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Influence of bamboo *Guadua aff. paraguayana* Doll (*Poaceae*) on the radial increment of *Sebastiania commersoniana* trees in remnant of a Mixed Ombrophilous Alluvial forests in southern Brazil

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Sebastiania commersoniana (Baillon) Smith & Downs (*Euphorbiaceae*) is a typical tree species almost exclusively growing in the floodplains of the second plateau of Paraná State and one of the most important tree species that best characterizes the stratum of these riparian forests. This study aims to assess the influence of *Guadua aff. paraguayana* bamboo species on the trunk increment of this tree species in remnant of a Mixed Ombrophilous Alluvial forests strongly altered by anthropogenic action, using tree rings analysis for age determination and as indicators of this forest formation health. The study was carried out in a riverside forest severely degraded by sand extraction in the Tibagi River. Through non-destructive small wood sampling methods, two radial wood strips (core diameter 5,15 mm) oriented from pith to bark at DBH level were collected for each selected tree, totalizing twenty two representative trees, twelve of them growing in areas strongly occupied by *Guadua* bamboo and ten of them in its absence. Distinct tree rings can be recognized by flattened radial fibers wall and a slightly decrease of vessel diameter. Data of average annual diameter increment and age estimates for this tree species are presented. Differences in growth rate and dynamics were observed in both growth conditions, allowing identifying the probable period of more intensive anthropogenic action. The influence of *Guadua* bamboo on tree growth seems probably be related to competition for light and nutrients. Tree rings analysis can provide important information for the management and conservation of these endangered forest fragments.