

The first report of South American edrioasteroids and the paleoecology and ontogeny of rhenopyrgid echinoderms

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A new species of rhenopyrgid edrioasteroid *Rhenopyrgus piojoensis* sp. nov. is described from the Silurian (Lower Ludlow) Los Espejos Formation in the Precordillera of Argentina. This species is the first reported edrioasteroid from South America. Rhenopyrgids are widely distributed in Ordovician through Devonian deposits of most continents. Numerous juvenile specimens show that the general bodyplan is organized early in ontogeny and that the pedunculate zone lengthens with age. Phylogenetic analysis shows that rhenopyrgids are more closely related to edrioasterid edrioasteroids such as edrioblastoids and cyathocystids than to pyrgocystid isorophids.

Key words: Echinodermata, Edrioasteroidea, Rhenopyrgidae, ontogeny, paleoecology, Silurian, South America.

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