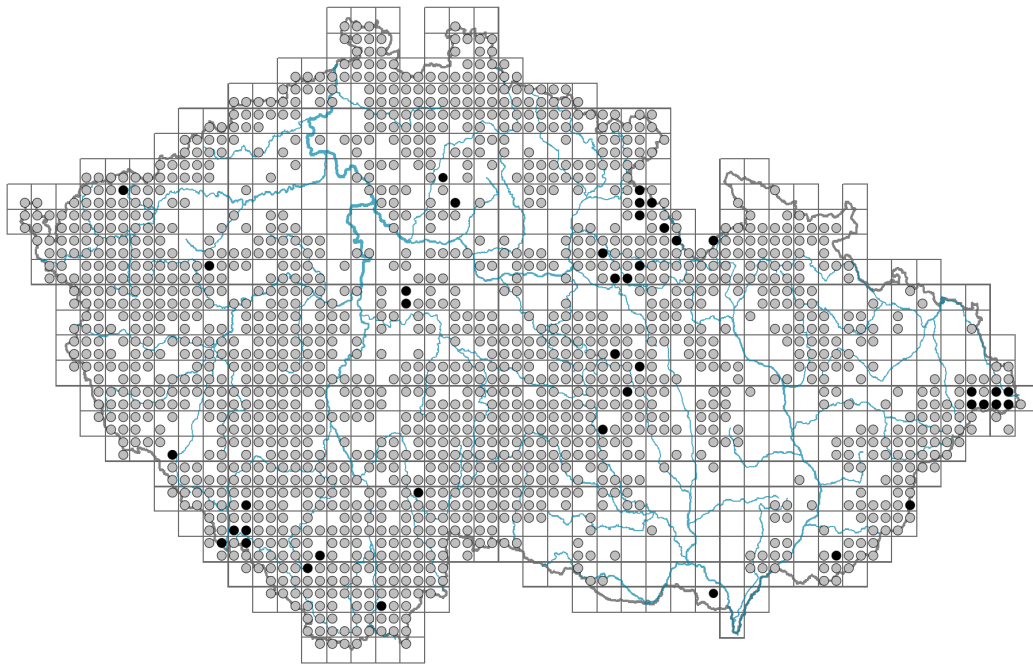


# *Nardus stricta*

## 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]: **0.1-0.3**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **CS - competitor/stress-tolerator**

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

Life strategy (Pierce method, C-score): **5.1 %**

Life strategy (Pierce method, S-score): **92 %**

Life strategy (Pierce method, R-score): **3 %**



## Leaf

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

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **evergreen**

Leaf anatomy: **scleromorphic**



## Flower

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

Flowering phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**

Flower colour: **green**

Perianth type: **reduced**

Perianth fusion: **reduced**

Inflorescence type: **spica e spiculis composita**

Dicliny: **synoecious**

Generative reproduction type: **apomixis**

Pollination syndrome: **wind-pollination**



## Fruit, seed and dispersal

Fruit type: **dry fruit - caryopsis**

Fruit colour: **brown**

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

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

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

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



## Belowground organs and clonality

Shoot metamorphosis: **rhizome**

Storage organ: **rhizome, tuft**

Type of clonal growth organ: **hypogeogenous rhizome**

Freely dispersible organs of clonal growth: **absent**

Shoot life span (cyclicity): **dicyclic or polycyclic shoots prevailing**

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

Primary root: **absent**

Persistence of the clonal growth organ [year]: **4**

Number of clonal offspring: **3.5**

Lateral spreading distance by clonal growth [m]: **0.03**

Clonal index: **4**

## 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): **13**

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): **18**

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

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): **13**

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): **18**

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): **26**

Ploidy level (x): **2**

2C genome size [Mbp]: **3578.39**

1Cx monoploid genome size [Mbp]: **1789.19**

Genomic GC content: **47.1 %**

## Taxon origin

Origin in the Czech Republic: **native**

## 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: **4x - transition between values 3 and 5 (generalist)**

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

Reaction indicator value: **2 - transition between values 1 and 3**

Nutrient indicator value: **2 - transition between values 1 and 3**

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

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.8**

Herb layer disturbance frequency indicator value: **-0.65**

Whole-community disturbance severity indicator value: **0.22**

Herb layer disturbance severity indicator value: **0.26**

Whole-community structure based disturbance indicator value: **0.59**

Herb layer structure-based disturbance indicator value: **0.75**

## Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2A Alpine grasslands on siliceous bedrock: **4 - constant dominant**

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**

5D Calcareous fens: **1 - rare occurrence**

5E Acidic moss-rich fens and peatland meadows: **2 - optimum**

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

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

5H Wet peat soils and bog hollows: **1 - rare occurrence**

6 Meadows and mesic pastures

6A Mesic Arrhenatherum meadows: **1 - rare occurrence**

6B Montane mesic meadows: **2 - optimum**

6C Pastures and park grasslands: **1 - rare occurrence**

6E Wet Cirsium meadows: **2 - optimum**



- 6F Intermittently wet *Molinia* meadows: **2 - optimum**  
 6G Vegetation of wet disturbed soils: **1 - rare occurrence**  
 7 Acidophilous grasslands  
 7A Subalpine and montane acidophilous grasslands: **3 - dominant**  
 7B Submontane *Nardus* grasslands: **3 - dominant**  
 8 Dry grasslands  
 8E Acidophilous dry 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: **1 - rare occurrence**  
 11I Willow carrs: **1 - rare occurrence**  
 11R Scrub and pioneer woodland of forests clearings: **1 - rare occurrence**  
 12 Forests  
 12G Acidophilous beech forests: **1 - rare occurrence**  
 12K Acidophilous oak forests: **1 - rare occurrence**  
 12L Boreo-continental pine forests: **1 - rare occurrence**  
 12O Peri-Alpidic pine forests: **1 - rare occurrence**  
 12P Peatland pine forests: **1 - rare occurrence**  
 12Q Peatland birch forests: **1 - rare occurrence**  
 12R Acidophilous spruce forests: **1 - rare occurrence**  
 12S Basiphilous spruce forests: **1 - rare occurrence**  
 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 Thermophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 - taxon occurring partly in the forest, but mainly in open vegetation**

### Diagnostic taxon

Diagnostic taxon of classes: [AB \*Juncetea trifidi\*](#), [TE \*Calluno-Ulicetea\*](#)

Diagnostic taxon of alliances: [ABB \*Nardo strictae\*-\*Caricion bigelowii\*](#), [RBC \*Caricion canescenti-nigrae\*](#), [TDD \*Molinion caeruleae\*](#), [TEA \*Nardion strictae\*](#), [TEB \*Nardo strictae\*-\*Agrostion tenuis\*](#), [TEC \*Violion caninae\*](#), [TED \*Nardo strictae\*-\*Juncion squarrosi\*](#)

Diagnostic taxon of associations: [ABB01 \*Carici bigelowii\*-\*Nardetum strictae\*](#), [ADA01 \*Sphagno compacti\*-\*Molinietum caeruleae\*](#), [RBC01 \*Caricetum nigrae\*](#), [RBC04 \*Bartsio alpinae\*-\*Caricetum nigrae\*](#), [TDD02 \*Junco effusi\*-\*Molinietum caeruleae\*](#), [TEA01 \*Festuco supinae\*-\*Nardetum strictae\*](#), [TEA02 \*Thesio alpini\*-\*Nardetum strictae\*](#), [TEB01 \*Sileno vulgaris\*-\*Nardetum strictae\*](#), [TEC01 \*Festuco capillatae\*-\*Nardetum strictae\*](#), [TED01 \*Juncetum squarrosi\*](#)

### Constant taxon

Constant taxon of classes: [AB \*Juncetea trifidi\*](#), [TE \*Calluno-Ulicetea\*](#)

Constant taxon of alliances: [ABA \*Juncion trifidi\*](#), [ABB \*Nardo strictae\*-\*Caricion bigelowii\*](#), [ADA \*Calamagrostion villosae\*](#), [RBC \*Caricion canescenti-nigrae\*](#), [TDB \*Polygono bistortae\*-\*Trisetion flavescentis\*](#), [TDD \*Molinion caeruleae\*](#), [TEA \*Nardion\*](#)



*strictae*, [TEB Nardo strictae-Agrostion tenuis](#), [TEC Violion caninae](#), [TED Nardo strictae-Juncion squarrosi](#)

Constant taxon of associations: [ABA01 Cetrario-Festucetum supinae](#), [ABB01 Carici bigelowii-Nardetum strictae](#), [ADA01 Sphagno compacti-Molinietum caeruleae](#), [RBC01 Caricetum nigrae](#), [RBC04 Bartsio alpinae-Caricetum nigrae](#), [RBD03 Carici echinatae-Sphagnetum](#), [RBD04 Polytricho communis-Molinietum caeruleae](#), [TDB02 Melandrio rubri-Phleetum alpini](#), [TDB03 Meo athamantici-Festucetum rubrae](#), [TDD02 Junco effusi-Molinietum caeruleae](#), [TDF03 Angelico sylvestris-Cirsietum palustris](#), [TEA01 Festuco supinae-Nardetum strictae](#), [TEA02 Thesio alpini-Nardetum strictae](#), [TEB01 Sileno vulgaris-Nardetum strictae](#), [TEC01 Festuco capillatae-Nardetum strictae](#), [TEC02 Campanulo rotundifoliae-Dianthetum deltoidis](#), [TED01 Juncetum squarrosi](#), [TEF01 Vaccinio-Callunetum vulgaris](#), [TEF03 Festuco supinae-Vaccinietum myrtilli](#)

Dominant taxon

Dominant taxon of associations: [ABB01 Carici bigelowii-Nardetum strictae](#), [RBD03 Carici echinatae-Sphagnetum](#), [RBD04 Polytricho communis-Molinietum caeruleae](#), [TDB03 Meo athamantici-Festucetum rubrae](#), [TDD02 Junco effusi-Molinietum caeruleae](#), [TEA01 Festuco supinae-Nardetum strictae](#), [TEA02 Thesio alpini-Nardetum strictae](#), [TEB01 Sileno vulgaris-Nardetum strictae](#), [TEC01 Festuco capillatae-Nardetum strictae](#), [TED01 Juncetum squarrosi](#), [TEF01 Vaccinio-Callunetum vulgaris](#), [TEF02 Calamagrostio arundinaceae-Vaccinietum myrtilli](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.2**

Ecological specialization index for non-forest vegetation: **5.3**

Ecological specialization index for forest vegetation: **4.9**

Colonization ability

Index of colonization success (ICS): **5**

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

Optimum successional age [years]: **7**

## Distribution and frequency

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

Floristic region: **Europe**

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

Elevational belt in the Czech Republic: **colline belt, submontane belt, montane belt, subalpine belt**

Expansive taxon in the region: **Bohemian Moravian Mesophyticum, Bohemian Moravian Oreophyticum, Carpathian Mesophyticum, Carpathian Oreophyticum**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **557**

taxon.data.freq\_in\_quad: **1566**

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%: **43.2 %**

Occurrence frequency in vegetation plots with a cover above 25%: **23.6 %**

Occurrence frequency in vegetation plots with a cover above 50%: **11.3 %**

Mean percentage cover in vegetation plots: **16.5 %**

Maximum percentage cover in vegetation plots: **99 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **33**

Number of narrow habitats in which the taxon has its optimum: **12**

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

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

### **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**