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Short communication

Supplement 2 to: “How many species of fossil holothurians are there?”

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The holothuroids have a long fossil record, extending back to the Middle Ordovician (Reich 1999, 2001, 2010; Lefebvre et al. 2013), however, in comparison to other modern echinoderm groups (e.g., Pawson 2007), the geologic and evolutionary history of sea cucumbers is poorly understood (Gilliland 1993; Reich 2010; Smith & Reich 2013). Also the fossil holothuroid species diversity is meagre (nearly 1,000; Reich 2013), compared with other echinoderm groups today, like echinoids (>10,000; Smith & Kroh 2013) or crinoids (>6,000; Rouse et al. 2013). This apparently minimal diversity has led many authors to suggest that the palaeontologic record of Holothuroidea is unimportant and non-existent. However, detailed analysis has shown that this is clearly due to a lack of systematic sampling and work on fossil material (cf. Reich 2013). Also the scientific literature on fossil Holothuroidea turned out to be very heterogeneous and worldwide often been published in rather obscure journals or books. Therefore, the access to this knowledge remains limited, which is why the author compiled a short annotated list of named fossil holothurians (Reich 2013, 2014). In this ‘Supplement 2’ I add 9 new taxa missing from the former compilations.

Additional taxa described since the last checklist

Following Reich (2013: 32ff.), the detailed list includes the species, original genus, author(s), type stratum and locality. A few fossil species are designated in part as follows: * sclerite assemblage, ** body fossil, *** non-Holothuroidea or very probably non-Holothuroidea

The numbering of species/paraspecies from (Reich 2013) is continued here.

Addendum

- 960 *asymmetrica* Gao, Ding, Zhang, Wang & Sun, 2012; *Tetravirga* [Carboniferous: Moscovian; P.R. of China: Shanxi]
- 961 *circularia* Soodan, 1991; *Eocaudina* [Quaternary: sub-Recent; Indian Ocean: Arabian Sea]
- 962 *cudgela* Gao, Ding, Zhang, Wang & Sun, 2012; *Eocaudina* [Carboniferous: Moscovian; P.R. of China: Shanxi]
- 963 *encentrica* Gao, Ding, Zhang, Wang & Sun, 2012; *Eocaudina* [Carboniferous: Moscovian; P.R. of China: Shanxi]
- 964 *indicus* Soodan, 1991; *Costigerites* [Quaternary: sub-Recent; Indian Ocean: Arabian Sea]
- 965 *indicus* Soodan, 1991; *Elgerius* [Quaternary: sub-Recent; Indian Ocean: Arabian Sea]
- 966 *lowspiris* Gao, Ding, Zhang, Wang & Sun, 2012; *Priscopedatus* [Carboniferous: Moscovian; P.R. of China: Shanxi]
- 967 *pentagona* Soodan, 1991; *Eocaudina* [Quaternary: sub-Recent; Indian Ocean: Arabian Sea]

968 *thicka* Gao, Ding, Zhang, Wang & Sun, 2012; *Eocaudina* [Carboniferous: Moscovian; P.R. of China: Shanxi]

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