## **OLACACEAE**

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Pantropical family, with three genera and ~56 species of trees, shrubs or exceptionally scrambling shrubs or lianas. Climbers in the Neotropics belong to the genus *Dulacia*, with two species consistently recorded as scandent shrubs. The genus is most diverse in humid forests at low elevations.

*Diagnostics*: Scrambling lianas with cylindrical stems; leaves simple, alternate, distichous, coriaceous with cartilaginous, undulate or entire margins, and pinnate venation, lamina commonly with conspicuous discolorous laticifers; exstipulate; drupes subtended by an accrescent calyx.

## **General Characters**

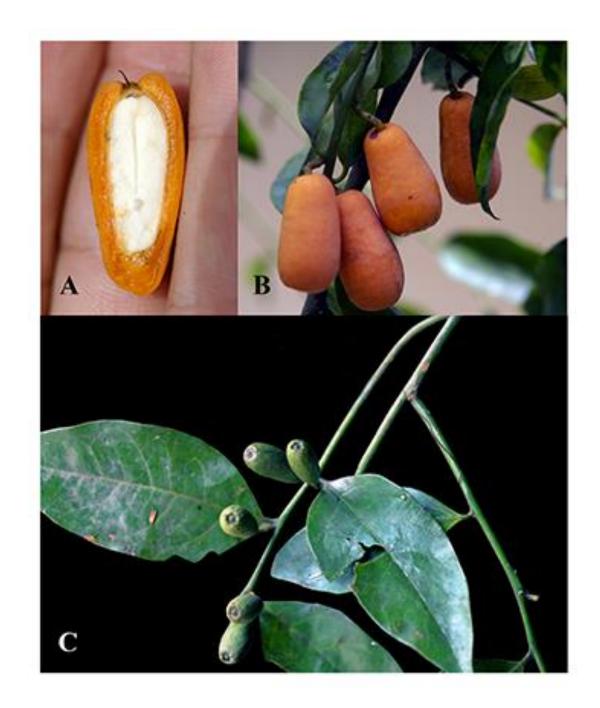
- 1. STEMS. Slender, cylindrical, attaining 3 m long; cross section simple, with regular anatomy; xylem, with narrow rays.
- 2. EXUDATES. Scanty, inconspicuous.
- 3. CLIMBING MECHANISM. Shrubs or scrambling lianas.
- 4. LEAVES. Leaves simple, alternate, with entire margins, and pinnate venation; petioles~0.5 cm long, adaxially canaliculate, glandless; stipules absent.
- 5. INFLORESCENCES. Axillary, very short, few-flowered cymes.
- 6. FLOWERS. Actinomorphic, bisexual; pedicellate. Calyx minute, obtusely 5-dentate, undulate or truncate, forming a hypanthium; petals 6, connate along lower ½, white, caducous; stamens 3; staminodes 6, bifid; ovary subinferior, 3-carpellate, unilocular, with a single pendent ovule per locule.

7. FRUITS. An ellipsoid drupe, completely covered by the fleshy accrescent calyx, orange when mature, with a single seed (Figure 188A, B).

## **DULACIA** Vellozo, Fl. Flumin. 32. 1829 ['1825'].

Glabrous, unarmed, shrubs or trees, or occasionally scrambling shrubs or lianas reaching up to 3 m in length; branches slender, flexuose. Leaves alternate, distichous, simple, coriaceous, with entire margins, and pinnate venation, lamina lacking laticifers; petioles furrowed, short; exstipulate. Inflorescences of axillary, simple or laxly branched thyrses, with straight or flexuose axes. Flowers pedicellate, bisexual, actinomorphic; calyx green, minute, cupular, obtusely 5-dentate, undulate or truncate, forming a hypanthium at base; petals 6, connate along lower ½, white, lanceolate, inflexed or reflexed, caducous; stamens 3, alternating with the petals, adnate to basal part of petals; staminodes 6, epipetalous, bifid; ovary semi-inferior, 3-locular, with a single ovule per locule, the stigmas subcapitate. Fruit an ellipsoid drupe, completely covered by the fleshy accrescent calyx except for the apical umbonate region, orange when mature, with a single seed.

**Distinctive features**: Erect shrubs with scrambling branches or scrambling lianas; leaves alternate, simple, with cartilaginous undulate or entire margins and pinnate venation, lamina lacking laticifers; exstipulate; drupes entirely covered by an accrescent, fleshy calyx. **Distribution**: A neotropical genus of ~13 species, two of which are consistently reported as scandent shrubs; *Dulacia cyanocarpa* Sleumer from Venezuela and Bolivia (?), and *D. macrophylla* (Benth.) Kuntze from the Amazonian basin in Colombia, Venezuela, Peru, and Brazil, in terra firme and seasonally flooded lowland forests.



**Figure 188**. *Dulacia* sp. **A.** Longitudinal section of fruit, showing the orange, fleshy accrescent calyx surrounding the fruit. **B**. Fruiting branch. **C**. Fruiting branch, fruit showing apical umbonate scar. Photos by P. Acevedo.