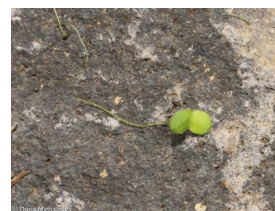
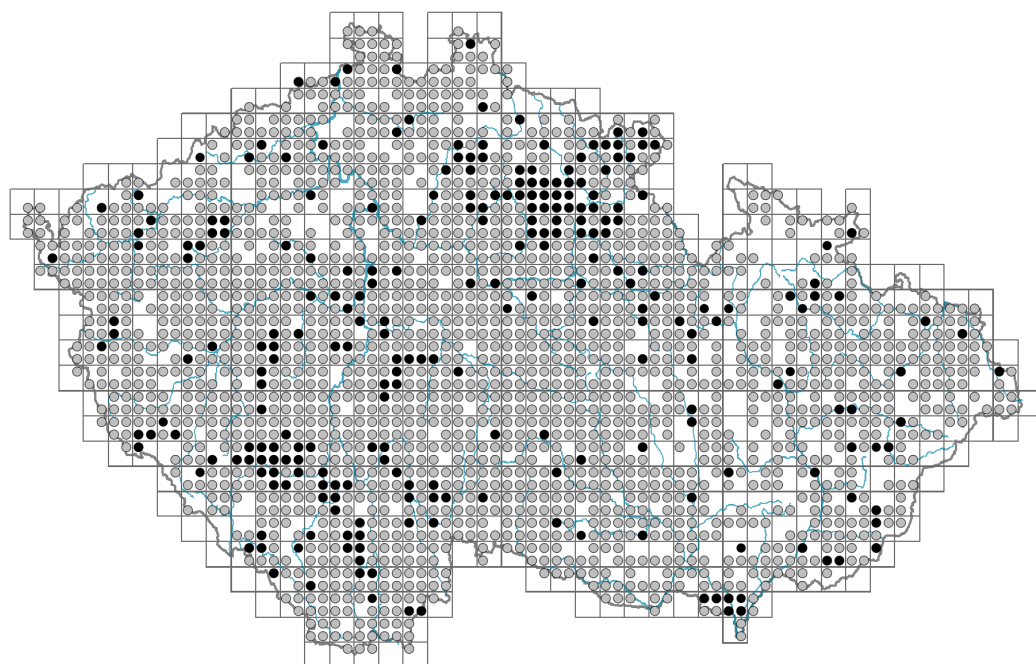


Lemna minor

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]: **0.002-0.005**

Growth form: **clonal herb**

Life form: **hydrophyte**

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

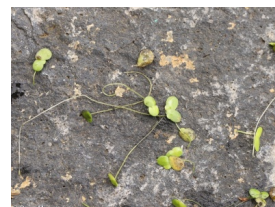
Life strategy (Pierce method, C-score): **0 %**

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

Life strategy (Pierce method, R-score): **100 %**



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Leaf

Leaf presence and metamorphosis: **leaves absent**

Stipules: **absent**

Leaf anatomy: **hydromorphic**

Flower

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

Perianth type: **flower achlamydeous**

Dicliny: **monoecious**

Generative reproduction type: **facultative allogamy**

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

Fruit, seed and dispersal

Fruit type: **dry fruit - follicle**

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

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

Dispersal strategy: **Wolffia (mainly hydrochory)**

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

Belowground organs and clonality

Shoot metamorphosis: **stolon, turion**

Storage organ: **turion**

Type of clonal growth organ: **budding plant**

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

Primary root: **absent**

Persistence of the clonal growth organ [year]:

Number of clonal offspring: **13.5**

Lateral spreading distance by clonal growth [m]:

Clonal index: **7**

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):

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):

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**

Carnivory: **non-carnivorous**

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

Karyology

Chromosome number (2n): **40 (20, 30, 42, 50, 80, 126)**

Ploidy level (x): **4 (2, 3, 5, 8, 12)**

2C genome size [Mbp]: **1174.26**

1Cx monoploid genome size [Mbp]: **293.57**

Genomic GC content: **46.3 %**

Taxon origin

Origin in the Czech Republic: **native**

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: **5x - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas (generalist)**

Moisture indicator value: **11 - aquatic plant rooted under water, but at least temporarily with leaves above the surface, or a plant floating on the water surface**

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

Nutrient indicator value: **6 - transition between values 5 and 7**

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: **-0.52**

Herb layer disturbance frequency indicator value: **-0.49**

Whole-community disturbance severity indicator value: **0.19**

Herb layer disturbance severity indicator value: **0.23**

Whole-community structure based disturbance indicator value: **0.53**

Herb layer structure-based disturbance indicator value: **0.55**

Habitat and sociology

Occurrence in habitats

3 Aquatic vegetation

3A Macrophytic vegetation of eutrophic and mesotrophic still waters: **3 - dominant**

3B Macrophytic vegetation of water streams: **1 - rare occurrence**

3C Macrophytic vegetation of oligotrophic lakes and pools: **1 - rare occurrence**

4 Wetland and riverine herbaceous vegetation

4A Reed-beds of eutrophic still waters: **3 - dominant**

4B Halophilous reed and sedge beds: **1 - rare occurrence**

4C Eutrophic vegetation of muddy substrata: **3 - dominant**

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

4E Reed vegetation of brooks: **2 - optimum**

4F Mesotrophic vegetation of muddy substrata: **2 - optimum**

4G Tall-sedge beds: **2 - optimum**

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

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

11 Heathlands and scrub

11I Willow carrs: **1 - rare occurrence**

11J Willow galleries of loamy and sandy river banks: **1 - rare occurrence**

12 Forests

12A Alder carrs: **2 - optimum**

12B Alluvial forests: **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: [VA Lemnetea](#), [VB Potametea](#)

Diagnostic taxon of alliances: [VAA Lemnion minoris](#), [VAB Utricularion vulgaris](#), [VAC Hydrocharition morsus-ranae](#)

Diagnostic taxon of associations: [VAA01 Lemnetum trisulcae](#), [VAA02 Lemnetum minoris](#), [VAA04 Lemno-Spirodeletum polyrhizae](#), [VAA07 Salvinio natantis-Spirodeletum polyrhizae](#), [VAA09 Lemno minoris-Riccieta fluitantis](#), [VAA10 Riccieta rhenanae](#), [VAC04 Potamo-Ceratophylletum submersi](#), [VBB17 Najadetum minoris](#)

Constant taxon

Constant taxon of classes: [VA Lemnetea](#), [VB Potametea](#)

Constant taxon of alliances: [MCF Carici-Rumicion hydrolopathi](#), [VAA Lemnion minoris](#), [VAB Utricularion vulgaris](#), [VAC Hydrocharition morsus-ranae](#), [VBA Nymphaeion albae](#), [VBB Potamion](#)

Constant taxon of associations: [MCA02 Typhetum angustifoliae](#), [MCA03 Typhetum latifoliae](#), [MCA06 Glycerio-Sparganietum neglecti](#), [MCC03 Sagittario sagittifoliae-Sparganietum emersi](#), [MCC10 Butometum umbellati](#), [MCE03 Beruletum erectae](#), [MCE04 Nasturtietum officinalis](#), [MCF01 Cicuto virosae-Caricetum pseudocyperis](#), [MCF03 Calletum palustris](#), [MCH01 Caricetum acutiformi-paniculatae](#), [VAA01 Lemnetum trisulcae](#), [VAA02 Lemnetum minoris](#), [VAA04 Lemno-Spirodeletum polyrhizae](#), [VAA05 Lemnetum gibbae](#), [VAA06 Lemno gibbae-Wolffietum arrizae](#), [VAA07 Salvinio natantis-Spirodeletum polyrhizae](#), [VAA08 Ceratophyllo-Azolletum filiculoidis](#), [VAA09 Lemno minoris-Riccieta fluitantis](#), [VAA10 Riccieta rhenanae](#), [VAA11 Ricciocarpetum natantis](#), [VAB02 Utricularietum australis](#), [VAC01 Hydrocharitetum morsus-ranae](#), [VAC02 Stratiotetum aloidis](#), [VAC03 Ceratophylletum demersi](#), [VAC04 Potamo-Ceratophylletum submersi](#), [VBA01 Nymphaeo albae-Nupharetum luteae](#), [VBA02 Nymphaeetum albae](#), [VBA03 Nymphaeetum candidae](#), [VBA05 Trapetum natantis](#), [VBA06 Nymphoidetum peltatae](#), [VBB01 Potametum natantis](#), [VBB04 Potametum lucentis](#), [VBB06 Elodeetum canadensis](#), [VBB08 Myriophylletum verticillati](#), [VBB10 Groenlandietum densae](#), [VBB11 Potametum denso-nodosi](#), [VBB13 Potametum zizii](#), [VBB15 Potametum trichoidis](#), [VBB17 Najadetum minoris](#), [VBB19 Potametum crispo-obtusifolii](#), [VBB21 Potametum pusilli](#), [VBB23 Potametum friesii](#), [VBD03 Potamo perfoliati-Ranunculetum circinati](#), [VBD04 Batrachietum rionii](#), [VBD05 Ranunculetum baudotii](#), [VBD06 Hottonietum palustris](#)

Dominant taxon

Dominant taxon of associations: [MBA03 Bidentetum cernuae](#), [MCA02 Typhetum angustifoliae](#), [MCA03 Typhetum latifoliae](#), [MCA05 Glycerietum maximae](#), [MCA06 Glycerio-Sparganietum neglecti](#), [MCA07 Acoretum calami](#), [MCC01 Oenanthe aquatica](#), [MCC03 Sagittario sagittifoliae-Sparganietum emersi](#), [MCC08 Alismatetum lanceolati](#), [MCE03 Beruletum erectae](#), [MCF01 Cicuto virosae-Caricetum pseudocyperis](#), [MCH01 Caricetum acutiformi-paniculatae](#), [VAA01 Lemnetum trisulcae](#), [VAA02 Lemnetum minoris](#), [VAA03 Lemnetum minorituroniferae](#), [VAA04 Lemno-Spirodeletum polyrhizae](#), [VAA05 Lemnetum gibbae](#), [VAA06 Lemno gibbae-Wolffietum arrizae](#), [VAA07 Salvinio natantis-Spirodeletum polyrhizae](#), [VAA09 Lemno minoris-Riccieta fluitantis](#), [VAA10 Riccieta rhenanae](#), [VAA11 Ricciocarpetum natantis](#), [VAB01 Lemno-](#)

[Utricularietum](#), [VAB02 Utricularietum australis](#), [VAC01 Hydrocharitetum morsus-ranae](#), [VAC02 Stratiotetum aloidis](#), [VAC03 Ceratophylletum demersi](#), [VAC04 Potamo-Ceratophylletum submersi](#), [VBB04 Potametum lucentis](#), [VBB08 Myriophylletum verticillati](#), [VBD02 Potamo crisp-Ranunculetum trichophylli](#), [VBD06 Hottonietum palustris](#), [VDC02 Sphagno-Utricularietum ochroleucae](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **3.7**

Ecological specialization index for non-forest vegetation: **3.7**

Ecological specialization index for forest vegetation: **5.4**

Colonization ability

Index of colonization success (ICS): **4**

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

Optimum successional age [years]: **26**

Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional, subtropical, austral or antarctic**

Floristic region: **circumpolar**

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

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **631**

taxon.data.freq_in_quad: **2014**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **12.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **38.1 %**

Occurrence frequency in vegetation plots with a cover above 25%: **26.1 %**

Occurrence frequency in vegetation plots with a cover above 50%: **19.3 %**

Mean percentage cover in vegetation plots: **21.3 %**

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: **16**

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

Number of broad habitats in which the taxon occurs: **4**

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**