ANATOMIC CHARACTERIZATION OF THE FOLIAR BLADE OF
Spondias dulcis Parkinson
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ABSTRACT

Introduction: Spondias dulcis Parkinson belongs to the Anacardiaceae R. Br. family, and is popularly known as Caja-manga. In folk medicine its leaves are used in teas and studies prove the presence of large amount of polyphenols, presenting pharmacological potential as antioxidant and laxative. Because of this, studies aiming to identify diagnostic characters are necessary in order to contribute to the pharmacobotanical control of the species. Objective: This study aimed to identify the anatomical characters of the leaf blade of Spondias dulcis Parkinson. Methods: Transverse and paradermic sections were obtained, freehand, and subjected to a 50% sodium hypochlorite solution for discoloration process. After washing in distilled water, the cross sections were stained with safrablau and the paradermic sections with methylene blue and mounted on semipermanent slides. The analyzes were performed on images obtained by digital camera coupled to light microscope. Results: The leaf blade, in frontal view, features in adaxial and abaxial faces straight-walled epidermal cells. It is classified as hypoestomatic, with anomocytic stomata. On the abaxial face are observed bases of in shape rosette trichomes. In cross section, the central rib features concave-convex contour and uniseriate epidermis, covered by a slightly thick cuticle. Below the epidermis is observed angular collenchyma. In the central region there are four collateral vascular bundles. Sclerenchyma is observed near the phloem. It is observed secretory cavities and the presence of druses type crystals. The mesophyll is dorsiventral, also featuring druses type crystals. Conclusion: The correct characterization provides important anatomical information useful for pharmacobotanical standardization, as there is variability in diagnostic characters. Keywords: Anacardiaceae. Pharmacobotany. Quality control.

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