

# GUIDE TO THE GENERA OF LIANAS AND CLIMBING PLANTS IN THE NEOTROPICS

## PLUMBAGINACEAE

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*Plumbago zeylanica* L., photo by S. Carrington

A tropical to warm temperate family with about 21 genera and about 830 species of herbs, or scrambling shrubs. In the Neotropics, the Plumbaginaceae is represented by 8 species in 3 genera, of which only two species of the genus *Plumbago* are reported as clambering vines. For the

most part, they are found in the lowlands in seasonal to dry forests, woodlands and savanna-like formations.

**Diagnosics:** Short, scrambling herbs or vines; inflorescence and fruits adhere to clothing or the fur of animals through stipitate sticky glands present in the calyx.

### General Characters

1. STEMS. Cylindrical with scanty secondary growth.
2. EXUDATES. Inconspicuous and clear exudate.

3. CLIMBING MECHANISMS. Climbing Plumbaginaceae are **scramblers**.
4. LEAVES. Alternate, simple, chartaceous with entire or undulate margins and pinnate venation; petioles short, glandless, forming a sheath with the stem; stipules absent.
5. INFLORESCENCE. Axillary or terminal racemes.
6. PEDICELS. Short or flowers sometimes sessile.
7. FLOWERS. Bisexual, actinomorphic, 5-merous; calyx tubular, short-lobed, 5-costate, covered with stipitate glands that produce a sticky substance; corolla gamopetalous, salverform, white, yellow or light violet, the tube long and narrow, the lobes expanded; stamens 5, equal, included or slightly exerted, the anthers opening along longitudinal slits; ovary superior, 1-5-carpellate, unilocular, with a single basal ovule per carpel, the style 1, terminal, with 5 stigmatic branches.
8. FRUIT. A valvate capsule with a single seed.

## USES

Many species of *Plumbago* are cultivated in gardens for the beauty of their flowers.

## GENERIC DESCRIPTION

**PLUMBAGO** Linnaeus, Sp. Pl. 151. 1753.

Shrubs or herbs, erect, creeping, or scrambling vines. Leaves simple, alternate, petiolate or sessile, with pinnate venation; stipules absent. Flowers bisexual, actinomorphic, short-pedicellate, bibracteate, in terminal racemes or panicles; calyx with 5 longitudinal ribs covered with stipitate glands, the lobes triangular; corolla hypocrateriform, the tube longer than the calyx, the lobes obovate, rounded, or truncate; stamens 5, the filaments free, included or slightly exerted, the anthers dehiscent by longitudinal valves; ovary superior, unilocular, with one basal ovule per carpel; style united, with 5 stigmatic branches. Fruit a valvate capsule, membranaceous, with a single seed.

**Distinctive features:** Scrambling vines with axillary or terminal racemes; calyx with long-stipitate, sticky glands.

**Distribution:** A tropical genus of 22 species, 2 of which are native in the Neotropics and consistently known as scrambling herbs or shrubs; distributed from S.E. Mexico to South America, including the West Indies.; found in the lowlands in seasonal to dry forests and woodland formations.

### **RELEVANT LITERATURE**

Acevedo-Rodríguez, P. 2005. Vines and climbing plants of Puerto Rico and the Virgin Islands. Contrib. United States National Herbarium 51: 1-483.

Luteyn, J.L. 2001. Plumbaginaceae. In: W.D. Stevens, C. Ulloa Ulloa, A. Pool and O.M. Montiel (eds), Flora de Nicaragua. Monographs in Systematic Botany from the Missouri Botanical Garden. 85(3) 1985-1986.