

CORALLORHIZA TRIFIDA Chatelain
Early Coral-root

FAMILY: Orchidaceae.

SYNONYM: *Corallorhiza trifida* Chatelain var. *verna* (Nutt.) Fern.

HABIT: Herbaceous perennial, 0.8-3 dm. high; flowering late April-early May.

SIMILAR SPECIES: This species and the equally rare *C. wisteriana* (Spring Coral-root) are very similar and bloom at the same time. However, *C. trifida* has a very pale flower and is known only from northern Ohio, while *C. wisteriana* has a brightly colored flower and is known only from southern Ohio. These two species are the only spring-blooming coral-roots in the state.

TOTAL RANGE: Circumboreal, s. in America to NJ, PA, IL, MO, and NM.

STATE RANGE (as of 2008): Post-1980 records are from Geauga, Portage, and Summit counties. Pre-1980 records are from Ashtabula, Cuyahoga, and Ross counties.

HABITAT: Coniferous woods, shrub borders of bogs, and damp thickets; tolerant of deep shade. The Ohio population occurs on the mossy floor of a boggy hemlock woods.

HAZARDS: Drying and compaction of the forest floor; like most coral-roots, it is sensitive to soil disturbances because of its relationship with mycorrhizal fungi (see Comments).

RECOVERY POTENTIAL: Probably very poor; see Comments.

INVENTORY GUIDELINES: Flower stalks only should be collected; rhizomes should be left in the soil.

COMMENTS: This genus lives for most of its life as an underground saprophyte. There seems to be a symbiotic relationship of this genus with mycorrhizal fungi that enwrap the rhizome. Thus, coral-roots are nearly impossible to cultivate or to transplant and are very sensitive to soil disturbance. Individual plants do not bloom every year. Long periods may pass between blooming. An abundance of flowers may be found one year; another year, merely a few flower stalks; yet other years no flowers at all are produced. The underground rhizomes, though, still persist in a semi-dormant state all this time. Flowering appears to be triggered by a combination of natural factors, such as air temperature, soil moisture, and photoperiod, as yet poorly understood.

Because of its early blooming time and its inconspicuous appearance this species easily may be overlooked. Therefore it should be sought elsewhere in northern Ohio. However, it is unlikely to be very frequent anywhere in Ohio, due to its unusual habitat and its sensitivity to soil disturbance. Southern plants of this species, including those from Ohio, have been separated

as var. *verna* (see Synonym), but most contemporary treatments do not recognize the variety as valid.

SELECTED REFERENCES:

Case, F.W., Jr. 1964. Orchids of the western Great Lakes region. Cranbrook Institute of Science Bull. No. 48, Bloomfield Hills, MI. 147 p.

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