# Macro and Microscopic Analysis of the Leaf and Stem of Randia armata (Sw.) DC., Rubiaceae 

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#### Abstract

SUMMARY. Randia armata (Sw.) DC., Rubiaceae is a shrub or small tree known as limoeiro-do-mato in Portuguese and widely distributed in Brazil. The vegetative parts are used as wound healing and anti-inflammatory in folk medicine. Due to the interest in expanding the knowledge on this species, this work has investigated the macro and microscopic characters of the leaf and stem, in order to contribute to the quality control analysis in pharmacognosy. Mature leaves and young stems were collected at the Embrapa (Colombo-PR), fixed in FAA, sectioned either by free hand or microtome, and examined in light microscopy. Microchemical tests and scanning electron microscopy were also performed. Macroscopically, the leaves are opposite, simple and obovate to elliptic-lanceolate. Microscopically, they have paracytic stomata exclusively on the abaxial side and non-glandular trichomes, either uni or multicellular and uniseriate. The mesophyll is dorsiventral and the midrib is biconvex with a collateral vascular bundle in a centric arrangement. The stem has a partially detached uniseriate epidermis, phellogen originated superficially and a complete sclerenchymatic sheath encircling the phloem cylinder. Prisms and druses of calcium oxalate are present.


