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THE OSTRACOD GENUS CYPRIDEIS (CRUSTACEA) AND ITS IMPLICATION FOR WESTERN AMAZONIA'S PALAEOENVIRONMENTS (LATE MIOCENE; SOLIMõES FORMATION; BRAZIL)

GROSS, Martin[1], **PILLER, Werner E.**[2], and CAPORALETTI, Marco[2], (1) Geology & Palaeontology, Landesmuseum Joanneum, Weinzoettlstrasse 16, Graz, A-8045, Austria, (2) Institute of Earth Sciences, University of Graz, Heinrichstrasse 26, Graz, 8010, Austria, werner.piller@uni-graz.at

Before the Late Miocene onset of the modern, W–E draining Amazon system an enormous wetland – the “Pebas” system – shaped Western Amazonia’s landscape and life for several millions of years. One of the most controversially discussed issues of that ecosystem is the influence of marine incursions. Their existence, chronology, origin as well as their spatial extent is still disputed. Aside from sedimentological and ichnological indications, paleontological evidences (i.e., mangrove pollen, foraminifers, specific molluscs, barnacles) were used to infer transitorily marine influences. In addition, the occurrence of highly endemic, brackish water associated ostracods (particularly *Cyprideis*) motivated several authors to propose elevated salinities or even marine transgressions. Several outcrops around Eirunepé (SW Amazonas state), which expose the upper part of the Solimões Formation (Late Miocene), were sedimentologically and micropaleontologically investigated (FWF project P12748-N21). Vertically as well as laterally, highly variable fine-grained clastic successions were recorded. Based on the lithofacies assemblages, these sediments represent various subenvironments of a fluvial, possibly anastomosing river system. Lacustrine environments are restricted to local floodplain ponds/lakes. The taxonomic evaluation of the ostracod faunas documents a moderately diverse assemblage (19 species). A wealth of freshwater ostracods (mainly *Cytheridella*, *Penthesilenula*) was found co-occurring with taxa (chiefly *Cyprideis*), which are typically related to marginal marine settings. The observed faunal compositions as well as constantly very light $\delta^{18}O$- and $\delta^{13}C$-values, obtained by analyzing both groups, refer to entirely freshwater conditions, which corroborate the fluvial depositional model for this area. Apparently, *Cyprideis* has been successfully adapted to pure freshwater settings at least during the Late Miocene fade out of the “Pebas” system. Consequently, the occurrence of *Cyprideis* and probably of some other “brackish/marine” taxa (*Perissocytheridea*, *Rhadinocytherura*) provides no concrete evidence for brackish waters or marine incursions in Western Amazonia during the Miocene.

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