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Mangrove foraminifera from western Ilha do Cardoso, south São Paulo State, Brazil

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Mangrove muddy sediments sampled from 15 sites along the margins of estuarine channels of western Cardoso Island were analyzed regarding the foraminifera content (total fauna). The assemblages, composed of 26 arenaceous foraminifera species, were studied in terms of abundance, diversity (Shannon-Wiener) and equitability. Along all investigated channels it was observed a decreasing of diversity and equitability towards the upstream. *Arenoparrella mexicana*, *Haplophragmoides wilberti* and *Trochammina inflata* are dominant in the Capivaru river, whereas *A. mexicana*, *T. inflata* and *Miliammina fusca* dominate in the Tapera river. In this channel, in sites where the time of exposition is short and/or middle (deep and mid intertidal subzones), *M. fusca* indicates a stronger freshwater input. However, this species is poorly represented in the estuarine upstream site of the Moupava River, which is also an oligohaline environment. It may be associated with the fact that the sample of this site was collected in the very shallow intertidal subzone (long exposition time), where *H. wilberti* typically dominates, as observed in a site of the Capivaru river. Along this channel, towards the estuarine upstream, it was verified a progressive augment in *H. wilberti* tests. Then, *H. wilberti* seems to be very well adapted to sites with long exposition time and may be used as an indicator of ancient very shallow intertidal areas (close to the transition intertidal-supratidal zones). It would not be the salinity the main factor controlling the distribution of this species. Among all species, *A. mexicana* is here considered the most resilient species found in the area. It appeared as a dominant species in the majority of sites: along the channels (downstream to upstream) and in different positions in the margins (deep, mid and shallow intertidal subzones). *Textularia earlandi*, *Monotalea salsa*, *Warrenita palustris*, *Ammotium directum*, *Ammodiscus* sp., *Acostata mariae*, *A. angulatum* and *Tiphrotrocha comprimata* represent a “discreet” group of estuarine species, always with a relatively low frequency of specimens. They showed a clear preference to more “marine” waters, exhibiting a progressive augment of individuals towards the downstream. The foraminifera distribution pattern observed in this estuarine wetland provides key elements to understand the hydrohaline dynamic in the area within a multi-seasonal context, supporting environmental diagnosis and the ecosystem management. It can be also used in paleoenvironmental studies.