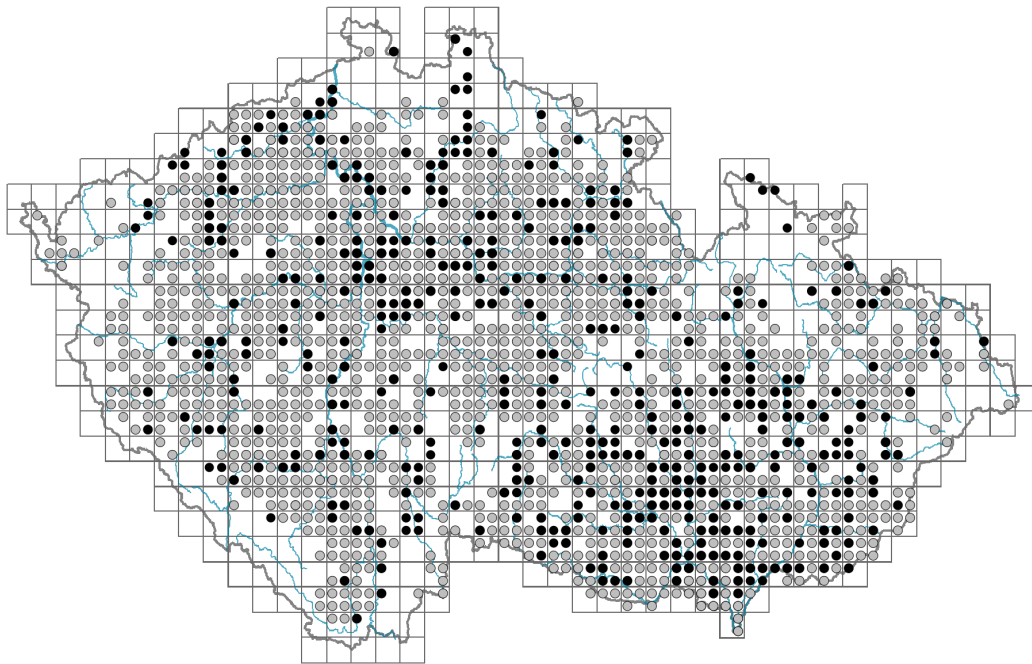


Ballota nigra

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.



© Vladimír Motýčka



© Pavel Veselý

Habitus and growth type

Height [m]: **0.2-0.8**

Growth form: **polycarpic perennial non-clonal herb**

Life form: **hemicryptophyte**

Life strategy: **C - competitor**

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

Life strategy (Pierce method, C-score): **26.1 %**

Life strategy (Pierce method, S-score): **32.6 %**

Life strategy (Pierce method, R-score): **41.3 %**

Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**

Flower

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

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

Flower colour: **white, pink, pink-violet, red-violet, violet**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

Shape of the sympetalous corolla or syntepalous perianth: **bilabiate**

Calyx fusion: **synsepalous**

Inflorescence type: **pseudospica e verticillastris composita**

Dicliny: **gynomonoecious, gynodioecious**

Generative reproduction type: **mixed mating**

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

Pollinator spectrum: **honeybee, bumblebees (hoverflies, meat flies s. l., butterflies)**



Fruit, seed and dispersal

Fruit type: **dry fruit - cluster of four one-seeded nutlets**

Fruit colour: **brown**

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

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

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

Myrmecochory: **probably non-myrmecochorous**

Belowground organs and clonality

Shoot metamorphosis: **pleiocorm**

Root metamorphosis: **primary storage root**

Storage organ: **pleiocorm, primary storage root**

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

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

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):

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

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):

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

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

Karyology

Chromosome number (2n): **20, 22**

Ploidy level (x): **2**

2C genome size [Mbp]: **2146.65**

1Cx monoploid genome size [Mbp]: **1073.33**

Taxon origin

Origin in the Czech Republic: **archaeophyte**

Invasion status: **naturalized**

Geographic origin: **Europe, Mediterranean**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **7 - half-light plant, mostly occurring at full light, but also in the shade up to about 30% 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: **7x - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions (generalist)**

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: **-0.75**

Herb layer disturbance frequency indicator value: **-0.71**

Whole-community disturbance severity indicator value: **0.61**

Herb layer disturbance severity indicator value: **0.61**

Whole-community structure based disturbance indicator value: **0.41**

Herb layer structure-based disturbance indicator value: **0.42**

Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 - rare occurrence**

1B Siliceous cliffs and block fields: **1 - rare occurrence**

1C Walls: **1 - rare occurrence**

1D Mobile calcareous screes: **1 - rare occurrence**

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



11L Tall mesic and xeric shrub: **2 - optimum**

11N Low xeric scrub: **1 - rare occurrence**

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

12 Forests

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

12C Oak-hornbeam forests: **1 - rare occurrence**

12D Ravine forests: **1 - rare occurrence**

12H Peri-Alpidic basiphilous thermophilous oak forests: **1 - rare occurrence**

12J Acidophilous thermophilous oak forests: **1 - rare occurrence**

12T Robinia pseudacacia plantations: **2 - optimum**

12U Plantations of broad-leaved non-native trees: **2 - optimum**

12V Spruce plantations: **1 - rare occurrence**

12W Pine and larch plantations: **1 - rare occurrence**

13 Anthropogenic vegetation

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

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

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

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

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **2 - optimum**

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

Diagnostic taxon

Diagnostic taxon of classes: [XC *Artemisietea vulgaris*](#)

Diagnostic taxon of alliances: [KBD *Aegopodio podagrariae-Sambucion nigrae*](#), [KBE *Chelidonio majoris-Robinion pseudoacaciae*](#), [XCA *Onopordion acanthii*](#), [XCE *Arction lappae*](#)

Diagnostic taxon of associations: [KBD01 *Sambucetum nigrae*](#), [KBD02 *Lycietum barbari*](#), [XBG12 *Ivaetum xanthiifoliae*](#), [XCA03 *Potentillo argenteae-Artemisietum absinthii*](#), [XCB11 *Asclepiadetum syriacae*](#), [XCE01 *Urtico urentis-Chenopodietum boni-henrici*](#), [XCE03 *Hyoscyamo nigri-Conietum maculati*](#), [XDD03 *Anthriscetum trichospermae*](#)

Constant taxon

Constant taxon of alliances: [KBD *Aegopodio podagrariae-Sambucion nigrae*](#), [XCA *Onopordion acanthii*](#), [XCE *Arction lappae*](#)

Constant taxon of associations: [KBD01 *Sambucetum nigrae*](#), [KBD02 *Lycietum barbari*](#), [XBG02 *Chenopodietum urbici*](#), [XBG12 *Ivaetum xanthiifoliae*](#), [XCA03 *Potentillo argenteae-Artemisietum absinthii*](#), [XCB11 *Asclepiadetum syriacae*](#), [XCE01 *Urtico urentis-Chenopodietum boni-henrici*](#), [XCE03 *Hyoscyamo nigri-Conietum maculati*](#), [XDD03 *Anthriscetum trichospermae*](#)

Dominant taxon

Dominant taxon of associations: [XBH02 *Hordeo murini-Brometum sterilis*](#), [XCE01 *Urtico urentis-Chenopodietum boni-henrici*](#), [XCE02 *Arctietum lappae*](#), [XDD02 *Torilidetum japonicae*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.2**

Ecological specialization index for non-forest vegetation: **4.3**

Ecological specialization index for forest vegetation: **4.8**

Colonization ability

Index of colonization success (ICS): **6**

Index of colonization potential (ICP): **6**

Optimum successional age [years]: **19**

Distribution and frequency

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

Floristic region: **Europe, Western Asia**

Distribution range extension along the continentality gradient: **5**

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: **551**

taxon.data.freq_in_quad: **1631**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.5 %**

Occurrence frequency in vegetation plots with a cover above 5%: **22.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **8.2 %**

Occurrence frequency in vegetation plots with a cover above 50%: **2.8 %**

Mean percentage cover in vegetation plots: **7.5 %**

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: **25**

Number of narrow habitats in which the taxon has its optimum: **7**

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**