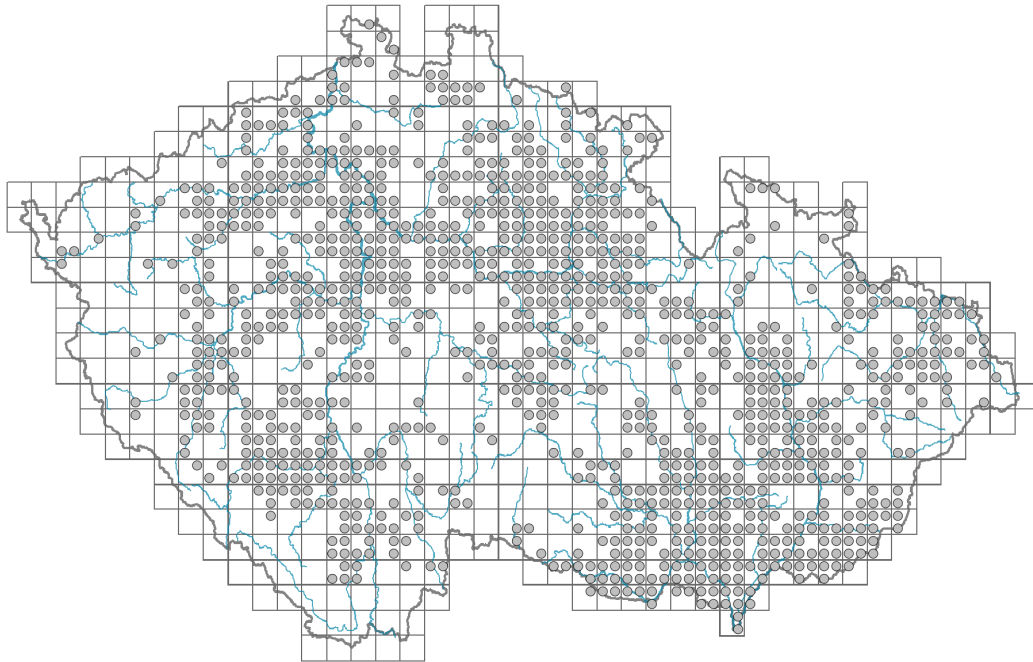


Amaranthus retroflexus

Distribution



© Pavel Veselý

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]: **0.1-2**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **CR - competitor/ruderal**

Life strategy (Pierce method based on leaf traits): **C/CSR**

Life strategy (Pierce method, C-score): **52.1 %**

Life strategy (Pierce method, S-score): **23.7 %**

Life strategy (Pierce method, R-score): **24.2 %**

Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**



© Jana Hložková



© Vojtěch Nádler



© Vojtěch Nádler

Flower

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

Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **green**

Flower symmetry: **actinomorphic**

Perianth type: **homochlamydeous**

Perianth fusion: **free**

Inflorescence type: **pseudospica**

Dicliny: **monoecious**

Generative reproduction type: **facultative autogamy**

Pollination syndrome: **wind-pollination, selfing**

Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

Fruit colour: **brown**

Reproduction type: **only by seed/spores**

Dispersal unit (diaspore): **seed**

Dispersal strategy: **Allium (mainly autochory)**

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

Belowground organs and clonality

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

Primary root: **present**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **0**

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

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): **0**

Number of buds per shoot at the soil surface (root buds included): **0**

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

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): **0**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

Karyology

Chromosome number (2n): **34**

Ploidy level (x): **2**

2C genome size [Mbp]: **892.08**

1Cx monoploid genome size [Mbp]: **446.04**

Genomic GC content: **35.6 %**



Taxon origin

Origin in the Czech Republic: **neophyte**

Invasion status: **invasive**

Geographic origin: **North America, Central America**

Year of the first record in the wild: **1818**

Period of introduction: **Early Modern Period (1500-1800)**

Introduction pathway: **unintentional - agriculture, unintentional - anthropogenic**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% of diffuse radiation incident in an open area**

Temperature indicator value: **7 - heat indicator, occurring in relatively warm lowlands**

Moisture indicator value: **4 - transition between values 3 and 5**

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: **0.26**

Herb layer disturbance frequency indicator value: **0.27**

Whole-community disturbance severity indicator value: **0.94**

Herb layer disturbance severity indicator value: **0.95**

Whole-community structure based disturbance indicator value: **0.69**

Herb layer structure-based disturbance indicator value: **0.69**

Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

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

4L Nitrophilous herbaceous fringes of lowland rivers: **1 - rare occurrence**

6 Meadows and mesic pastures

6G Vegetation of wet disturbed soils: **1 - rare occurrence**

11 Heathlands and scrub

11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**

12 Forests

12T Robinia pseudacacia plantations: **1 - rare occurrence**

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **2 - optimum**

13B Annual vegetation of arable land: **2 - optimum**

13C Annual vegetation of trampled habitats: **1 - rare occurrence**

13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 - rare occurrence**



Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Diagnostic taxon

Diagnostic taxon of classes: [XB *Stellarietea mediae*](#)

Diagnostic taxon of alliances: [XBB *Veronico-Euphorbion*](#), [XBK *Eragrostion cilianensi-minoris*](#)

Diagnostic taxon of associations: [XBB01 *Mercurialietum annuae*](#), [XBG12 *Ivaetum xanthiifoliae*](#), [XBG13 *Kochietum densiflorae*](#), [XBK03 *Eragrostio poaeoidis-Panicetum capillaris*](#), [XBK04 *Cynodontetum dactyli*](#)

Constant taxon

Constant taxon of alliances: [XBB *Veronico-Euphorbion*](#)

Constant taxon of associations: [XBB01 *Mercurialietum annuae*](#), [XBG12 *Ivaetum xanthiifoliae*](#), [XBG13 *Kochietum densiflorae*](#), [XBI03 *Polygono arenastri-Chenopodietum muralis*](#), [XBK03 *Eragrostio poaeoidis-Panicetum capillaris*](#), [XBK04 *Cynodontetum dactyli*](#)

Dominant taxon

Dominant taxon of associations: [XBB01 *Mercurialietum annuae*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **5**

Ecological specialization index for non-forest vegetation: **5**

Colonization ability

Index of colonization success (ICS): **3**

Index of colonization potential (ICP): **2**

Optimum successional age [years]: **1.5**

Distribution and frequency

Floristic zone: **meridional**

Floristic region: **Western America**

Continentality degree: **6**

Distribution range extension along the continentality gradient: **6**

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: **445**

taxon.data.freq_in_quad: **1064**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.6 %**

Occurrence frequency in vegetation plots with a cover above 5%: **17 %**

Occurrence frequency in vegetation plots with a cover above 25%: **4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.8 %**

Mean percentage cover in vegetation plots: **5.3 %**

Maximum percentage cover in vegetation plots: **63 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **10**

Number of narrow habitats in which the taxon has its optimum: **2**

Number of broad habitats in which the taxon occurs: **5**

Number of broad habitats in which the taxon has its optimum: **1**

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**