

THE ICHNOFOSSILS OF THE ORDOVICIAN-DEVONIAN FORMATIONS OF THE PARANÁ BASIN, BRAZIL

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In the Lower Paleozoic strata of Paraná Basin, the ichnofossils are an important clue to paleontological information, mainly where the body fossils are scarce. This fact is particularly significative in the Alto Garças (Ordovician), Vila Maria (Silurian), and Furnas and Ponta Grossa (Devonian) formations. The ichnofossils allow paleoenvironmental analyses and to infer the paleofauna diversity. This paper concerns about the ichnofossils in the Ordovician-Devonian outcrops of the east and setentrional borders of Paraná Basin, and its possible usefulness in paleoenvironmental reconstruction. In a general way the ichnofossil assemblages contain the following ichnogenera: (i) Alto Garças Formation: *Skolithos*; (ii) Vila Maria Formation: *Arthropycus* and *Palaeophycus*; (iii) Furnas Formation: *Arenicolites*, *Arthropycus*, *Circulichnus*, *Conostichnus*, *Cruziana*, *Cylindrichnus*, *Didymaulichnus*, *Furnasichnus*, *Lockeia*, *Monocraterion*, *Palaeophycus*, *Planolites*, *Rusophycus*, and *Skolithos*; and (iv) Ponta Grossa Formation: *Bifungites*, *Chondrites*, *Cruziana*, *Lockeia*(?), *Notopus*, *Palaeophycus*, *Palaeosabella*, *Rusophycus*, *Skolithos*(?) and *Zoophycos*. These ichnofossil assemblages can be applied on ichnofacies models, allowing the local paleoenvironmental interpretation. The identified ichnofacies in Alto Garças and Furnas formations are *Skolithos* and *Cruziana*. In Vila Maria Formation is the *Cruziana* ichnofacies, and in the Ponta Grossa Formation it was possible recognize the *Cruziana* and *Zoophycos* ichnofacies. They are all indicative of shallow water marine environment.