

## URTICACEAE

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A primarily tropical and subtropical family extending into the northern temperate region, with 58 genera and ~2,126 species of herbs, shrubs, trees, and occasionally lianas. In the Neotropics, there are 19 genera and 670 species, of which only five species in two genera are consistently reported as climbers (lianas and vines). For the most part, they are found in moist to wet lowland forest, from Mexico south to southern Brazil.

**Diagnosics:** Scrambling vines or lianas; stems furrowed or cylindrical, unarmed; leaves alternate, often 3-veined or nearly 3-veined from base, serrate margins and long, unequal petioles; stipules lateral, free, often early caducous; flowers and fruits minute.

### General Characters

1. **STEMS.** Smooth, herbaceous or with moderate secondary growth, furrowed, turning cylindrical with age, 3–15 m in length and 0.5–1.5 cm in diam.; cross section with regular vascular anatomy, with a large medulla and numerous narrow rays.
2. **EXUDATES.** Watery and abundant in *Urera* or not visible in *Pouzolzia*.
3. **CLIMBING MECHANISMS.** All climbing Urticaceae are scramblers.
4. **LEAVES.** Alternate, simple, membranaceous, sub-trinerved, with serrate margins in *Urera* or entire margins in *Pouzolzia*; petioles short and of similar size in *Pouzolzia*, long and unequal in *Urera* (Figure 236A); stipules lateral, free, commonly early caducous.
5. **INFLORESCENCE.** Axillary spikes with flowers in glomerules in *Pouzolzia* (Figure 235), axillary or cauliflorous, dichotomous cymes in *Urera* (Figure 236B).
6. **PEDICELS.** Short or absent.

7. FLOWERS. Unisexual, actinomorphic or zygomorphic, small, greenish or whitish; tepals 3–5; stamens 3–5, antitepalous, the filaments inflexed in bud; ovary superior, syncarpous, bi-carpellate, unilocular, with a single ovule.
8. FRUIT. A small, dry or fleshy achene, white, green or orange; seeds small.

### Key to the genera of climbing Urticaceae

1. Plant herbaceous, reaching 3 m in length; leaves entire .....*Pouzolzia*
1. Plant woody, reaching 5–25 m in length; leaves serrate or undulate.....*Urera*

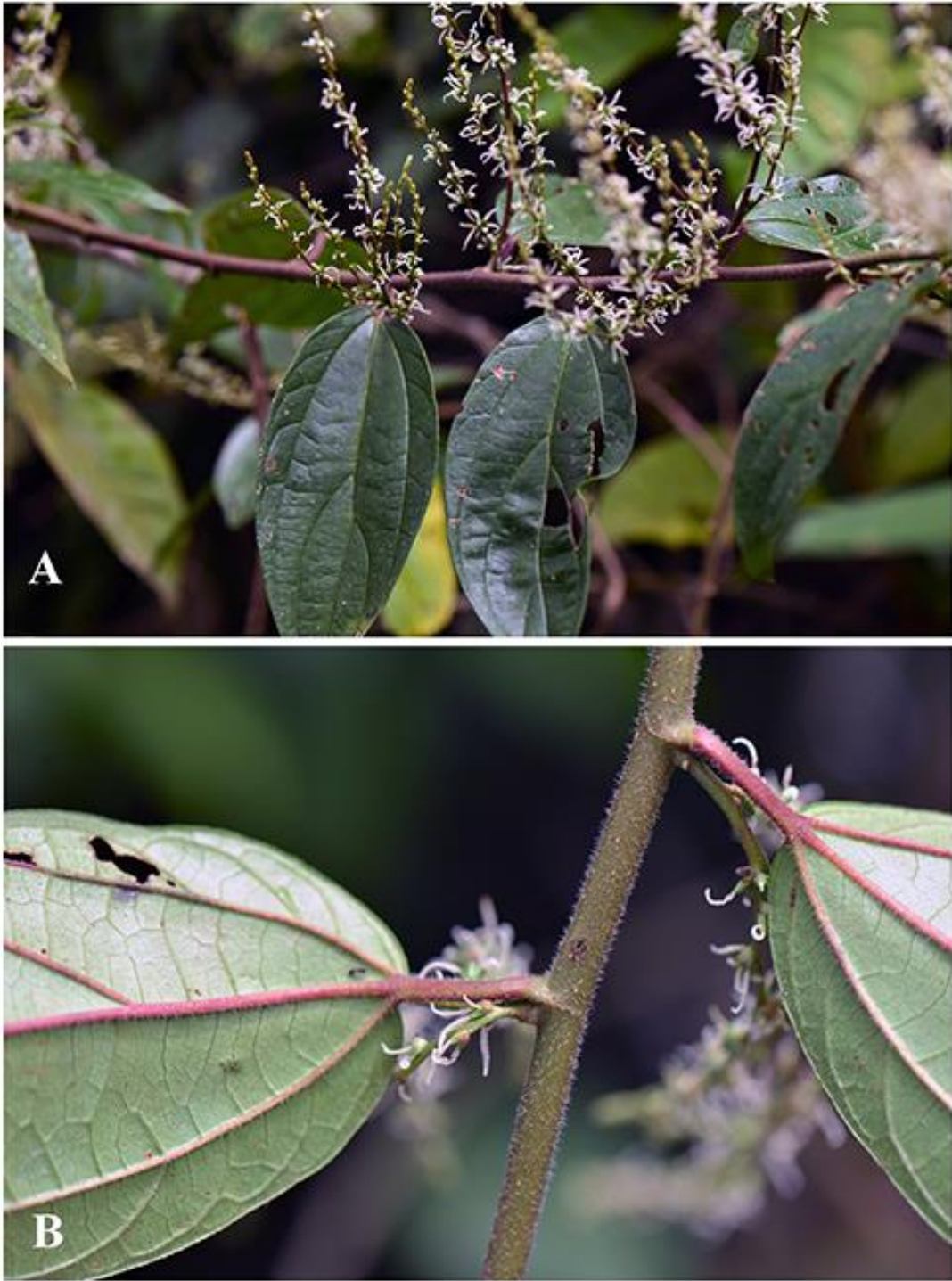
**POUZOLZIA** Gaudichaud in Freycinet, Voyage Monde Bot. 503. 1830 [1826].

Monoecious erect herb or shrubs, or rarely scrambling shrubs. Stems cylindrical, simple, with regular anatomy. *Pouzolzia formicaria* (Poepp. ex Wedd.) Wedd., the only climbing species in the Neotropics, is recognized in the following way. Leaves alternate, sub-triplinerved, with entire margins; petioles ~1 cm long, often reddish tinged. Inflorescences erect spikes with flowers in dispersed glomerules, axillary or distal on short lateral branches. Flowers actinomorphic; staminate flowers: perianth of 4, free tepals; stamens 4; pistillate flower: tepals green, connate into a trigonous tube, the stigma long-exserted, white, plumose. Fruit an achene envolved by a persistent perianth.

**Distinctive features:** Distinctively Urticaceae, leaves sub-trinerved, with entire margins, spikes ascending with minute cream to whitish flowers in glomerules.

**Distribution:** A pantropical genus of ~57 species, 12 of which are native to the Neotropics.

*Pouzolzia formicaria*, the only climbing species, is restricted to the Amazon basin, commonly found along river margins in seasonally flooded forests; 40-150 (1,500) m.



**Figure 235.** *Pouzolzia formicaria*. **A.** Flowering branch. **B.** Detail of pistillate inflorescences. Photo by P. Acevedo.

**URERA** Gaudichaud in Freycinet, Voyage Monde Bot. 496. 1830 [1826].

Monoecious or dioecious shrubs or small trees, occasionally scrambling lianas with some species reaching 25 m in length and ~1.5 cm in diam. Foliage and young branches commonly with painfully stinging hairs (not so much in the climbing species). Stems furrowed to cylindrical, climbing species unarmed, simple with regular anatomy showing a large medulla and numerous narrow rays; exudate watery and abundant. Leaves alternate, chartaceous, simple, sub-trinerved, with serrate margins; petioles long and commonly of variable length within individual plants. Inflorescences axillary or cauliflorous, pedunculate, bifurcated cymes, shorter than the subtending leaf. Flowers minute, actinomorphic; staminate flowers: perianth of 4–5 tepals; stamens 4–5; pistillate flowers: perianth of 4 free tepals, the stigma plumose. Achenes globose, commonly covered by an accrescent, fleshy perianth.

**Distinctive features:** Scrambling lianas 5–15 m long, with alternate, simple, leaves with serrate margins, often with at least scattered stinging hairs; petioles commonly of unequal lengths; inflorescence of short, corymbose, bifurcate cymes, either axillary or cauliflorous.

**Distribution:** A tropical genus of 45 species shared between the African and American tropics, with 24 species in the Neotropics, two species are consistently reported as lianas, although sometimes they may grow as shrubs; distributed from Mexico to southeastern Brazil in wet or seasonal moist forests; 150–500 m.

#### **EXCLUDED TAXA.**

*Poikilospermum suaveolens* (Blume) Merr., an East Indian species is naturalized in Jamaica (Adams 1972). The genus is treated by many workers as a climber, however, *Poikilospermum* in reality is a hemiepiphyte that geminates on the phorophyte and climbs down

(through the production of long aerial roots) and although resembling a liana, does not behave as such (Chew 1963). Since our definition of climber excludes pseudo-epiphytes, this species therefore, is not treated by us.



**Figure 236.** *Urera caracasana*. **A.** Sterile branch. **B.** Cauliflorous inflorescence. Photo by P. Acevedo.