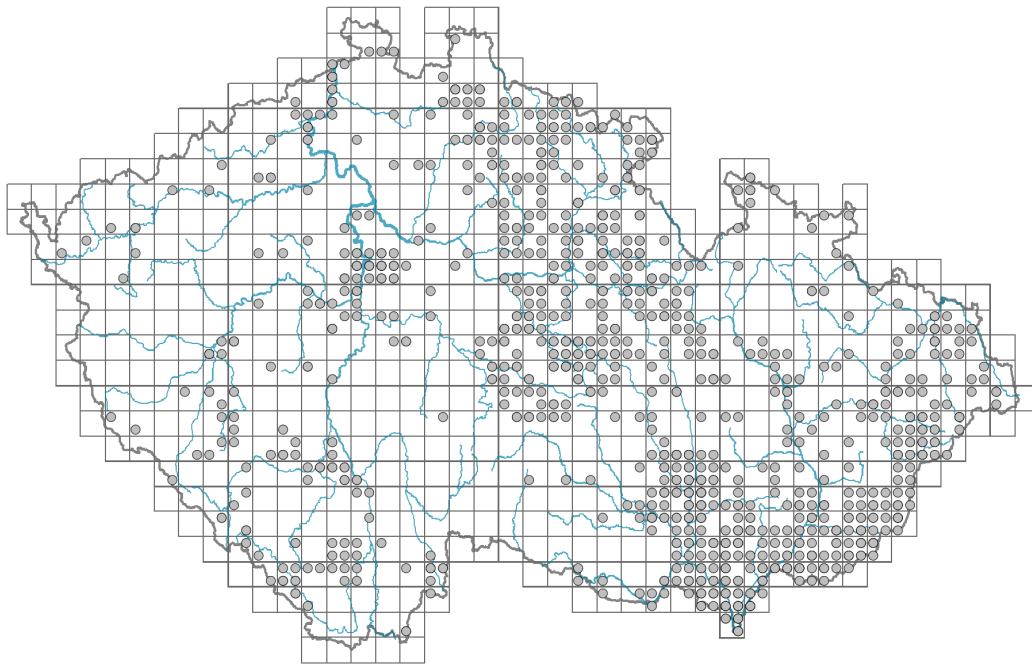


Symphotrichum novi-belgii agg.

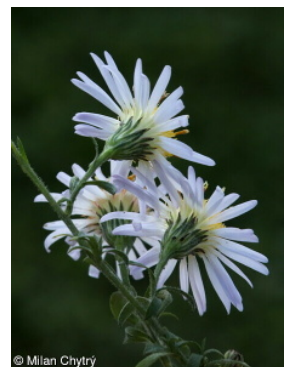
Distribution



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]: **0.15-1.5**

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, 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, red-violet, violet, blue, blue-violet**

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, facultative allogamy**

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), Zea (no dispersal)**

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

Belowground organs and clonality

Shoot metamorphosis: **stolon**

Storage organ: **stolon**

Type of clonal growth organ: **hypogeogenous rhizome**

Freely dispersible organs of clonal growth: **absent**

Shoot life span (cyclicality): **monocyclic shoots prevailing**

Branching type of stem-derived organs of clonal growth: **sympodial**

Primary root: **absent**

Persistence of the clonal growth organ [year]: **2**

Number of clonal offspring: **6**

Lateral spreading distance by clonal growth [m]: **0.13**

Clonal index: **5**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **5**

Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **15**

Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **0**

Size of the belowground bud bank (root buds excluded): **20**

Depth of the belowground bud bank (root buds excluded) [cm]: **4**

Number of buds per shoot at the soil surface (root buds included): **5**

Number of buds per shoot at a depth of 0–10 cm (root buds included): **15**

Number of buds per shoot at a depth greater than 10 cm (root buds included): **0**

Size of the belowground bud bank (root buds included): **20**

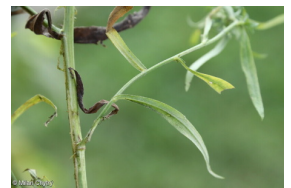
Depth of the belowground bud bank (root buds included) [cm]: **4**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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



Karyology

Chromosome number (2n): **32, 48, 64**

Ploidy level (x): **4, 6, 8**

2C genome size [Mbp]: **4400.33**

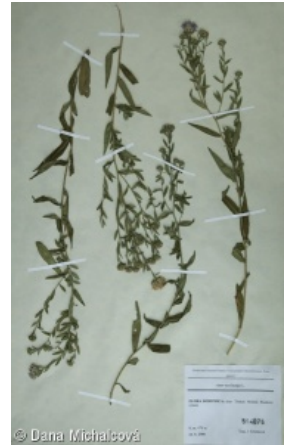
1Cx monoploid genome size [Mbp]: **636.78**

Taxon origin

Origin in the Czech Republic: **neophyte**

Invasion status: **invasive**

Geographic origin: **North America, hybrid origin, anecophyte**



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: **6 - transition between values 5 and 7**

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**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.1**

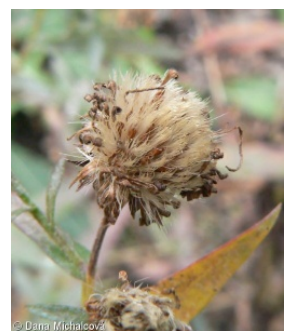
Herb layer disturbance frequency indicator value: **-0.57**

Whole-community disturbance severity indicator value: **0.41**

Herb layer disturbance severity indicator value: **0.41**

Whole-community structure based disturbance indicator value: **0.32**

Herb layer structure-based disturbance indicator value: **0.32**



Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **2 - optimum**

4B Halophilous reed and sedge beds: **1 - rare occurrence**

4C Eutrophic vegetation of muddy substrata: **1 - rare occurrence**

4D Riverine reed vegetation: **1 - rare occurrence, 2 - optimum**

4E Reed vegetation of brooks: **1 - rare occurrence**

4G Tall-sedge beds: **2 - optimum**

4H Vegetation of low annual hygrophilous herbs: **1 - rare occurrence**

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

4J River gravel banks: **1 - rare occurrence**

4K Petasites fringes of montane brooks: **1 - rare occurrence**

4L Nitrophilous herbaceous fringes of lowland rivers: **3 - dominant**

5 Vegetation of springs and mires

5B Lowland to montane soft-water springs: **1 - rare occurrence**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 - rare occurrence, 2 - optimum**6C Pastures and park grasslands: **1 - rare occurrence**6D Alluvial meadows of lowland rivers: **2 - optimum**6E Wet Cirsium meadows: **1 - rare occurrence, 2 - optimum**6F Intermittently wet Molinia meadows: **1 - rare occurrence, 2 - optimum**6G Vegetation of wet disturbed soils: **1 - rare occurrence**

8 Dry grasslands

8F Thermophilous forest fringe vegetation: **1 - rare occurrence**

10 Saline vegetation

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

11 Heathlands and scrub

11I Willow carrs: **1 - rare occurrence**11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence, 2 - optimum**11L Tall mesic and xeric shrub: **1 - rare occurrence**11R Scrub and pioneer woodland of forests clearings: **2 - optimum**

12 Forests

12A Alder carrs: **2 - optimum**12B Alluvial forests: **1 - rare occurrence, 2 - optimum**12I Sub-continental thermophilous oak forests: **1 - rare occurrence**12T Robinia pseudacacia plantations: **1 - rare occurrence**12U Plantations of broad-leaved non-native trees: **2 - optimum**12W Pine and larch plantations: **1 - rare occurrence**

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 - rare occurrence**13B Annual vegetation of arable land: **1 - rare occurrence**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**

Diagnostic taxon

Diagnostic taxon of associations: [KAC01 *Salicetum albae*](#), [KBD03 *Sambuco nigrae-Aceretum negundo*](#), [LBA07 *Fraxino pannonicae-Ulmetum glabrae*](#), [TDE05 *Scutellario hastifoliae-Veronicetum longifoliae*](#), [XDA04 *Sicyo angulatae-Echinocystietum lobatae*](#), [XDE09 *Asteretum lanceolati*](#)

Constant taxon

Constant taxon of associations: [XDE09 *Asteretum lanceolati*](#)

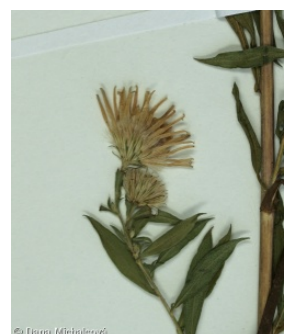
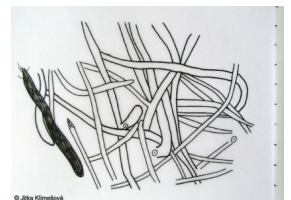
Dominant taxon

Dominant taxon of associations: [LBA07 *Fraxino pannonicae-Ulmetum glabrae*](#), [XDE09 *Asteretum lanceolati*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.8**Ecological specialization index for non-forest vegetation: **3.7**Ecological specialization index for forest vegetation: **5.8**

Colonization ability



Index of colonization success (ICS): **3**
 Index of colonization potential (ICP): **4**
 Optimum successional age [years]: **39.5**

Distribution and frequency

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

Floristic region: **Americas, Eastern America**

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: 342

taxon.data.freq_in_quad: 673

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.5 %**

Occurrence frequency in vegetation plots with a cover above 5%: **48.5 %**

Occurrence frequency in vegetation plots with a cover above 25%: **35.8 %**

Occurrence frequency in vegetation plots with a cover above 50%: **27.3 %**

Mean percentage cover in vegetation plots: **27.4 %**

Maximum percentage cover in vegetation plots: **90 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **35**

Number of narrow habitats in which the taxon has its optimum: **15**

Number of broad habitats in which the taxon occurs: **8**

Number of broad habitats in which the taxon has its optimum: **5**

