## LYTHRACEAE

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A tropical and subtropical family extending into temperate zones, containing herbs, shrubs and trees, with 27 genera and ~650 species, not commonly associate with lianas. However, two neotropical species of *Cuphea, i.e., C. paradoxa* Koehne and *C. pinetorum* Benth. are frequently collected as scrambling herbs or vines. Since Lythraceae is a morphologically diverse family no attempt will be made here to provide a description of the family, instead, the current treatment is solely based on the description of climbing species of *Cuphea*.

## **General Characters**

- 1. STEMS. Herbaceous to subwoody, often with 4 or 5 prominent angles, reaching 2–10 m in length; cross section with regular anatomy forming a continuous vascular cylinder traversed by uniseriate or biseriate rays (sometimes inconspicuous). The presence of intraxylary phloem is common to all members of the family (Metcalf & Chalk 1957).
- 2. EXUDATES. No visible exudate.
- 3. CLIMBING MECHANISM. Scramblers, leaning upon the surrounding vegetation and reaching up to 10 m in length.
- 4. LEAVES. Opposite, decussate, simple, chartaceous, with entire margins and pinnate venation; petioles are short or absent; stipules inconspicuous.
- 5. INFLORESCENCES. Axillary, 1–3-flowered racemes, or flowers solitary in upper nodes.
- 6. FLOWERS. Zygomorphic, 6-merous, bisexual, shortly pedicellate; calyx tubular, 12-ribbed, with short lobes and sometimes appendages on distal portion; corolla of free petals, the 2 dorsal petals usually larger than the 2 or 4 ventral ones; stamens included or exserted,

inserted on the floral tube, filaments unequal; ovary superior, asymmetrical, 2-carpellate, unilocular, with few to numerous ovules, style terminal, short, included, stigma capitate.

- 7. FRUITS. A thin-walled capsule.
- 8. SEEDS. Few to many, dorsiventrally flattened.

CUPHEA Jacquin, Enum. Syst. Pl. 4, 21. 1760.

Erect, herbs, subshrubs or shrubs, scrambling vines or decumbent herbs. Scrambling



*Cuphea pinetorum*, photo by P. Acevedo.

vines 2–10 m long. Stems nearly terete or 4–5-angled. Leaves opposite, decussate, pinnately veined, with entire margins, sessile or shortly petioled. Inflorescence of short, axillary 1–3-flowered racemes, or flowers solitary in upper nodes. Flowers zygomorphic, 6-merous; calyx tubular, often gibbous, deep pink, red, purplish or rarely green, 12-ribbed, the lobes short; petals bright red, 6, the 2 dorsal petals larger than the ventral ones, or sometimes vestigial; stamens commonly 11, and exserted; ovary superior, sessile, asymmetric. Fruit a unilocular, thin-walled capsule, covered by the persistent,

ribbed calyx.

**Distinctive features**: Scrambling, herbaceous or subwoody vines, with opposite leaves, flowers brightly colored.

**Distribution**: A New World genus ~260 species, of erect herbs or shrubs. Only *C. paradoxa* from Colombia and Venezuela and *C. pinetorum* from Mexico to Honduras are consistently reported as scrambling vines; open disturbed, moist habitats; 125–2,400 m.