



Flora of North America

Macranthera (Orobanchaceae)
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- X. MACRANTHERA Nuttall ex Bentham, Edwards's Bot. Reg. 21: sub plate 1770, [6].
1835 * Flame or hummingbird flower [Greek *macros*, long, and *antheros*, anther,
alluding to long exserted stamens] E

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Herbs, perennial or biennial; hemiparasitic. **Stems** erect, not succulent, retrorsely puberulent. **Leaves** basal and cauline, opposite, not succulent; petiole present; blade margins deeply pinnatifid on proximal leaves, toothed on distal leaves. **Inflorescences** terminal racemes; bracts present. **Pedicels** present; bracteoles absent. **Flowers**: sepals 5, calyx radially symmetric, campanulate to short-tubular, lobes linear; petals 5, corolla bright orange, tubular, abaxial lobes 3, adaxial lobes 2; stamens 4, free, equal, filaments pilosulous, staminode 0; ovary 2-locular, placentation axile; stigma linear-clavate. **Capsules** radially symmetric, dehiscence loculicidal. **Seeds** ca. 110, brown to blackish, irregularly triangular, winged (with tuberculate crest). $x = 13$.

Species 1: se United States.

SELECTED REFERENCES Alford, J. D. and L. C. Anderson. 2002. Taxonomy and morphology of *Macranthera flammea* (Orobanchaceae). Sida 20: 189--204. Musselman, L. J. 1972. Root parasitism of *Macranthera flammea* and *Tomanthera auriculata*. J. Elisha Mitchell Sci. Soc. 88: 58--60. Pickens, A. L. 1927. Unique method of pollination by the ruby-throat. Auk 44: 24--27.

1. *Macranthera flammea* (W. Bartram) Pennell, Bull. Torrey Bot. Club 40: 124. 1913 E F

Gerardia flammea W. Bartram, Travels Carolina, 412. 1791

Herbs, monocarpic, blackening upon drying. **Stems** virgately branched distally, 4-angled, 8--35 dm. **Leaves**: petiole winged, to 2 cm; blade lanceolate to narrowly ovate, 8--15 x 2--6 cm, reduced in size distally and eventually bractlike, apex acute to acuminate, glabrate; basal leaves 3--46. **Racemes** terminal on stem and branches, 8--36 cm. **Pedicels** deflexed-spreading, strongly upcurved distally. **Flowers**: calyx tube 2--4 mm, retrorsely puberulent, lobes linear, 7.5--15 mm, longer than tube; corolla 2--2.5 cm, exterior densely glandular-mealy, lobes 3--4.5 mm, much shorter than tube, abaxial lobes reflexed-spreading, adaxial lobes erect; stamens long-exserted, filaments orange, 1.5--4.6 cm; style long-exserted, 28--36 mm, glabrous. **Capsules** brown, ovoid, 9.5--13 mm, densely puberulent. **Seeds** 2.5--3 mm, wings 2--5. $2n = 26$.

Flowering Aug--Oct. Streamheads and ecotones, baygall ecotones, seepage slopes, margins of shrub-tree bogs, occasionally cypress-gum depressions, usually where burned periodically from adjacent longleaf or slash pine habitats; 0--100 m; Ala., Fla., Ga., La., Miss.

Macranthera flammea is one of the most striking plants in the flora due to its remarkable height (for an herb) and numerous, brilliant orange flowers; it is best able to compete with associated shrubs and trees by flowering prolifically following fire and by temporarily growing above the woody species to attract pollinating hummingbirds. There is precise coincidence in the flowering of flame flower and the arrival of ruby-throated hummingbirds [*Archilochus colubris* (Linnaeus)] prior to their trans-Gulf migration to Central America.