

---

# Leaf epidermal anatomy of some species of the Fabaceae family from Lao PDR

Khamfa Chanthavongsa\*<sup>1</sup>

<sup>1</sup>Biology Department, Faculty of Science, National University Of Laos (Biology Department, Faculty of Science) – Biology Department, Faculty of Science, National University Of Laos, Laos

## Résumé

The leaf epidermal characteristics of 20 species from 14 genera of the Fabaceae in the Lao PDR were studied; namely *Callerya atropurpurea* (Wall.) Schot, *Crotalaria sessiliflora* L., *Dalbergia rimosa* Roxb., *Dendrolobium lanceolatum* Schindl., *Desmodium heterocarpon* (L.) DC., *Desmodium styracifolium* (Osbeck) Merr., *Desmodium triflorum* (L.) DC., *Droogmansia godefroyana* Schindl. ex Gagnep., *Flemingia kerrii* Craib, *Flemingia lineata* (L.) W.T.Aiton, *Flemingia macrophylla* (Willd.) Kuntze ex Prain, *Indigofera zollingeriana* Miq., *Pycnospora lutescens* (Poir.) Schindl., *Spatholobus parviflorus* Kuntze, *Tadehagi triquetrum* (L.) H. Ohashi, *Tephrosia coccinea* Wall., *Uria crinita* (L.) DC., *Uria lagopodioides* (L.) Desv. ex DC., *Vigna luteola* (Jacq.) Benth. and *Vigna radiata* (L.) R.Wilczek. Leaf epidermal peels were prepared from each of the samples. The results indicated that leaf epidermal characteristics, such as the shape of epidermal cells, type of stomata, trichomes and crystals, can be useful for species and generic identifications within the Fabaceae. Based on these characters the Fabaceae can be divided into several groups. For example, based on type of stomata this family can be divided into five groups: 1. Diacytic stomata group; 2. Anisocytic stomata group; 3. Paracytic stomata group; 4. Cyclocytic stomata group; and 5. Anomocytic stomata group. However, leaf epidermal characteristics should be combined with other features of the plant for more accurate identification.

**Mots-Clés:** anatomy, epidermis, taxonomic study, Fabaceae

---

\*Intervenant