From teeth pathology to feeding ecology: paleodiet of *Notiomastodon platensis* from Brazil Intertropical Region

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*Notiomastodon platensis* is a Quaternary proboscidean endemic from South America. Due abundant and rich fossil record, its paleobiology is crucial to understand Pleistocene/Holocene ecological/environmental dynamics. This study aimed to recognize the feeding habits of *Notiomastodon* from Minas Gerais and Pernambuco states, in Brazilian Intertropical Region (BIR), with dental calculus floristic content. Dental calculus samples were collected from 10 third molars of adult individuals, being chemically processed (37% HCl dissolution, washing, sieving and preparation of slides). The floristic content was recognized using stereo microscope (40x) and specialized literature. Fragments of high silicified vegetal tissue (vascular and epidermal) and phytoliths cylindrical-convex, polylobed-crenated and elongated were found in all samples, which suggest that *N. platensis* would consume Arecaceae (palms), Asteraceae (herbaceous plants, shrubs, and trees) and Poaceae (grasses). Thus, *Notiomastodon*,in BIR, was both grazer (consumption of grasses) and browser (consumption of leaves, bark, and fruits) feeding habits, i.e., mixed-feeder paleodiet. Since dental calculus is an oral pathology of adult life span, it does not differentiate if *N. platensis* had seasonal/regional predilection for any feeding habit, featuring a generalistic feeding behavior, as observed in modern elephants. These results agree with literature, where *N. platensis* from other BIR localities would have mixed-feeder habit with predilection for grasses (both C3 and C4). Despite its abundance and generalistic feeding behavior, *N. platensis* was negatively selected at Pleistocene/Holocene transition, and other aspects of its paleobiology must be studied in order to comprehend its extinction.

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