GUIDE TO THE GENERA OF LIANAS AND CLIMBING PLANTS

IN THE NEOTROPICS

OXALIDACEAE

By Pedro Acevedo-Rodríguez (Feb 2021)



O. integra Knuth, from Photos of Colombia flowers website

With the exception of the cosmopolitan genus *Oxalis*, a pantropical family of herbs or less often shrubs or small trees, with 5 genera and about 657 species. The family is represented in the Neotropics by 2 genera and about 300 species of herbs. *Oxalis* being the only genus with scrambling vines. Found in Andean moist and cloud forests.

General Characters

- 1. STEMS. Herbaceous, fleshy, cylindrical, reddish, reaching up to 3 m.
- 2. EXUDATES. No visible exudate.
- 3. CLIMBING MECHANISM. Scrambler, with short lateral branches.
- 4. LEAVES. Leaves are trifoliolate, alternate; leaflets fleshy, with entire margins, shortly petiolulate; stipules minute, stramineous, often caducous.
- 5. INFLORESCENCES. Axillary or terminal few-flowered cymes.
- 6. FLOWERS. Actinomorphic, bisexual; pedicelled; sepals 5, free, light green; petals yellow; stamens 8, of equal length, filaments free, alternating with the disc lobes; ovary superior,

unilocular, tricarpellate, ovules numerous, with parietal placentation, style terminal, stigma capitate.

7. FRUITS. A small cylindrical, dry capsule.

GENERIC DESCRIPTION

OXALIS Linnaeus, Sp. Pl. 433. 1753.



O. integra, photo by Camilo Jotaje

Herbs with tubers or bulbs, or rarely subshrubs or shrubs or scrambling herbaceous vines. Vine species with succulent, cylindrical, reddish stems reaching up to 3 m in length. Leaves alternate, trifoliolate (in climbing species); long-petioled; leaflets fleshy, retuse at apex, shortly petiolulate; stipules minute or caducous. Flowers actinomorphic, 5-merous, bisexual, produced in axillary or terminal, many to 1-flowered

cymes. Calyx green, tubular or bell-shaped, of 5 free, lanceolate sepals. Corolla yellow, yellow with reddish lines or reddish (in vine species), of 5 distinct or basally connate petals; stamens usually 10(-15), the filaments connate at base into a tube, the anthers opening by longitudinal slits; ovary superior of 3-5 carpels, the placentation axile, ovules (1-)2 to many per locule, the styles distinct, terminal with a capitate stigma. Fruit a cylindrical loculicidal capsule.

Distinctive features: Scrambling herbaceous vines with fleshy stems and leaves; corolla yellow.

Distribution: *Oxalis* is a cosmopolitan genus of 558 species, of which 263 are neotropical. Of these, only 2 species, *O. integra* Knuth and *O mollis* Kunth are consistently reported as vines. *Oxalis integra* is known from Colombia, Ecuador and Peru while *O. mollis* is known from Ecuador and Peru; montane or cloud forests; 2000–3100 m.

RELEVANT LITERATURE

Cocucci A.A. 2004. Oxalidaceae, pages 285-290. In: Kubitzki K. (eds) Flowering Plants. Dicotyledons. The Families and Genera of Vascular Plants, Vol 6. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-662-07257-8_32