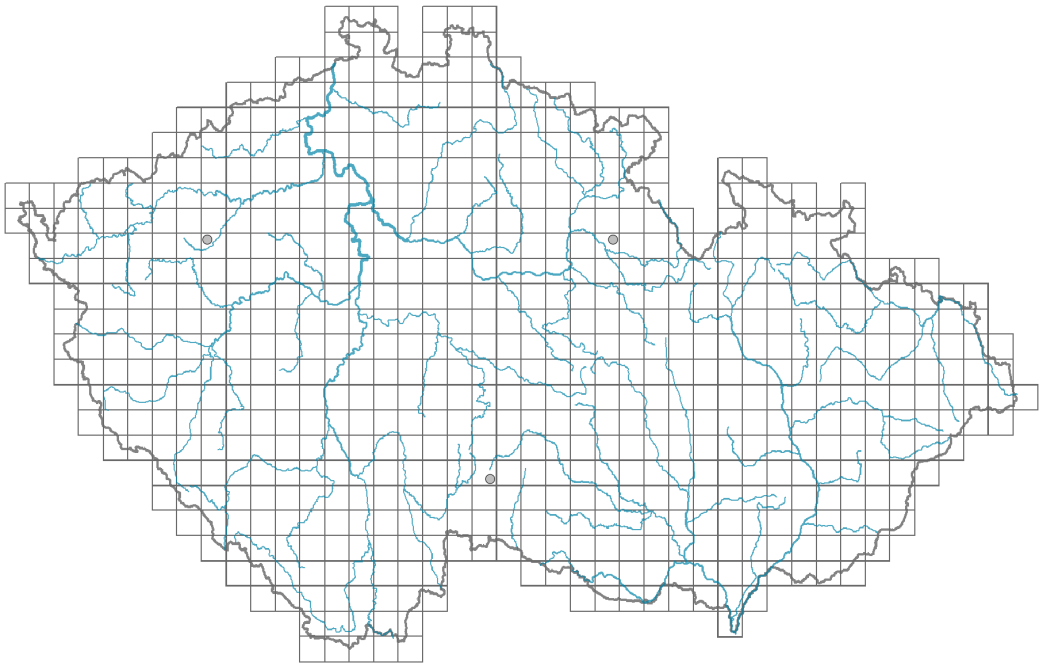
Pteridium aquilinum subsp. *aquilinum*

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]: **0.5–2**
Growth form: **clonal herb**
Life form: **geophyte**
Life strategy: **C – competitor**
Life strategy (Pierce method based on leaf traits): **C**
Life strategy (Pierce method, C-score): **80.9 %**
Life strategy (Pierce method, S-score): **13.4 %**
Life strategy (Pierce method, R-score): **5.8 %**

Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **compound – bipinnate, compound – tripinnate**
Stipules: **absent**
Petiole: **present**
Leaf life span: **summer green**
Leaf anatomy: **scleromorphic**

Flower

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

© 2014–2026 Pladias – Citation: Pladias – Database of the Czech Flora and Vegetation. www.pladias.cz

Dicliny: **synoecious**

Fruit, seed and dispersal

Reproduction type: **by seed/spores and vegetatively**
Dispersal unit (diaspore): **spore**
Dispersal strategy: **Lycopodium (mainly anemochory)**
Myrmecochory: **non-myrmecochorous (b)**

Belowground organs and clonality

Shoot metamorphosis: **rhizome**
Storage organ: **rhizome**
Type of clonal growth organ: **hypogeogenous rhizome**
Freely dispersible organs of clonal growth: **absent**
Shoot life span (cyclicity): **monocyclic shoots prevailing**
Branching type of stem-derived organs of clonal growth: **dichotomous**
Primary root: **absent**
Persistence of the clonal growth organ [year]: **4**
Number of clonal offspring: **1**
Lateral spreading distance by clonal growth [m]: **0.4**
Clonal index: **5**

Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **0**
Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **12**
Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **15**
Size of the belowground bud bank (root buds excluded): **27**
Depth of the belowground bud bank (root buds exluded) [cm]: **11**
Number of buds per shoot at the soil surface (root buds included): **0**
Number of buds per shoot at a depth of 0–10 cm (root buds included): **12**
Number of buds per shoot at a depth greater than 10 cm (root buds included): **15**
Size of the belowground bud bank (root buds included): **27**
Depth of the belowground bud bank (root buds included) [cm]: **11**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**
Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

Karyology

Chromosome number (2n): **104**
Ploidy level (x): **4**
2C genome size [Mbp]: **13397.43**
1Cx monoploid genome size [Mbp]: **3349.36**
Genomic GC content: **45.7 %**

© 2014–2026 Pladias – Citation: Pladias – Database of the Czech Flora and Vegetation. www.pladias.cz

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 – transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area**
Temperature indicator value: **5 – moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**
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: **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: **-1.83**
Herb layer disturbance frequency indicator value: **-0.62**
Whole-community disturbance severity indicator value: **0.38**
Herb layer disturbance severity indicator value: **0.26**
Whole-community structure based disturbance indicator value: **0.12**
Herb layer structure-based disturbance indicator value: **0.13**

Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **1 – rare occurrence**

6 Meadows and mesic pastures

6F Intermittently wet Molinia meadows: **1 – rare occurrence**
6G Vegetation of wet disturbed soils: **1 – rare occurrence**

7 Acidophilous grasslands

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

8 Dry grasslands

8F Thermophilous forest fringe vegetation: **1 – rare occurrence**

9 Sand grasslands and rock-outcrop vegetation

9B Open vegetation of acidic sands: **1 – rare occurrence**
9C Festuca grasslands on acidic sands: **1 – rare occurrence**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 – rare occurrence**

12 Forests

12A Alder carrs: **1 – rare occurrence**
12C Oak-hornbeam forests: **1 – rare occurrence**
12E Herb-rich beech forests: **1 – rare occurrence**

© 2014–2026 Pladias – Citation: Pladias – Database of the Czech Flora and Vegetation. www.pladias.cz

12G Acidophilous beech forests: **2 – optimum**
12I Sub-continental thermophilous oak forests: **1 – rare occurrence**
12K Acidophilous oak forests: **3 – dominant**
12L Boreo-continental pine forests: **2 – optimum**
12P Peatland pine forests: **1 – rare occurrence**
12Q Peatland birch forests: **2 – optimum**
12R Acidophilous spruce forests: **1 – rare occurrence**
12U Plantations of broad-leaved non-native trees: **1 – rare occurrence**
12V Spruce plantations: **1 – rare occurrence**
12W Pine and larch plantations: **2 – optimum**

13 Anthropogenic vegetation

13E Perennial nitrophilous herbaceous vegetation of mesic sites: **1 – rare occurrence**
13F Herbaceous vegetation of forests clearings and Rubus scrub: **3 – dominant**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **1.2 – taxon occurring mainly along forest edges and in forest openings, including forest roads and paths, windthrow sites, burnt sites and forest clearings**
Affinity to the forest environment in Mesophyticum and Oreophyticum: **1.2 – taxon occurring mainly along forest edges and in forest openings, including forest roads and paths, windthrow sites, burnt sites and forest clearings**

Diagnostic taxon

Diagnostic taxon of alliances: **LFA *Festuco-Pinion sylvestris*, LFB *Dicrano-Pinion sylvestris***
Diagnostic taxon of associations: **LFA01 *Festuco-Pinetum sylvestris*, XEA06 *Pteridietum aquilini***

Constant taxon

Constant taxon of associations: **XEA06 *Pteridietum aquilini***

Dominant taxon

Dominant taxon of associations: **XEA06 *Pteridietum aquilini***

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.3**
Ecological specialization index for non-forest vegetation: **3.7**
Ecological specialization index for forest vegetation: **4.5**

Colonization ability

Index of colonization success (ICS): **6**
Index of colonization potential (ICP): **9**
Optimum successional age [years]: **9**

Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional, subtropical, tropical, austral or antarctic**
Floristic region: **circumpolar**
Distribution range extension along the continentality gradient: **5**
Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt, montane belt**
Expansive taxon in the region: **Bohemian Moravian Mesophyticum, Bohemian Moravian Oreophyticum, Carpathian Mesophyticum, Carpathian Oreophyticum**

© 2014–2026 Pladias – Citation: Pladias – Database of the Czech Flora and Vegetation. www.pladias.cz

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 536
taxon.data.freq_in_quad: 1367

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.3 %**
Occurrence frequency in vegetation plots with a cover above 5%: **50 %**
Occurrence frequency in vegetation plots with a cover above 25%: **33.3 %**
Occurrence frequency in vegetation plots with a cover above 50%: **23.3 %**
Mean percentage cover in vegetation plots: **25.5 %**
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: **23**
Number of narrow habitats in which the taxon has its optimum: **6**
Number of broad habitats in which the taxon occurs: **8**
Number of broad habitats in which the taxon has its optimum: **2**

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**

© 2014–2026 Pladias – Citation: Pladias – Database of the Czech Flora and Vegetation. www.pladias.cz