

Leaf Microscopic Characters of *Ormosia arborea* (Vell.) Harms, Fabaceae

Márcia R. DUARTE ^{1*}, Elize R. K. DRANKA ¹ & Mami YANO ²

¹ Laboratório de Farmacognosia, Departamento de Farmácia, Universidade Federal do Paraná (UFPR),
Av. Prof. Lothário Meissner, 632, CEP 80210-170, Curitiba, PR, Brazil

² Universidade Católica Dom Bosco, Campo Grande, MS, Brazil

SUMMARY. The genus *Ormosia* (Fabaceae-Faboideae) is common in the neotropics and includes different species used in folk medicine for various purposes. *Ormosia arborea* is a tree popularly known as “olho-de-cabra” and used for its contraceptive effects in Brazilian rural communities. As it lacks data about this medicinal plant, this work has carried out anatomical studies on the leaf of this potential vegetal drug. Fully-expanded leaves were fixed and prepared according to light and scanning electron microscopic techniques. Microchemical tests were also carried out. The leaf has paracytic stomata confined to the abaxial side. The cuticle is smooth and there are bicellular non-glandular trichomes predominantly on the abaxial surface. The mesophyll is dorsiventral and traversed by minor collateral vascular bundles with sclerenchymatic and crystalliferous bundle sheaths which may attain the epidermis. The midrib is concave-convex in transection and has one major collateral vascular bundle in circular arrangement and one or two minor ones, each of which encircled by a sclerenchymatic bundle sheath. The petiole is circular in transection and possesses a ring of numerous collateral vascular bundles enclosed in a conspicuous sclerenchymatic sheath. Some cells bearing phenolic compounds and prismatic crystals of calcium oxalate are also present in the leaf.

KEY WORDS: Leguminosae, Medicinal plant, Phenolic compounds, Plant anatomy, *Ormosia arborea*, Sophoreae.

*Author to whom correspondence should be addressed. E-mail: marciard@ufpr.br