

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.