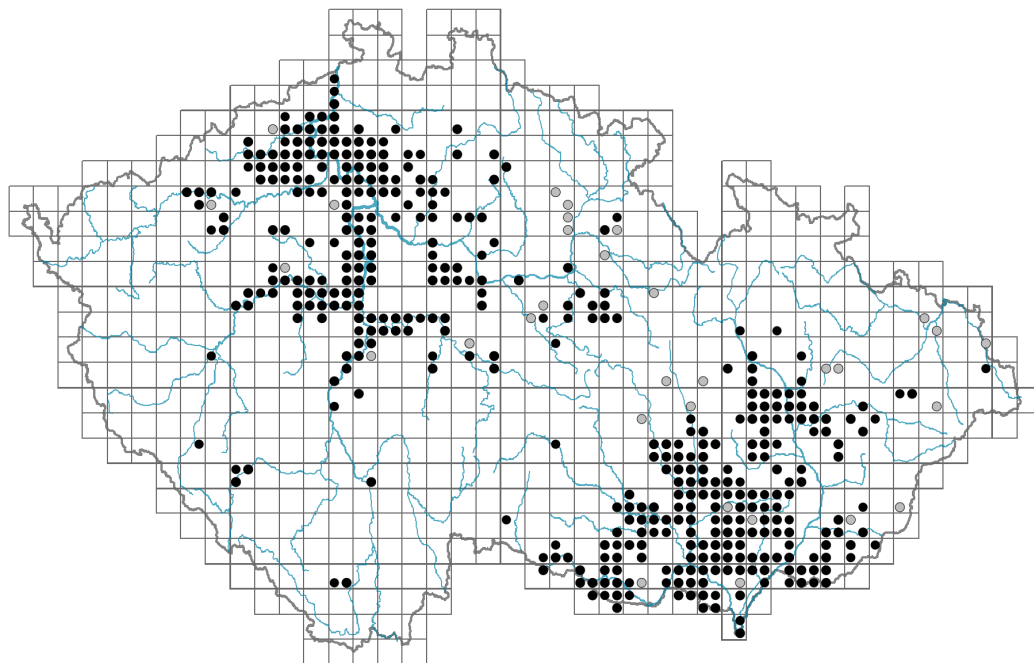


# *Stachys recta*

## 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]: **0.3-0.7**

Growth form: **polycarpic perennial non-clonal herb**

Life form: **hemicryptophyte**

Life strategy: **CSR - competitor/stress-tolerator/ruderal**

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

Life strategy (Pierce method, C-score): **24.2 %**

Life strategy (Pierce method, S-score): **24.3 %**

Life strategy (Pierce method, R-score): **51.5 %**

## Leaf

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

Leaf arrangement (phyllotaxis): **opposite**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **both present and absent**

Leaf life span: **summer green**

Leaf anatomy: **scleromorphic, mesomorphic**



## Flower

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

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**

Flower colour: **yellow-white, yellow**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**

Perianth fusion: **fused**

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

Calyx fusion: **synsepalous**

Inflorescence type: **pseudospica e verticillastris composita**

Dicliny: **synoecious**

Generative reproduction type: **facultative allogamy**

Pollination syndrome: **insect-pollination**

Pollinator spectrum: **bumblebees (honeybee, solitary bees)**



## Fruit, seed and dispersal

Fruit type: **dry fruit - cluster of four one-seeded nutlets**

Fruit colour: **brown, black**

Reproduction type: **only by seed/spores**

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

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

Myrmecochory: **probably myrmecochorous**

## Belowground organs and clonality

Shoot metamorphosis: **pleiocorm**

Storage organ: **pleiocorm**

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

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

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): **12**

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): **17**

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): **12**

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): **17**

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): **34**

Ploidy level (x): **4**

2C genome size [Mbp]: **1620.71**

1Cx monoploid genome size [Mbp]: **405.18**

Genomic GC content: **38.7 %**

## 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: **6 - transition between values 5 and 7**

Moisture indicator value: **3 - missing on damp soil**

Reaction indicator value: **8 - transition between values 7 and 9, occurring mostly in calcium-rich 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: **-0.87**

Herb layer disturbance frequency indicator value: **-0.53**

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

Herb layer disturbance severity indicator value: **0.24**

Whole-community structure based disturbance indicator value: **0.46**

Herb layer structure-based disturbance indicator value: **0.51**



## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1A Calcareous cliffs: **1 - rare occurrence**

1B Siliceous cliffs and block fields: **1 - rare occurrence**

1D Mobile calcareous screes: **1 - rare occurrence**

6 Meadows and mesic pastures

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

8 Dry grasslands

8A Hercynian dry grasslands on rock outcrops: **2 - optimum**

8B Submediterranean dry grasslands on rock outcrops: **2 - optimum**

8C Narrow-leaved sub-continental steppes: **2 - optimum**

8D Broad-leaved dry grasslands: **1 - rare occurrence**

8E Acidophilous dry grasslands: **1 - rare occurrence**

8F Thermophilous forest fringe vegetation: **2 - optimum**

## 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: **2 - optimum**

## 11 Heathlands and scrub

11L Tall mesic and xeric shrub: **1 - rare occurrence**

11N Low xeric scrub: **2 - optimum**

## 12 Forests

12D Ravine forests: **1 - rare occurrence**

12H Peri-Alpidic basiphilous thermophilous oak forests: **2 - optimum**

12J Acidophilous thermophilous oak forests: **1 - rare occurrence**

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

12T Robinia pseudacacia plantations: **1 - rare occurrence**

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

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

## 13 Anthropogenic vegetation

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

13D Perennial thermophilous ruderal vegetation: **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 alliances: [KBA \*Prunion fruticosae\*](#), [THA \*Alyso-Festucion pallentis\*](#), [THB \*Bromo pannonici-Festucion pallentis\*](#), [THC \*Diantho lumnitzeri-Seslerion\*](#), [THH \*Geranion sanguinei\*](#)

Diagnostic taxon of associations: [KBA01 \*Prunetum fruticosae\*](#), [LCA02 \*Lithospermo purpureocaerulei-Quercetum pubescentis\*](#), [THA02 \*Seselio ossei-Festucetum pallentis\*](#), [THA03 \*Sedo albi-Allietum montani\*](#), [THB01 \*Poo badensis-Festucetum pallentis\*](#), [THC01 \*Carici humilis-Seslerietum caeruleae\*](#), [THC02 \*Minuartio setaceae-Seslerietum caeruleae\*](#), [THD02 \*Erysimo crepidifolii-Festucetum valesiacae\*](#), [THH02 \*Geranio sanguinei-Dictamnietum albae\*](#)

## Constant taxon

Constant taxon of alliances: [THB \*Bromo pannonici-Festucion pallentis\*](#)

Constant taxon of associations: [KBA01 \*Prunetum fruticosae\*](#), [LCA02 \*Lithospermo purpureocaerulei-Quercetum pubescentis\*](#), [THA02 \*Seselio ossei-Festucetum pallentis\*](#), [THA03 \*Sedo albi-Allietum montani\*](#), [THB01 \*Poo badensis-Festucetum pallentis\*](#), [THC01 \*Carici humilis-Seslerietum caeruleae\*](#), [THC02 \*Minuartio setaceae-Seslerietum caeruleae\*](#), [THD02 \*Erysimo crepidifolii-Festucetum valesiacae\*](#), [THH02 \*Geranio sanguinei-Dictamnietum albae\*](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **4.6**

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

Ecological specialization index for forest vegetation: **4.8**

## Colonization ability

Index of colonization success (ICS): **6**

Index of colonization potential (ICP): **6**

Optimum successional age [years]: **27**

## Distribution and frequency

Floristic zone: **southern temperate, submeridional**

Floristic region: **Europe**

Continentality degree: **6**

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

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

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **208**

taxon.data.freq\_in\_quad: **447**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **1.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **3.7 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0 %**

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

Mean percentage cover in vegetation plots: **2.6 %**

Maximum percentage cover in vegetation plots: **13 %**

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: **7**

Number of broad habitats in which the taxon occurs: **7**

Number of broad habitats in which the taxon has its optimum: **4**

## 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**