

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

ONAGRACEAE

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Fuchsia cf. regia (Vell.) Munz., photo by P. Acevedo

A family of 22 genera and about 660 species of herbs or seldom shrubs, trees or scrambling vines. Although cosmopolitan in distribution, many genera are centered in temperate areas or in cool, high elevation areas of the Neotropics. Vines in the Neotropics belong exclusively to the genus *Fuchsia*, with a total of about 15 species of scrambling vines. These are for the most part centered in the Andean regions of Venezuela, Colombia, Ecuador and Peru, and the coastal mountains of the states of Rio de Janeiro south to Parana in southeastern Brazil.

Diagnosics: Scrambling vines 2-6 m long, stems slender (1-2 cm diam.) with shaggy bark, flowers pendant, often fuchsia, deep pink, red or orange, with inferior, often

green ovary, forming a long hypanthium above the ovary, stamens exserted, of unequal lengths.

General Characters

1. STEMS. Cylindrical, with limited secondary growth (1-2 cm diam.), reaching 2-6 m in length; cross section with *regular* anatomy forming a continuous vascular cylinder traversed by narrow rays. Bark beige, commonly shaggy.
2. EXUDATES. No visible exudate.
3. CLIMBING MECHANISM. Scrambler, with short plagiotropic branches or long hanging branches.
4. LEAVES. Alternate, opposite or whorled, simple, entire or serrate, pinnatinerved; stipules lanceolate, basal or interpetiolar, caducous.
5. INFLORESCENCES. Flowers axillary, solitary but often congested at the ends of branches, sometimes in pedant racemes or panicles.
6. FLOWERS. Flowers large, actinomorphic or zygomorphic, bisexual, solitary in leaf axils, or in axillary spikes, racemes or panicles; calyx forming a hypanthium with 4 sepals at apex; corolla of 4 distinct, clawed petals; stamens twice as many as the petals, or seldom 4 or 2, the filaments borne on the hypanthium or surrounding the nectary disk that encircles the apical portion of the ovary, the anthers opening by longitudinal slits; ovary inferior, of (2-)4, united carpels, the placentation axile or parietal, the ovules 1 to many per carpel, the style terminal with a capitate to 4-lobed stigma. .
7. FRUITS. A fleshy berry, with many seeds.

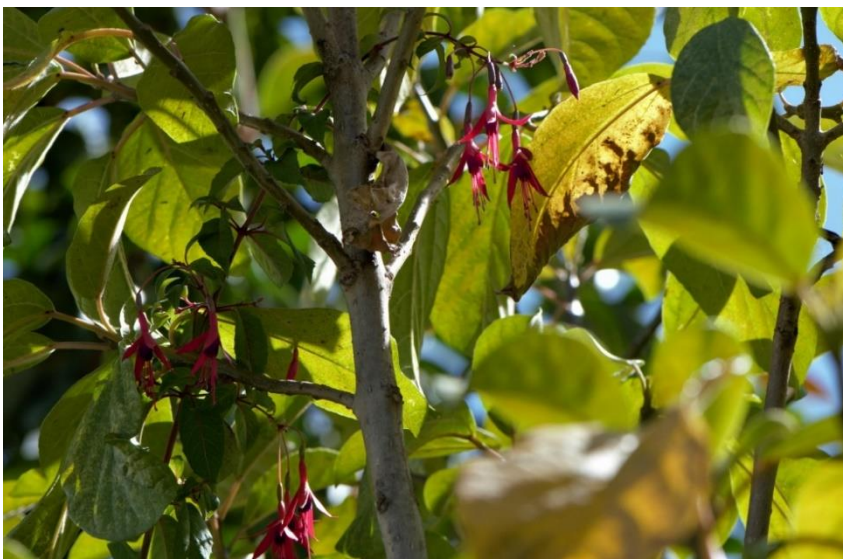


Figure 1. *Fuchsia regia* with scrambling habit. Photo by P. Acevedo.

GENERIC DESCRIPTION

FUCHSIA Linnaeus, Sp. Pl. 1191. 1753.



Stem of *F. regia*, photo by P. Acevedo

Mostly shrubs, erect or scrambling, less commonly trees or herbaceous plants, often with well-developed tubers. Lianas reaching 10-15 m in length, with long hanging branches. Stems flexible, terete, ridged in some species, commonly < 2 cm in diam., bark light brown-beige, shaggy when old or smooth that splits off in a few long strips (Berry, 1982); cross section with regular anatomy forming a continuous vascular cylinder traversed by narrow rays, medulla often becoming hollow. Leaves opposite, whorled or alternate, entire to serrulate, with small caducous stipules. Flowers axillary but often congested at the end of branches, pendant, actinomorphic; perianth commonly pink, red, purple or orange but calyx coloration different from that of the corolla; calyx tubular forming a hypanthium beyond the ovary, lobes 4, elongated and often slightly spreading; nectary often present at the base of the calyx tube; corolla of 4 free, overlapping petals; stamens 8, exserted, 4 antepetalous and shorter than the others; ovary inferior commonly green and distinct from the hypanthium, 4-carpellate, with numerous ovules per carpel, stigma capitate or clavate, entire or lobed. Fruit a fusiform, fleshy, many-seeded berry.

Distinctive features: Scrambling, unarmed vines, moderately woody, leaves alternate, opposite or whorled, flowers very showy and pendant, with long exserted stamens of two different lengths.

Distribution: A genus predominantly native to the highlands of Mexico, Central America, South America and Hispaniola, with 106 species in the Neotropics, 15 of which are reported as

scrambling vines, these occurring in Venezuela, Colombia, Ecuador, Peru and SE Brazil; moist, wet or cloud forests; 1700-3400 m.

RELEVANT LITERATURE

Berry, P.E. 1982. The Systematics and Evolution of *Fuchsia* Sect. *Fuchsia* (Onagraceae). *Annals of the Missouri Botanical Garden* 69: 1-198.