

THE TERMINAL NEOPROTEROZOIC BIOTA OF THE CORUMBÁ GROUP, WESTERN BRAZIL.

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The Corumbá Group, an important unit of the Paraguai Fold Belt, is made up mostly of carbonate and pelites relatively little deformed at Corumbá on the Bolivian border but more tectonized further E in the Bodoquena range. This is paleontologically the most important unit of the Brazilian Neoproterozoic because near its top in the Tamengo Formation it contains invertebrate fossils Cloudina, an index fossil for the latest Neoproterozoic, and Corumbella weneri, broadly coeval with soft-bodied Ediacaran faunas elsewhere. This formation also includes Tyrasotaenia and small poorly preserved palynomorphs, including Sphaerocongregus. Recently, however, additional fossils and dubiofossils have been found. For example, in the underlying Bocaina Formation in the Bodoquena range, phosphatic stromatolites contain microfossils while associated dolostones have yielded stromatolites, oncolites, and possible ichnofossils (minute horizontal traces and large blob-like depressions). Meanwhile, new collections in the Tamengo Formation at Corumbá and restudy of material on hand have extended the stratigraphic range of Cloudina, revealed similarities of Corumbella with sabellididitans, and uncovered locally abundant, millimetric organic (algal?) scraps as well as silicified, probably cyanobacterial, microscopic globose colonies. More important, however, is the discovery of Eoholynia (an alga) and a structured carbonized fragment of apparent invertebrate origin in the previously unstudied Guaicurus Formation at the top of the group. These data plus new chemostratigraphic data are consistent with a post-Varanger Neoproterozoic age for all these fossils.