



## **Fibre pits in wood of *Xylopia emarginata* Mart. (Annonaceae)**

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The influence of environmental conditions such as flooding areas on wood anatomical features is little known. The aim of this work was to compare the stem and root fibre pits of *Xylopia emarginata* grown in swamp forest and cerrado. Wood samples of stem and root of *X. emarginata* were collected in Reserva Biológica e Estação Experimental de Moji-Guaçu using a non-destructive method. The anatomical study of the wood included analyses in three sectional planes and dissociated tissue. Quantitative data in fibre pits were processed using the software Sample Size Estimator Worksheet to obtain the statistical parameters, and BioEstat 2.0 to perform non-parametric Mann-Whitney test. Analyses by light and scanning electron microscopy of *X. emarginata* wood showed large differences in number of fibres pits between stem and root from swamp forest and cerrado. The largest number of pitting occurs in the radial walls of the fibres, being the roots have twice the number of pits than in the stem from swamp forest and cerrado specimens and these differences were statistically significant.

**Key words:** cerrado, flooding soil, root, stem, wood anatomy.