

Abstract:

A new Lower Devonian sea spider (Arthropoda: Pycnogonida) from the Hunsrück Slate, Germany is described as *Flagellopantopus blocki* gen. et sp. nov. This is only the sixth fossil pycnogonid species to be described. Its most remarkable and unique aspect is the long, flagelliform telson. Although our fossil apparently lacks chelifores (an apomorphy) the retained telson and the segmented trunk end behind the last pair of legs resolve *F. blocki* to a fairly basal position in the pycnogonid stem lineage. It probably lies between *Palaeoisopus problematicus* Broili, which has a lanceolate telson and the most trunk segments of any sea spider, and all other Silurian–Recent Pycnogonida. Our new material shows that at least two fossil pycnogonids retained a telson, albeit with very different morphologies, and further supports the idea that a greater diversity of body plans existed among the Palaeozoic pycnogonid taxa.