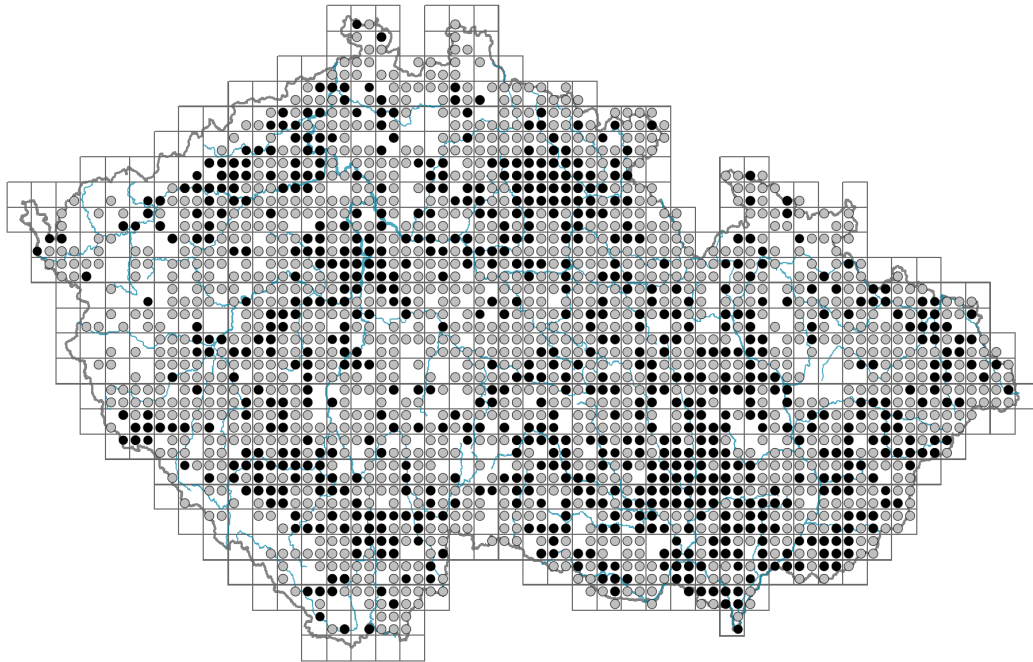


Veronica persica

Distribution



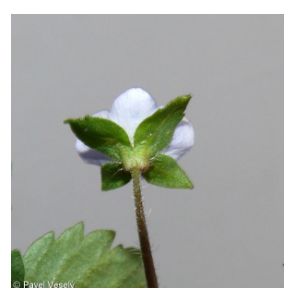
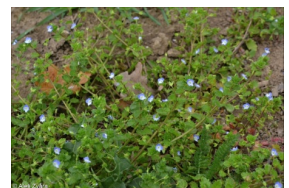
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Map info

● 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]: **0.05-0.15**

Growth form: **annual herb**

Life form: **therophyte**

Life strategy: **R - ruderal**

Life strategy (Pierce method based on leaf traits): **R/CR**

Life strategy (Pierce method, C-score): **22 %**

Life strategy (Pierce method, S-score): **0 %**

Life strategy (Pierce method, R-score): **78.1 %**

Leaf

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

Leaf arrangement (phyllotaxis): **alternate, opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **present**

Leaf life span: **overwintering green**

Leaf anatomy: **mesomorphic**

Flower

Flowering period [month]: **February-December**

Flowering phase: **1 Corylus avellana-Leucojum vernal (pre-spring)**

Flower colour: **blue**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

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

Calyx fusion: **fused at the base**

Inflorescence type: **racemus**

Dicliny: **synoecious**

Generative reproduction type: **facultative autogamy**

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

Pollinator spectrum: **hoverflies, flies s. l., other Diptera, beetles (honeybee, bumblebees, solitary bees, butterflies, nitidulids)**

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: **probably myrmecochorous**

Belowground organs and clonality

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

Primary root: **present**

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): **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): **5**

Depth of the belowground bud bank (root buds excluded) [cm]: **1**

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): **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): **5**

Depth of the belowground bud bank (root buds included) [cm]: **1**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

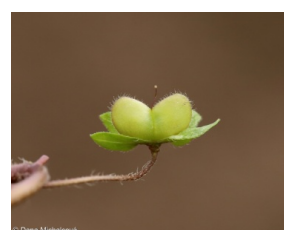
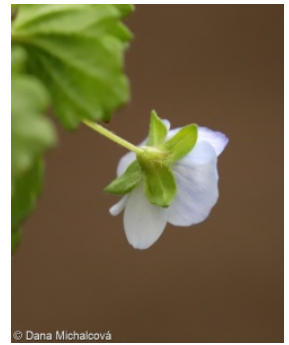
Carnivory: **non-carnivorous**

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

Karyology

Chromosome number (2n): **28**

Ploidy level (x): **4**



2C genome size [Mbp]: **1279.42**
 1Cx monoploid genome size [Mbp]: **319.85**
 Genomic GC content: **39.1 %**

Taxon origin

Origin in the Czech Republic: **neophyte**
 Invasion status: **naturalized**
 Geographic origin: **Mediterranean**
 Year of the first record in the wild: **1810**
 Period of introduction: **Early Modern Period (1500-1800)**
 Introduction pathway: **unintentional - agriculture, unintentional - anthropogenic**

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: **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: **0 - not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **0.37**

Herb layer disturbance frequency indicator value: **0.37**

Whole-community disturbance severity indicator value: **0.98**

Herb layer disturbance severity indicator value: **0.98**

Whole-community structure based disturbance indicator value: **0.81**

Herb layer structure-based disturbance indicator value: **0.84**

Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4D Riverine reed vegetation: **1 - rare occurrence**

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

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

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

6 Meadows and mesic pastures

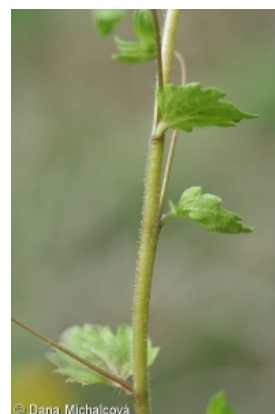
6G Vegetation of wet disturbed soils: **1 - rare occurrence**

9 Sand grasslands and rock-outcrop vegetation

9E Acidophilous vegetation of spring therophytes and succulents: **1 - rare occurrence**

9F Basiphilous vegetation of spring therophytes and succulents: **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**

12U Plantations of broad-leaved non-native trees: **1 - rare occurrence**

13 Anthropogenic vegetation

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

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: [XBA *Caucalidion*](#), [XBB *Veronico-Euphorbion*](#), [XBC *Scleranthion annui*](#)

Diagnostic taxon of associations: [XBA01 *Caucalido platycarpi-Conringietum orientalis*](#), [XBA03 *Euphorbio exiguae-Melandrietum noctiflori*](#), [XBB02 *Veronico-Lamietum hybridi*](#)

Constant taxon

Constant taxon of alliances: [XBA *Caucalidion*](#), [XBB *Veronico-Euphorbion*](#), [XBC *Scleranthion annui*](#), [XBE *Oxalidion fontanae*](#)

Constant taxon of associations: [XBA01 *Caucalido platycarpi-Conringietum orientalis*](#), [XBA03 *Euphorbio exiguae-Melandrietum noctiflori*](#), [XBA05 *Veronicetum hederifolio-triphylli*](#), [XBB02 *Veronico-Lamietum hybridi*](#), [XBC01 *Aphano arvensis-Matricarietum chamomillae*](#), [XBC03 *Erophilo vernaе-Arabidopsietum thalianae*](#), [XBE01 *Echinochloo cruris-galli-Chenopodietum polyspermi*](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.8**

Ecological specialization index for non-forest vegetation: **5.8**

Colonization ability

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

Index of colonization potential (ICP): **1**

Optimum successional age [years]: **4**

Distribution and frequency

Floristic zone: **boreal, 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, montane belt (subalpine belt)**

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

mapping cells: 619

taxon.data.freq_in_quad: 1999

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **3.4 %**

Occurrence frequency in vegetation plots with a cover above 5%: **14 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.4 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0.2 %**

Mean percentage cover in vegetation plots: **4.4 %**

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: **15**

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

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

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**