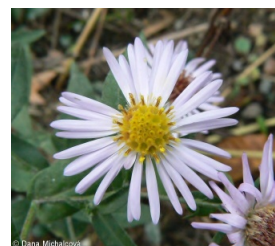
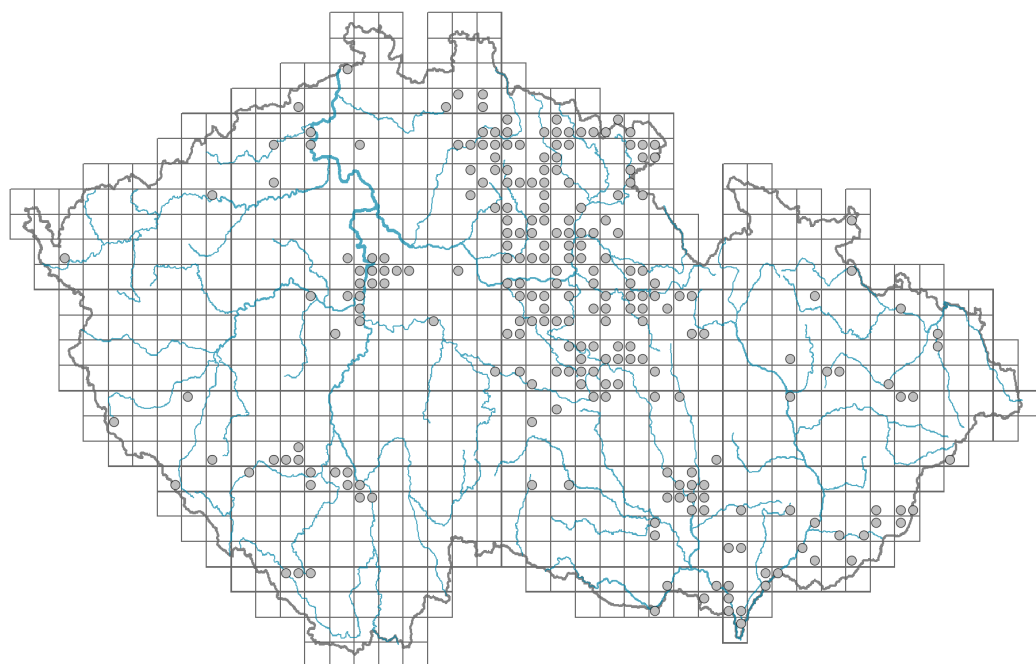


# *Symphotrichum novi-belgii*

## Distribution

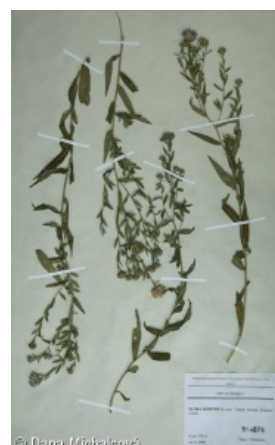


### Map info

● revised records

○ unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



## Habitus and growth type

Height [m]: **0.2-1.4**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **C - competitor**

## Leaf

Leaf presence and metamorphosis: **leaves present, not modified**

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **both present and absent**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**

## Flower

Flowering period [month]: **August-October**

Flowering phase: **9 Hedera helix-Solidago (early autumn)**

Flower colour: **white, yellow, blue**

Flower symmetry: **actinomorphic, zygomorphic**

Perianth type: **calyx reduced, corolla present**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **ligulate, tubular**

Calyx fusion: **pappus**

Inflorescence type: **panicula ex anthodiis composita**

Dicliny: **gynomonoecious**

Generative reproduction type: **alogamy self-incompatibility**

Pollination syndrome: **insect-pollination, geitonogamy**

## Fruit, seed and dispersal

Fruit type: **dry fruit - achene/cypsela/samara**

Fruit colour: **brown**

Reproduction type: **by seed/spores and vegetatively**

Dispersal unit (diaspore): **fruit, infrutescence or its part**

Dispersal strategy: **Epilobium (mainly anemochory and autochory)**

Myrmecochory: **non-myrmecochorous (b) nv**

## Belowground organs and clonality

Shoot metamorphosis: **stolon**

Storage organ: **stolon**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

## Karyology

Chromosome number (2n): **48**

Ploidy level (x): **6**

2C genome size [Mbp]: **4163.68**

1Cx monoploid genome size [Mbp]: **693.95**

Genomic GC content: **39.2 %**

## Taxon origin

Origin in the Czech Republic: **neophyte**

Invasion status: **invasive**

Geographic origin: **North America**

Year of the first record in the wild: **1850**

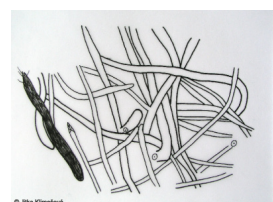
Period of introduction: **Late Modern Period (1800-1950)**

Introduction pathway: **intentional - ornamental**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area**



Temperature indicator value: **6 - transition between values 5 and 7**

Moisture indicator value: **5 - indicator of fresh soils, focus on soils of average moisture, missing on wet and on soils that frequently dry out**

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

Nutrient indicator value: **8 - pronounced nutrient indicator**

Salinity indicator value: **1 - salt tolerant, mostly on low-salt to salt-free soils, but occasionally on slightly salty soils**

## Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 - rare occurrence**

6D Alluvial meadows of lowland rivers: **2 - optimum**

6E Wet Cirsium meadows: **1 - rare occurrence**

6F Intermittently wet Molinia meadows: **1 - rare occurrence**

10 Saline vegetation

10I Inland saline meadows: **1 - rare occurrence**

11 Heathlands and scrub

11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**

11L Tall mesic and xeric shrub: **1 - rare occurrence**

11R Scrub and pioneer woodland of forests clearings: **2 - optimum**

12 Forests

12B Alluvial forests: **1 - rare occurrence**

13 Anthropogenic vegetation

13D Perennial thermophilous ruderal vegetation: **2 - optimum**

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **3 - dominant**

13F Herbaceous vegetation of forests clearings and Rubus scrub: **1 - rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

## Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional**

Floristic region: **Eastern America**

Continentality degree: **4**

Distribution range extension along the continentality gradient: **4**

Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 156

taxon.data.freq\_in\_quad: 248

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **13**

Number of narrow habitats in which the taxon has its optimum: **4**

Number of broad habitats in which the taxon occurs: **6**

Number of broad habitats in which the taxon has its optimum: **3**

### **Threats and protection**

Red List 2017 (national categories): **taxon is not on the Red List**

Red List 2017 (IUCN categories): **LC(NA) - least concern (taxon is not on the Red List)**

Legal protection: **not protected by law**