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CYPRIDEIS (*Ostracoda*) FROM WESTERN AMAZONIA'S NEOGENE
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Ostracods and in particular the genus *Cyprideis* experienced an extensive radiation in western Amazonia during the Miocene. At that time a vast wetland (“Pebas system”) shaped the landscape and its biota (e.g. HOORN *et al.*, 2010). Inter alia the frequent occurrence of the usually brackish water form *Cyprideis* motivated several authors to propose elevated salinities or sporadic marine transgressions. With the onset of the modern Amazon system the unique “Pebasian fauna” vanished during the Latest Miocene.

Here we document the microfauna of a 400.25 m deep drill hole (1AS-10-AM; S04°50'/W70°22'; 62 km SW Benjamin Constant). The core consists of sandy–pelitic alternations with dm-thick lignitic intercalations. Sediments below ~215 m depths are largely pedogenically altered (reddish paleosols) and yielded no or only very rare and badly preserved ostracod remains. Based on the biostratigraphic model of MUÑOZ-TORRES *et al.* (2006) the core interval above ~215 m comprises the *Cyprideis caraione* to *Cyprideis obliquosulcata* ostracod zones (possibly also the lower part of the *Cyprideis cyrtoma* zone). These zones correspond to a Middle–early Late Miocene age by applying the chronology of WESSELINGH & RAMOS (2010).

Cyprideis extremely dominates the faunas with more than 95 % of the found ostracods. Nine species belong to the “ornate” group sensu MUÑOZ-TORRES *et al.* (1998: *Cyprideis cyrtoma*, *C. ?graciosa*, *C. inversa*, *C. lacrimata*, *C. ?longispina*, *C. pebasae*, *C. sulcosigmoidalis*, *C. aff. C. tuber-*

culata, *Cyprideis* sp. 1) and at least seven to the “smooth” group (*C. amazonica*, *C. aff. C. amazonica*, *C. machadoi* s.l. (?4 species), *C. olivencai*, *C. schedogymnos*, *Cyprideis* sp. 2 and 3).

Among the “ornate” group, *C. sulcosigmoidalis* occurs throughout the productive sample interval (28.2–214.1 m depth). Considerable variations in size (between samples) as well as in ornamentation (within and between samples) are observed. Based on these results, the species *Cyprideis aulakos* is obviously closely related or even a junior synonym of *C. sulcosigmoidalis*. Because *C. aulakos* is assigned in the phylogenetic scheme of MUÑOZ-TORRES *et al.* (2006) to the “smooth” lineage and its appearance defines the base of the *C. aulakos* zone, reconsiderations of the existing phylogenetic and biostratigraphic concept are required.

The smooth *C. machadoi* is supposed to be an extremely variable species in relation to shape and development of the anterior margin and MUÑOZ-TORRES *et al.* (1998) put several taxa in the synonymy of *C. machadoi*. However, four clearly differing morphotypes are found here, which necessitate a re-evaluation of the species concept around *C. machadoi*.

The Middle–early Late Miocene ostracod assemblages of core 1AS-10-AM differ with >95 % *Cyprideis* notably from the Late Miocene fauna of the Eirunepé region (250 km S B. Constant; GROSS *et al.*, 2012). There *Cyprideis* constitutes only ~1/3 of the ostracod fauna and is demonstrated to have adapted to pure freshwater settings during the fade out of the “Pebas system”. Despite remarkable compositional differences between 1AS-10-AM and Eirunepé, no micropalaeontological evidences (e.g. foraminifers) for a marine influx were found throughout this core.

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