## SILENE REGIA Sims Royal Catchfly

FAMILY: Caryophyllaceae

HABIT: Erect, unbranched herbaceous perennial from a caudex on a taproot, 6-15 dm.; flowering late June-August.

SIMILAR SPECIES: Only two other Ohio Silene species have bright scarlet flowers like S. regia: S. virginiana and S. rotundifolia. S. regia is tall (to 15 dm.), erect, and mostly unbranched. Flower petals are rounded and cauline leaves are many (15-20 pairs), round-based, and sessile. S. virginiana is shorter (to 8 dm.) with weak stems. Flower petals are bilobed and cauline leaves are fewer (to 15 pairs) and narrowly oblanceolate. S. rotundifolia is short (to 7 dm.) with weak, branched, and decumbent stems. Flower petals are bilobed and cauline leaves are few (to 8 pr.) and broadly lanceolate to suborbicular

TOTAL RANGE: E. MO, s. IL, OH, KY, TN, to n. AL and GA.

STATE RANGE: There are post-1960 records from 6 central Ohio counties: Champaign, Clark, Greene, Madison, Marion, and Union. There is a pre-1960 record from Montgomery County. King (1981) cites records from Fairfield, Franklin, and Hamilton counties as well as dubious reports from Holmes and Tuscarawas counties.

STATE STATUS: 1980-1983: Endangered, 1984-1987: Threatened, 1988 to present: Potentially Threatened.

HABITAT: Prairies and open woods. In Ohio, the species is found in prairie remnants, cemeteries, railroad and powerline rights-of-way, and roadsides.

HAZARDS: Overgrowth by woody species due to succession, casual picking of flowers, digging by wildflower gardeners, use of herbicides on railroad and powerline rights-of-way. However, the greatest threat appears to be the spread of the non-native smooth brome (Bromus inermis) into prairie remnants.

RECOVERY POTENTIAL: Possibly good. Transplants easily and is known to reproduce well from seed. However, few new locations are likely to be found and several known locations have become degraded over the last 20 years.

INVENTORY GUIDELINES: Collect mature flowering material; collect aboveground parts only. Collecting should be restricted to newly discovered populations.

COMMENTS: This is one of Ohio's most beautiful and conspicuous wildflowers. The state range may be accurately known. Because of its scarlet flowers, it has been suggested that S. regia is closely related to S. virginiana. The two will form hybrids, but these are sterile. S. virginiana does, however, form fertile hybrids with S. caroliniana. This indicates that S. regia is further removed from S. virginiana than other species that do not have the scarlet flowers.

## **SELECTED REFERENCES:**

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.

Hitchcock, C.L. and B. Maguire. 1947. A revision of the North American species of Silene. Univ. Wash. Pub. Bio. 13: 1-73.

King, C.C. 1981. Distribution of royal catchfly (Silene regia) with Special reference to Ohio populations. p. 131-141, In: Stuckey, R., and K. Reese, eds., The prairie peninsula - in the "shadow" of Transeau: Proc. Sixth North American Prairie Conference. Ohio Biol. Surv. Biol. Notes, No. 15. 278 p.

Kruckeberg, A.R. 1964. Artificial crosses involving eastern North American Silenes. Brittonia 16: 95-105.



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