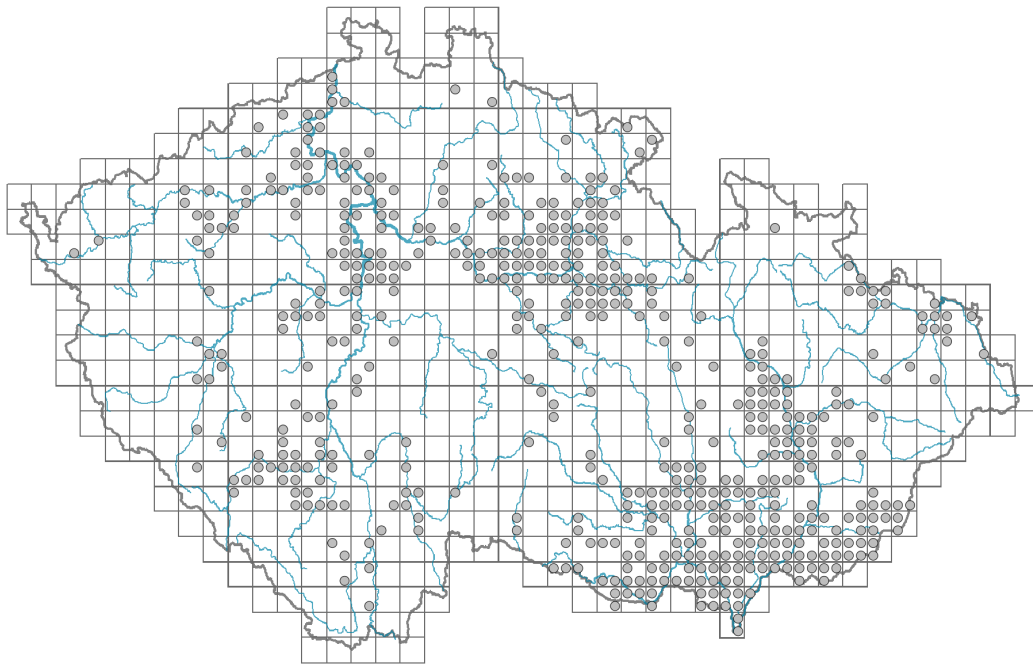


Amaranthus powellii

Distribution



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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]: **0.2-1.2**

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): **57.4 %**

Life strategy (Pierce method, S-score): **20.4 %**

Life strategy (Pierce method, R-score): **22.2 %**

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**



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Flower

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

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):
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded):
 Number of buds per shoot at a depth greater than 10 cm (root buds excluded):
 Size of the belowground bud bank (root buds excluded):
 Number of buds per shoot at the soil surface (root buds included):
 Number of buds per shoot at a depth of 0–10 cm (root buds included):
 Number of buds per shoot at a depth greater than 10 cm (root buds included):
 Size of the belowground bud bank (root buds included):

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]: **938.05**
 1Cx monoploid genome size [Mbp]: **469.02**
 Genomic GC content: **35.3 %**

Taxon origin

Origin in the Czech Republic: **neophyte**



Invasion status: **invasive**

Geographic origin: **Central America, South America**

Year of the first record in the wild: **1853**

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

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: **7 - occurring at nutrient-rich sites more often than at average sites and only exceptionally at poor sites**

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: **0.38**

Herb layer disturbance frequency indicator value: **0.38**

Whole-community disturbance severity indicator value: **0.97**

Herb layer disturbance severity indicator value: **0.97**

Whole-community structure based disturbance indicator value: **0.71**

Herb layer structure-based disturbance indicator value: **0.7**

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

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

11 Heathlands and scrub

11R Scrub and pioneer woodland of forests clearings: **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 alliances: [XBB Veronico-Euphorbion](#)

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

Constant taxon

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

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.4**

Ecological specialization index for non-forest vegetation: **5.5**

Distribution and frequency

Floristic zone: **meridional, tropical**

Floristic region: **Americas**

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 278

taxon.data.freq_in_quad: 531

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%: **17.5 %**

Occurrence frequency in vegetation plots with a cover above 25%: **2.6 %**

Occurrence frequency in vegetation plots with a cover above 50%: **1.3 %**

Mean percentage cover in vegetation plots: **5 %**

Maximum percentage cover in vegetation plots: **88 %**

Number of habitats with taxon occurrence in the Czech Republic

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

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

Number of broad habitats in which the taxon occurs: **4**

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**