

## Mini data sheet on *Solidago nemoralis* (Asteraceae)

Added in 2004 - Deleted in 2012

### Reasons for deletion:

The EPPO Panel on Invasive Alien Plants made a first categorization of alien invasive plants. As *Solidago nemoralis* is advertised for landscaping purposes in Europe without any thorough analysis of its potential invasiveness, the Panel considered in 2004 that it should be added to the EPPO Alert List. In 2012, as no immediate risk was perceived, it was transferred to the Observation List.

### Why

*Solidago nemoralis* is a perennial, slender plant (0.3-0.5 m tall). Leaves are alternate. Basal and rosette leaves are long, oval, and tapered at base with serrations on the distal half. Stalk leaves are oval and tapered at both ends. All leaves have distinct midrib and web-like venation. The inflorescence is a cluster of yellow flowers all growing on one side of the stalk. In North America, it flowers in August-September. Achenes then develop with tufts of hair and are dispersed by the wind. Pictures can be viewed:

[http://www.indiana.edu/~preserve/nature/floral\\_inventory/pages/sol\\_nem.htm](http://www.indiana.edu/~preserve/nature/floral_inventory/pages/sol_nem.htm)

[http://www.shout.net/~jhilty/plantx/fld\\_goldenrodx.htm](http://www.shout.net/~jhilty/plantx/fld_goldenrodx.htm)

### Geographical distribution

**North America:** Canada, USA (Alabama, Arkansas, Connecticut, Delaware, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Missouri, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Pennsylvania, Rhode Island, Texas, Vermont, Virginia, West Virginia).

### Habitats

Prairies (growing on black soil, gravel, sand), dry and sandy fields, sandy roadsides, railroads, dunes, *Quercus velutina* savannas, eroded clay banks, abandoned fields.

### Damage

In some Western states in USA, it is considered as a troublesome weed. Chemical treatments are mentioned in the literature in apple orchards, pastures, and soybean fields. In the USA, no environmental or social impact is mentioned. In its native range *S. nemoralis* is not considered as a noxious weed or invasive species. Data is lacking on possible hybridization with other *Solidago* species. However, *S. nemoralis* shares some similarities with other *Solidago* species which are invasive in Europe (e.g. *S. canadensis*, *S. gigantea*). It is reported that, at suitable locations, *S. nemoralis* has a tendency to form colonies. It survives in difficult locations (slopes, poor soil) where little else will grow. It produces large number of highly viable seeds and vegetative spread is considered as rapid. It can stand low temperatures (-30C°).

### Dispersal

Local dispersal is mainly ensured by seeds. Plants can also be spread by rhizomes when soil or plants are disposed of. Over long distances, trade of plants and seeds can disseminate *S. nemoralis*.

### Pathway

Plants for planting, seeds of *S. nemoralis* (soil with viable rhizomes or seeds?).

### Possible risks

It shares characteristics with other *Solidago* species which are invasive in Europe and in other parts of the world. Control methods are available (herbicides, mowing) but may be difficult to apply in natural or semi-natural environments. This plant is planned to be planted in Europe in public spaces, motorway verges, embankments for landscaping purposes. Considering its high seed production, rapid seed spread and vegetative spread, it could present a risk to the EPPO region as it could outcompete native species including endangered species (e.g. in natural grasslands competing with orchids). However, more data is needed on possible habitats at risk in Europe, and plant biology. Introduction

of this species for landscaping purpose should be avoided, native species or alien plants with no history of invasiveness in Europe should be substituted for it.

### Sources

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