

OROBANCHACEAE

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The largest family of parasitic plants. They are parasitic on the rhizomes and roots of other plants. They are annual or perennial herbs, rarely subshrubs and shrubs and have cosmopolitan distribution with ~100 genera and ~2,000 species worldwide. In the Neotropics, there are ~21 genera and a little over 300 species. Of these, only the genus *Vellosiella* is represented by several scrambling or twining species.

Diagnosics: Climbing *Vellosiella* are glabrous or hirsute; stems are terete to quadrangular in cross section; leaves are opposite, simple, lanceolate to ovoid, with sinuate-dentate margins, acuminate at apex; stipules are absent.

General Characters

1. STEMS. Terete to quadrangular in cross section, slender.
2. LEAVES. Opposite or sometimes alternate, simple, petiolate or sessile, toothed or entire, rarely lobed, pinnate, palmate, or 1-veined; stipules absent.
3. CLIMBING MECHANISMS. Scrambling or twining.
4. INFLORESCENCE. Terminal or axillary spikes, racemes, corymbs, panicles or a single, axillary flower.
5. FLOWERS. Bisexual; calyx actinomorphic to gamosepalous, 4- or sometimes 5-lobed, the lobes connate; corolla 5-lobed, zygomorphic, usually bilabiate; stamens 4, often didynamous; ovary superior, 1- or 2-locular, with axial or parietal placentation; style 1.
6. FRUITS. Capsule with septicidal or loculicidal dehiscence.

USES

Inflorescences and fruits of a few neotropical Orobanchaceae are used as food and the showy flowers are desirable as ornamentals, but few others are cultivated. Only three species of Orobanchaceae have economic importance as medicinal plants or crops, none of which occur in the Neotropics. Some species in the genera *Orobanche* and *Striga* are economically important because they are invasive and have caused severe crop damage to agricultural fields worldwide.

VELLOSIELLA Baillon, Bull. Mens. Soc. Linn. Paris 1: 715. 1887.

Hemiparasitic, perennial herbs, subshrubs, shrubs, scrambling or twining vines; stems



Vellosiella dracocephaloides, photo by L.S. Leoni.

terete to quadrangular, glabrous or hirsute.

Leaves opposite, pinnately veined, shortly

petiolate, lanceolate to ovoid, with sinuate-

dentate margin, acuminate at apex. Inflorescence

a single axillary flower, the pedicels elongate,

bibracteolate and often abruptly curved distally;

calyx spathaceous, with entire margin, inflated,

acuminate at apex; corolla sub-actinomorphic,

with 5 shallowly cleft and emarginate lobes,

infundibuliform, slightly curved, fluted, orange-

red; ovary bilocular; style 1, the stigma capitate.

Fruit a loculicidal capsule; seeds fusiform,

truncate, with a transparent, reticulate outer testa.

Distinctive features: The spathe-like calyx, infundibuliform corolla, and fusiform seeds characterize this genus.

Distribution: A South American genus of three species, two of which are reported as scrambling or twining vines. *Vellosiella dracocephaloides* (Vell.) Baill. is endemic to southeastern Brazil and occurs in riparian and secondary forests at 1,100–2,120 m elevation. *Vellosiella spathacea* (Oliv.) Melch. occurs from southern Venezuela to Guyana in riparian or mixed tropical forests to upland cloud forests and tepui scrub at 1,500–2,200 m elevation.