

CORALLORHIZA MACULATA Raf.
Spotted Coral-root; Large Coral-root

FAMILY: Orchidaceae

HABIT: Herbaceous perennial, 2-8 dm.; flowering late July-early September.

SIMILAR SPECIES: The only summer-blooming coral-root in Ohio. All coral-roots resemble each other, especially as dried specimens, thus the blooming period is of special note. *C. maculata* also is the largest in size of the Ohio species of coral-root and has the most brightly-colored flowers.

TOTAL RANGE: Nfld. to B.C., s. to MD, IN, and IL, and s. in the mountains to NC; in the west to Mexico and Central America.

STATE RANGE (as of 2008): Post-1980 records are from Ashtabula, Delaware, Geauga, Huron, Lake, Mahoning, Portage, Richland, Stark, Summit, and Wayne counties. Pre-1980 records are from Ashland, Athens, Belmont, Butler, Coshocton, Cuyahoga, Erie, Fairfield, Franklin, Hocking, Jackson, Licking, Lorain, Noble, Pickaway, Scioto, and Trumbull counties.

HABITAT: Various types of mature deciduous forest; most Ohio records are from mixed mesophytic or beech-sugar maple communities; the species is tolerant of deep shade.

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

RECOVERY POTENTIAL: Sheviak (1974) indicates that it can withstand disturbance better than most coral-roots.

INVENTORY GUIDELINES: Flower stalks only should be collected; rhizomes should be left in the soil. Labels should note the color and shape of the lip of the flower, characters which are virtually destroyed by drying.

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.

C. maculata may well be more frequent in Ohio than our records indicate. Few people bother to search the woods in mid-summer for wildflowers.

This species is exceedingly variable in flower color. Numerous minor forms have been described from these color variations, but none appear to deserve taxonomic rank.

Despite the name “Spotted”, the lip of the flower may or may not be spotted, a fact not reflected by all keys.

SELECTED REFERENCES:

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

Gleason, H.A., and A. Cronquist. 1991. Manual of vascular plants of northeastern United States and adjacent Canada. New York Botanical Garden, Bronx, New York. 910 pp.

Luer, C.A. 1975. The native orchids of the United States and Canada excluding Florida. New York Botanical Garden, New York, NY. 361 p.

Sheviak, C.J. 1974. An introduction to the ecology of the Illinois Orchidaceae. Illinois State Museum, Springfield, IL. 90 p.



Division of Natural Areas and Preserves
Ohio Department of Natural Resources

Created: 1/1980 Allison W. Cusick