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Maastrichtian *Ceratisepia* and Mesozoic cuttlebone homeomorphs

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The phylogenetics of potential Mesozoic ancestors of cuttlefish of a restricted order Sepiida von Zittel, 1895 (superorder Decabrachia Boettger, 1952) is reviewed. Microstructural studies of Mesozoic homeomorphs of cuttlebones (*Pearceiteuthis* gen. n., *Loligosepia*, *Trachyteuthis* , *Actinosepia*) are consistent with their assignement to the superorder Octobrachia Fioroni, 1981. The discovery of an embryonic *Ceratisepia* shell in the upper Maastrichtian of the Netherlands, indicates that true Sepiida did have a pre-Cenozoic origin. Cretaceous decabrachs of the order Spirulida Stolley, 1919 do not show evidence of the dorso-anterior shell growth vectors seen in Cenozoic spirulids, sepiids and octobrachs. Separate origins of the Sepiida and Spirulida within Cretaceous diplobelinid belemnites is still the most attractive hypothesis. *Ceratisepia vanknippenbergi* sp. n. from the upper Maastrichtian of the Netherlands and *Pearceiteuthis buyi* gen. et sp. n. from the Callovian of England are described.

Key words: Cephalopods, cuttlefish, ontogeny, biomineralization, Mesozoic.

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