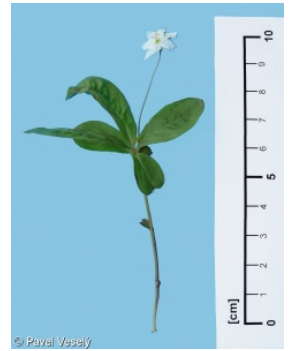
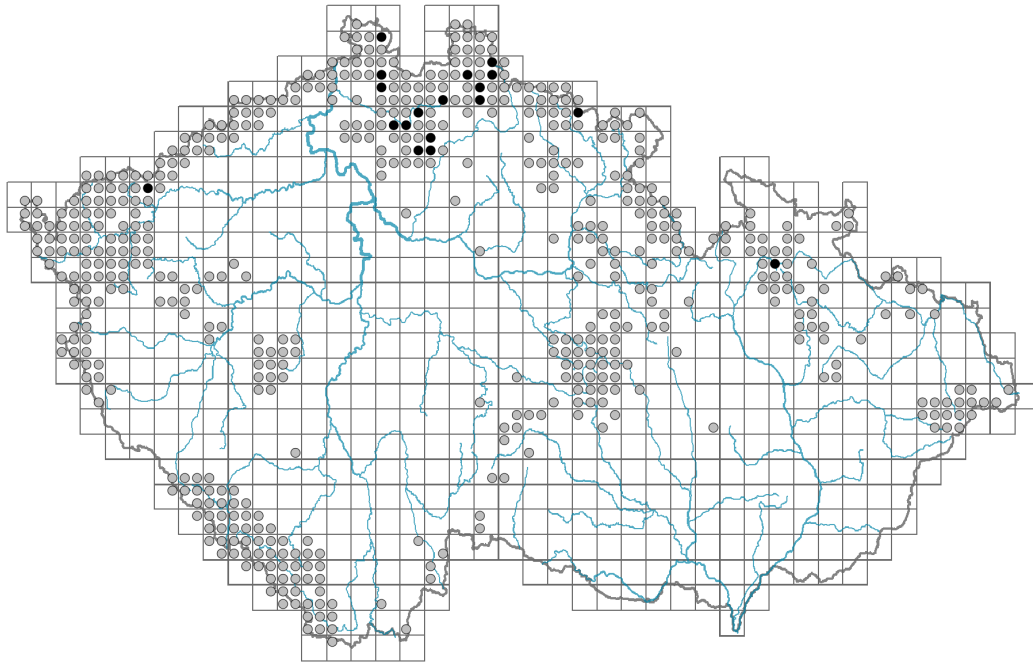


Trientalis europaea

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]: **0.05-0.15**

Growth form: **clonal herb**

Life form: **geophyte**

Life strategy: **S - stress-tolerator**

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

Life strategy (Pierce method, C-score): **12.5 %**

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

Life strategy (Pierce method, R-score): **87.5 %**

Leaf

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

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

Leaf shape: **simple - entire**

Stipules: **absent**

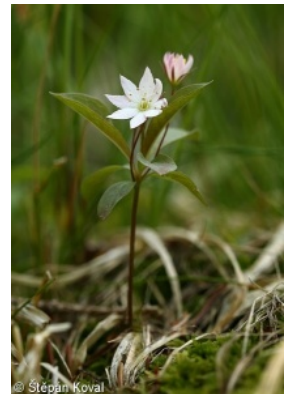
Petiole: **both present and absent**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic, hygromorphic**

Flower

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



Flowering phase: **4 Fagus sylvatica-Galeobdolon (start of mid-spring)**

Flower colour: **white**

Flower symmetry: **actinomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

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

Calyx fusion: **synsepalous**

Inflorescence type: **flores solitarii**

Dicliny: **synoecious**

Generative reproduction type: **mixed mating**

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



Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**

Fruit colour: **brown**

Reproduction type: **mostly vegetatively, rarely by seed/spores**

Dispersal unit (diaspore): **seed**

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

Myrmecochory: **probably non-myrmecochorous**



Belowground organs and clonality

Shoot metamorphosis: **stolon, stolon with tuberous tip**

Storage organ: **stolon, stolon with tuberous tip**

Type of clonal growth organ: **belowground stem tuber**

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]:

Number of clonal offspring:

Lateral spreading distance by clonal growth [m]: **0.16**

Clonal index: **5**

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): **11**

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

Size of the belowground bud bank (root buds excluded): **16**

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

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): **11**

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

Size of the belowground bud bank (root buds included): **16**

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): **160**

Ploidy level (x): **16**

2C genome size [Mbp]: **5297.9**

1Cx monoploid genome size [Mbp]: **331.12**

Genomic GC content: **38.2 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **4x - transition between values 3 and 5 (generalist)**

Temperature indicator value: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

Moisture indicator value: **6x - transition between values 5 and 7 (generalist)**

Reaction indicator value: **3 - acidity indicator, occurring mainly in acidic conditions, exceptionally in neutral conditions**

Nutrient indicator value: **3 - occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**

Salinity indicator value: **0 - not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.73**

Herb layer disturbance frequency indicator value: **-1.07**

Whole-community disturbance severity indicator value: **0.2**

Herb layer disturbance severity indicator value: **0.14**

Whole-community structure based disturbance indicator value: **0.2**

Herb layer structure-based disturbance indicator value: **0.21**

Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2A Alpine grasslands on siliceous bedrock: **1 - rare occurrence**

2B Subalpine tall-forb and tall-grass vegetation: **2 - optimum**

5 Vegetation of springs and mires

5C Alpine and subalpine soft-water springs: **1 - rare occurrence**

5E Acidic moss-rich fens and peatland meadows: **1 - rare occurrence**

5F Transitional mires: **2 - optimum**

5G Raised bogs: **2 - optimum**

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **2 - optimum**

7B Submontane Nardus grasslands: **1 - rare occurrence**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **2 - optimum**

11D Subalpine acidophilous Pinus mugo scrub: **2 - optimum**

11H Subalpine deciduous scrub: **2 - optimum**

12 Forests

12E Herb-rich beech forests: **1 - rare occurrence**

12G Acidophilous beech forests: **2 - optimum**

12K Acidophilous oak forests: **2 - optimum**

12L Boreo-continental pine forests: **2 - optimum**

12O Peri-Alpidic pine forests: **1 - rare occurrence**

12P Peatland pine forests: **2 - optimum**

12Q Peatland birch forests: **2 - optimum**

12R Acidophilous spruce forests: **2 - optimum**

12S Basiphilous spruce forests: **2 - optimum**

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

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

13 Anthropogenic vegetation

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

Affinity to the forest environment

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.1 - taxon occurring both in the forest and open vegetation**

Diagnostic taxon

Diagnostic taxon of classes: [KC *Roso pendulinae-Pinetea mugo*](#), [LF *Vaccinio-Piceetea*](#)

Diagnostic taxon of alliances: [ADA *Calamagrostion villosae*](#), [ADC *Salicion silesiacae*](#), [ADE *Dryopterido filicis-maris-Athyrium distentifolii*](#), [KCA *Pinion mugo*](#), [LFC *Piceion abietis*](#)

Diagnostic taxon of associations: [ADA01 *Sphagno compacti-Molinietum caeruleae*](#), [ADA02 *Crepido conyzifoliae-Calamagrostietum villosae*](#), [ADA03 *Violo sudeticae-Deschampsietum cespitosae*](#), [ADC02 *Pado borealis-Sorbetum aucupariae*](#), [ADD02 *Salicetum lapponum*](#), [ADE01 *Daphno mezerei-Dryopteridetum filicis-maris*](#), [ADE02 *Adenostylo alliariae-Athyrium distentifolii*](#), [KCA01 *Dryopterido dilatatae-Pinetum mugo*](#), [KCA02 *Adenostylo alliariae-Pinetum mugo*](#), [LFC01 *Calamagrostio villosae-Piceetum abietis*](#), [LFC02 *Athyrio distentifolii-Piceetum abietis*](#), [RBD04 *Polytricho communis-Molinietum caeruleae*](#), [TEA01 *Festuco supinae-Nardetum strictae*](#), [TEF03 *Festuco supinae-Vaccinietum myrtilli*](#)

Constant taxon

Constant taxon of classes: [KC *Roso pendulinae-Pinetea mugo*](#)

Constant taxon of alliances: [ADA *Calamagrostion villosae*](#), [ADC *Salicion silesiacae*](#), [KCA *Pinion mugo*](#), [LFC *Piceion abietis*](#)

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Ecological specialization indices

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

Ecological specialization index for non-forest vegetation: **4.7**

Ecological specialization index for forest vegetation: **5.9**

Colonization ability

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

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

Optimum successional age [years]: **5.5**

Distribution and frequency

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

Floristic region: **Europe, Asia, Americas**

Continentality degree: **6**

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

Elevational belt in the Czech Republic: **colline belt, submontane belt, montane belt (lowlands)**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **246**

taxon.data.freq_in_quad: **552**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.3 %**

Occurrence frequency in vegetation plots with a cover above 5%: **9.5 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0.5 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

Mean percentage cover in vegetation plots: **3.4 %**

Maximum percentage cover in vegetation plots: **38 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **23**

Number of narrow habitats in which the taxon has its optimum: **14**

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

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

Threats and protection

Red List 2017 (national categories): **C4a - near threatened taxon**

Red List 2017 (IUCN categories): **LC - least concern**

Legal protection: **not protected by law**