

## CORDIACEAE

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A tropical to warm temperate family with two genera and ~400 species of trees, shrubs or rarely scrambling climbers. In the Neotropics, the Cordiaceae is represented by ~308 species in 2 genera, of which only 11 species of *Varronia*, a genus endemic to the Western Hemisphere, are reported as scrambling shrubs. For the most part, they are found in moist to dry forests and woodlands, 0–2,300 m elevation.

**Diagnostics:** Scrambling vines or lianas; leaves simple, alternate with serrate margins, exstipulate; inflorescences axillary or terminal, often short, pedunculate corymbose cymes with flowers grouped in heads; flowers 5-merous, corollas gamopetalous, stamens inserted on the corolla tube, and ovary superior; fruits fleshy drupes.

### General Characters

1. **STEMS.** Cylindrical, few species with substantial secondary growth, commonly 3–5 m long and 1–2.5 cm diam.; bark commonly grayish and; cross sections with regular anatomy, showing wide vessels and numerous narrow rays.
2. **EXUDATES.** Inconspicuous and clear exudates.
3. **CLIMBING MECHANISMS.** Climbing *Varronia* species are scramblers.
4. **LEAVES.** Alternate, simple, chartaceous to coriaceous with serrate margins; veins pinnate; petioles short, glandless; stipules absent.
5. **INFLORESCENCE.** Axillary or terminal (often on short, lateral branches), short to long pedunculate subdichasial or corymbose cymes with flowers grouped in heads, some species with axillary glomerules.
6. **PEDICELS.** Very short or flowers sessile in *Varronia*.

7. FLOWERS. Bisexual, actinomorphic, 5-merous; calyx of 5 distinct, equal sepals; corolla white, gamopetalous, campanulate, funnel-shaped, or less often hypocrateriform; stamens 5, equal, the filaments inserted on the corolla tube, the anthers opening along longitudinal slits; ovary superior, of 2 connate carpels, bilocular; ovules 1 per locule, axile, the style 1, terminal, 2-branched, each branch with 2 stigmatic branches.
8. FRUIT. A fleshy globose to ovoid, red drupe, often subtended by the calyx on lower  $\frac{1}{2}$ ; with 1–4 pyrenes.

**VARRONIA** P. Browne, Civ. Nat. Hist. Jamaica 172. 1756.

Erect shrubs, a few species scrambling vines or lianas 2–4 m long; stems cylindrical; cross



*Varronia serrata*, photo by P. Acevedo.

axillary, few-flowered fascicles, or terminal subdichasial cymes with subscorpioid branches, sometimes racemes of fascicles. Flowers bisexual, 5-merous, short-pedicellate or sessile; calyx crateriform, sepals with valvate aestivation; corolla campanulate, white; style distally divided in 4

sections with regular anatomy showing wide vessels and numerous narrow rays. Leaves glabrous, pubescent or scabrous, coriaceous to chartaceous, with pinnate venation and serrulate or serrate margins; petioles short; stipules absent. Inflorescence



Stem x-sect. of *V. polycephala*, photo by P. Acevedo.

stigmatic branches. Drupes globose or nearly so, fleshy, often red, commonly with accrescent calyx on lower ½.

**Distinctive features:** Scrambling shrubs a few m long; leaves alternate, simple, with serrate or serrulate margins, commonly with rough pubescence on upper surface.

**Distribution:** A New World genus with 138 neotropical species, eleven of which are reported as climbers; distributed from Mexico to southern Brazil and the West Indies, often in open disturbed habitats.