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Evolution of the retiolitid *Neogothograptus* (Graptolithina) and its new species from the upper Wenlock of Poland, Baltica

Anna Kozłowska, Alfred Lenz, and Michael Melchin
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Neogothograptus reticulatus sp. nov. from the upper Homerian Colonograptus praedeubeli Biozone, and *N. thor–steinssoni* and *N. alatiformis* from the *Lobograptus progenitor* Biozone, are described for the first time from three localities: borehole, Baltic erratic boulder of East European Platform and Holy Cross Mountains of Poland. *N. reticulatus*, presently the oldest known species of *Neogothograptus*, is also tentatively identified from upper Homerian strata of south–eastern Australia. The two other species are previously known only from Arctic Canada, and possibly China. The morphology of the *Neogothograptus reticulatus* rhabdosome, its appendix, thecal profile, densely reticulated rhabdosome and genicular hoods suggest a close relationship to *N. eximinassa* from *Colonograptus ludensis* Biozone. *N. reticulatus* and *N. eximinassa* are most similar to *Gothograptus nassa*, the earliest–known retiolitid to appear immediately following the *Cyrtograptus lundgreni* extinction event. The biostratigraphic position of *N. reticulatus* suggests it might be considered as a potential ancestor to all younger (Ludlow) species of *Neogothograptus*. Cladistic analysis, however, provides no direct support for such an interpretation and, instead, suggests that *Baculograptus batesi* may be the ancestor. The occurrences of *Neogothograptus*, as well as *G. nassa*, from a number of Silurian terranes mostly from low paleolatitude regions, but also from high paleolatitudes, demonstrate their tolerance to a broad range of paleoenvironments.

Key words: Retiolitidae, *Gothograptus*, *Neogothograptus*, evolution, biostratigraphy, ocean currents, paleolatitude, late Wenlock, Ludlow, Silurian.

Anna Kozłowska [akd@twarda.pan.pl], Instytut Paleobiologii PAN, ul. Twarda 51/55, PL-00-818 Warszawa, Poland. Alfred Lenz [aclenz@uwo.ca], Department of Earth Sciences, University of Western Ontario, London, Ontario N6A 5B7, Canada. Michael Melchin [mmelchin@stfx.ca], Department of Earth Sciences, St. Francis Xavier University, Antigonish, Nova Scotia, B2G 2W5, Canada.

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