Late Jurassic (early Tithonian) dinoflagellate. Riding & Helby (2001) recognised two distinct morphotypes based on size and morphology. The type material is from an outcrop sample of the Lelinta Formation (Fageo Group) from Misool, eastern Indonesia (Hasibuan 1990, Helby & Hasibuan 1988). Riding & Helby (2001, p. 195) also briefly described an informal morphotype, *Belowia* sp. A, from the early Tithonian of the Crux-1 well, located in the Bonaparte Basin within the Territory of Ashmore and Cartier Islands Adjacent Area (Northern Territory) (Foster 2001, fig. 1). This genus therefore appears to be confined to the early Tithonian of Australasia and Indonesia.

The generic name *Belowia* is preoccupied by *Belowia* Moquin-Tandon, 1849, a genus of the Chenopodiaceae (the goosefoot family), originally described from the Georgian Caucasus (Moquin-Tandon 1849). It was named after J.F. Below, who wrote a botanical dissertation published in 1700. *Belowia* Moquin-Tandon,

1849 is no longer considered correct because it is included in *Suaeda*, a cosmopolitan genus, occurring in coastal regions and salt steppes. Nevertheless, *Belowia* Riding & Helby, 2001 is an objective junior homonym of *Belowia* Moquin-Tandon, 1849. The generic name *Belowicysta* is proposed here to replace the junior homonym *Belowia* Riding & Helby. The type of *Belowicysta*, by original designation, is *Belowia balteus* Riding & Helby, 2001.

Division DINOFLAGELLATA (Bütschli, 1885)
Fensome *et al.* 1993
Subdivision DINOKARYOTA Fensome *et al.*, 1993
Class DINOPHYCEAE Pascher, 1914
Subclass PERIDINIPHYCIDAE Fensome *et al.*, 1993
Order GONYAULACALES Taylor, 1980
Suborder GONYAULACINEAE (autonym)
Family GONYAULACACEAE Lindemann, 1928
Subfamily LEPTODINIOIDEAE Fensome *et al.*, 1993

***Belowicysta* nom. nov.**

Type species. Belowicysta balteus (Riding & Helby, 2001) comb. nov.

2001 *Belowia* Riding & Helby, 2001, pp. 189-191.

Comments. The diagnosis, comments and comparison pertaining to *Belowicysta* are all as for *Belowia* Riding & Helby, 2001. The name *Belowicysta* is in honour of the eminent palynologist Dr Raimond Below of Bonn, Germany.

Belowicysta balteus (Riding & Helby, 2001) comb. nov.

2001 *Belowia balteus* Riding & Helby, 2001, p. 191-195, figs 5-7.

Comments. The description, dimensions, comments, comparison, derivation of name, holotype/type locality and stratigraphical distribution pertaining to *Belowicysta balteus* are all as for *Belowia balteus* Riding & Helby, 2001. This contribution transfers the species *balteus* to *Belowicysta*. The holotype is from the early Tithonian part of the Lelinta Formation of Misool, eastern Indonesia and has been registered in the Commonwealth Palaeontological Collection (CPC) of Geoscience Australia (GA) as CPC number 35922. (Riding & Helby 2001, fig. 6A-C).

Acknowledgments

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References

- FOSTER, C.B., 2001. Introduction. In J.R. LAURIE & C.B. FOSTER eds, *Studies in Mesozoic Palynology II. Memoir of the Association of Australasian Palaeontologists* 24, i-iii.
- HASIBUAN, F., 1990. *Mesozoic stratigraphy and paleontology of Misool Archipelago, Indonesia*. Unpublished PhD thesis, University of Auckland, New Zealand, 384 pp.
- HELBY, R. & HASIBUAN, F., 1988. A Jurassic dinoflagellate sequence from Misool Indonesia. *7th International Palynological Congress, Brisbane, Abstracts Volume*, p. 69.
- MOQUIN-TANDON, C.H.B.A. 1849. Salsolaceae. In de CANDOLLE, A.L.P.P. ed., *Prodromus Systematis Naturalis Regni Vegetabilis* 13(2), 41-219.
- RIDING, J.B. & HELBY, R., 2001. Marine microplankton from the Late Jurassic (Tithonian) of the north-west Australian region. *Memoir of the Association of Australasian Palaeontologists* 24, 177-220.