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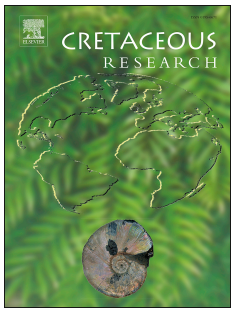

The variable echinoid *Micraster woodi* sp. nov. – Trait variability patterns in a taxonomic nightmare

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The variable echinoid *Micraster woodi* sp. nov. – trait variability patterns in a taxonomic nightmare

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A B S T R A C T

On the basis of the type material of a new species of micrasterid, *Micraster woodi* sp. nov., from the upper Turonian of Lower Saxony (Germany), intraspecific patterns in variability of 18 size- and shape-related indices were analysed. The results were compared with available data for four other species of *Micraster*, viz. *M. leskei*, *M. normanniae*, *M. cortestudinarium* *M. rogalae and the closely related Roweaster corbovis*, as documented by seven assemblages from the Turonian and Coniacian of Poland and Kazakhstan. Interspecific patterns in the variability of five shape indices reveal a specific pattern which is similar among most of the species studied. This finding indicates differences in developmental robustness among the shape indices studied. Indices with higher relative variability yield the more obvious differences between the species studied as given by the mean values of particular features. Accordingly, it is suggested that increases in variability, suggested to be the result of decreased canalisation, played an important role in the diversification of *Micraster* during the Late Cretaceous.

Key words:

Spatangoida

Phenotypic variability

Canalisation