SOLIDAGO GLUTINOSA SSP. RANDII VAR. ONTARIOENSIS (COMPOSITAE: ASTEREAE), A NEW UPPER GREAT LAKES ENDEMIC

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The following name is needed for publications on the biosystematics of the Solidago glutinosa complex:

Solidago glutinosa Nutt. ssp. randii (Porter) Cronq. var. ontarioensis Ringius, var. nov.

Cypselis setosibus parce, ramis capitulescentas et pedunculis strigosibus parce, pollinis grana plus quam 25.0 µ diametro.

Stems (7.0) 13.3-40.9 (60.5) cm high. Rosette leaves spatulate, apices obtuse to acute, margins entirecrenate to crenate. Cauline leaves (2) 4-13 (24), lowermost (4.0) 5.7-12.2 (21.5) mm wide. Capitulescence variable but mostly open virgate, capitula not numerous. Rays 8-10. Disks 10-14; pollen diameter (21.2) 23.6-27.1 (29.5) µ. Chromosome number: 2<u>n</u> = 36. TYPE: CANADA. Coastal rocks, Michipigoten Harbour, Algoma District, Ontario, 25 August 1984, 6. S. Ringius 1987. (holotype WAT).

Variety ontarioensis is one of four varieties recognised in ssp. randii in a recent revision of the Solidago spathulata/glutinosa complex (Ringius, 1985, doctoral diss. University of Waterloo). The variety occurs only on sparsely vegetated rocky shorelines of lakes Superior and northern Huron, usually within a few meters of the water's edge. Its small size, few leaves and long outer phyllaries distinguish it from var. gillmanii (Gray) Crong., a sand dune variety.

Variety ontarioensis is similar to the upper Great Lakes form of Solidago glutinosa ssp. glutinosa var. glutinosa. The two varieties occur in the same habitat type but differ in ploidy, the former is tetraploid and the latter is diploid, and ploidy related traits. Variety ontarioensis has larger pollen grains, larger capitula, and longer corolla lobes. They are sympatric along the northeast coast of Lake Superior from Montreal Harbour to Sault Ste. Marie. However, they appear to form discrete populations along the shore. Variety ontarioensis is more abundant in the eastern end of Lake Superior and on Georgian Bay while var. glutinosa is found only on Northern Lake Superior.



Ringius, Gordon S . 1987. "Solidago glutinosa ssp. randii var. ontarioensis (Compositae: Astereae), a new upper Great Lakes endemic." *Phytologia* 62(5), 432.

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