

# CLUSIACEAE

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A family of trees, shrubs, herbs, and lianas of pantropical distribution with some members extending to warm temperate zones. Worldwide, the family consists of 36 genera and ~1,600 species. In the Neotropics the family is represented by 23 genera and ~750 species, of which 13 species of *Clusia* are reported as sometimes climbing shrubs or lianas. These species are generally found below 500 m elevation but sometimes reaching higher elevations; occurring in wet, seasonally flooded, and gallery forests.

**Diagnosics:** Species of *Clusia* with climbing habit are scrambling shrubs, commonly with adventitious roots, decussate lateral branches, cream to yellow exudates, exstipulate, opposite, thick coriaceous leaves with fine, inconspicuous secondary venation and terminal dichasial cymes.

## General Characters

1. **STEMS.** Branches are cylindrical or quadrangular; mature stems are cylindrical, in some species known to reach up to 15 cm in diam. and 20 m in length. Cross sections with regular wood anatomy, commonly oxidizing dark brown upon cutting.
2. **EXUDATES.** Thick, odorless and reported as white, cream, yellowish or sometimes orangish.
3. **CLIMBING MECHANISM.** Most species of climbing *Clusia* are trees or epiphytes that sometimes have long climbing branches or are scramblers that later produce adventitious roots that help them to secure their position on host plants.
4. **PUBESCENCE.** For the most part they are glabrous.

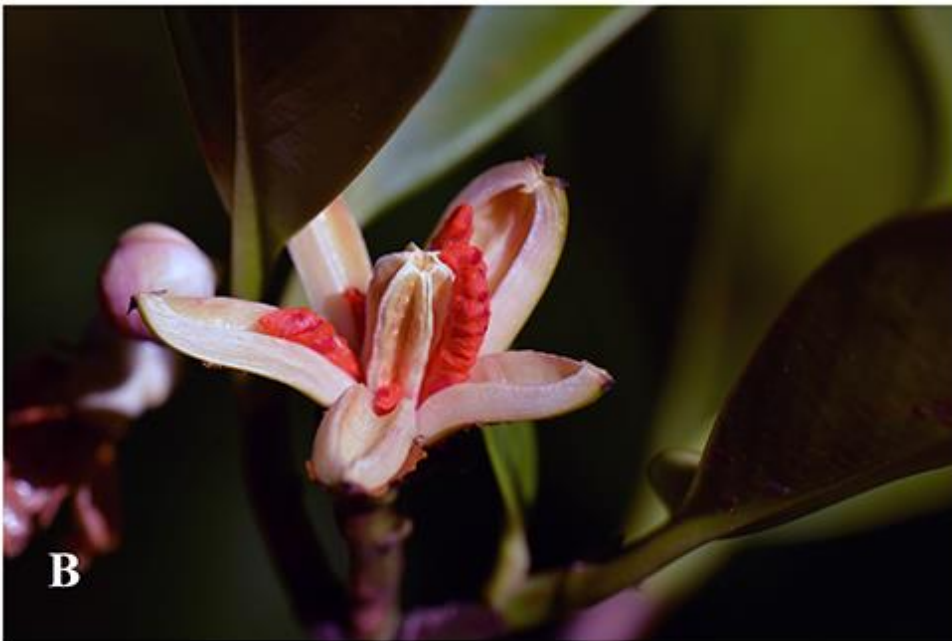
5. LEAVES. Simple, opposite, thick coriaceous, exstipulate, with entire margins, with inconspicuous secondary venation, and short glandless petioles.
6. INFLORESCENCES. Terminal, usually pyramidal-shaped, dichasial cymes or panicles of cymes, sometimes few-flowered cymes (Figure 80A).
7. FLOWERS. Actinomorphic, unisexual; calyx of 4–6, free sepals; corolla of (3)5(14) free petals; mostly pedicellate; calyx forming a hypanthium that projects beyond the ovary; corolla of free petals, sometimes calyprate or absent; staminate flowers: stamens 4 to numerous, the filaments connate or free, pistillode sometimes present; pistillate flower: staminodia 4-numerous, free or connate into a ring, sometimes secreting a resin, ovary superior, 4–12-carpellate, the ovules numerous, with axile placentation, the stigma peltate.
8. FRUITS. Fleshy valvical capsules with numerous seeds, covered with a fleshy, red or orange covering (Figure 80B).

**CLUSIA** Linnaeus, Sp. Pl. 509. 1753.

As in family description.

**Distinctive features:** Most species of *Clusia* are free standing trees, stranglers or shrubs, a few species sometimes with climbing branches or scrambling lianas. Easily distinguished by the cream to yellow, thick exudate and the thick-coriaceous leaves with inconspicuous secondary veins.

**Distribution:** A neotropical genus of 150 species of which 13 are reported as sometimes growing as climbing shrubs or lianas.



**Figure 80.** *Clusia* sp. **A.** Dichasial cyme with flower buds. **B.** Dehiscent capsule showing numerous seeds with orange covering. Photos by P. Acevedo.