

## ***Thomasaria* vs. *Pyramidalia* conundrum in Devonian brachiopod systematics solved: An argument to formalize epitypification under the ICZN**

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*Acta Palaeontologica Polonica* 64 (2), 2019: 399-408 doi:<https://doi.org/10.4202/app.00603.2019>

*Pyramidalia* is a brachiopod genus with *Spirifera simplex* as the type species. Imprecise diagnosis and misidentification of the material studied in the original description resulted in a plethora of interpretations (a valid genus belonging either to the order *Spiriferida* or to the Spiriferinida; synonym of the spiriferide *Thomasaria*; synonym of *Squamulariina* or *Cyrtinaella*, both spiriferinides). To address this problem we designated the specimen GSM 6915 from Wolborough quarry near Newton Abbot (Devon, England; Givetian) as the lectotype of *Spirifera simplex*. We examined microstructure and internal characters of a topotypic specimen and found out that *Spirifera simplex* has an impunctate shell and is thus a spiriferide, not a spiriferinide. No significant differences in morphology or internal characters of *Thomasaria* and *Pyramidalia* can be found, so the latter is interpreted as a junior subjective synonym of the former. The procedure used in the present analysis is equivalent to the epitypification provided for in the ICN; formalisation of a similar procedure under the ICZN is recommended.

**Key words:** Brachiopoda, *Pyramidalia*, *Thomasaria*, epitypification, ICZN, Devonian, UK, England.

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