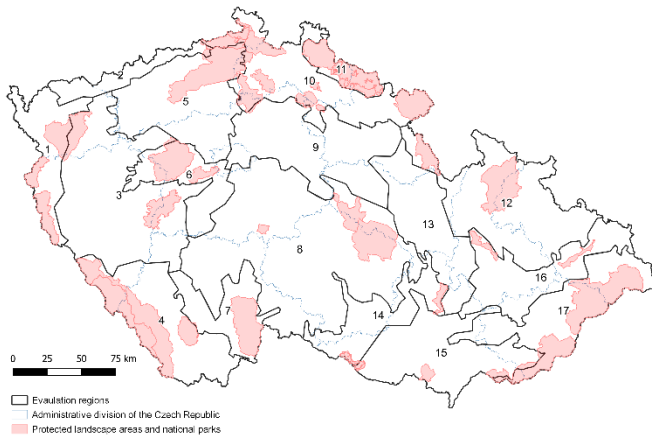
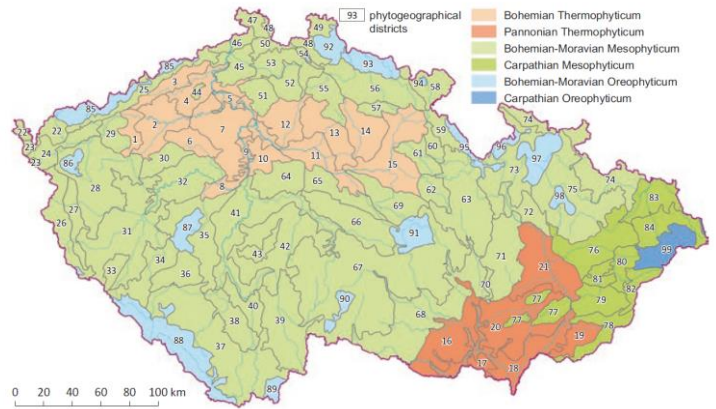


**Supplementary Table S3.** Assessment for individual regions and broad phytogeographical regions. Regions (A) were defined mostly geographically, although they largely reflect biogeographical and phytogeographical patterns; while broad phytogeographical regions (B) were adopted from Kaplan et al. (2017) and they are reflecting coarse scale geology, prevailing climate and biogeography. Expansive character is indicated by 1, non-expansive by 0.

**A, regions (n=17)**



**B, phytogeographic regions (n=6)**



	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Region 11	Region 12	Region 13	Region 14	Region 15	Region 16	Region 17	Bohemian Thermophyticum	Bohemian Moravian Mesophyticum	Bohemian Moravian Oreophyticum	Pannonian Thermophyticum	Carpathian Mesophyticum	Carpathian Oreophyticum
<i>Acer campestre</i>	0	0	1	0	1	1	0	0	1	1	0	0	1	1	1	1	1	1	1	0	1	1	0
<i>Acer platanoides</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0
<i>Acer pseudoplatanus</i>	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	0	1	1	1
<i>Aegopodium podagraria</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Agrostis canina</i>	1	1	0	1	0	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0
<i>Agrostis capillaris</i>	1	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	0	1	1	0	1	1
<i>Alliaria petiolata</i>	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0
<i>Allium ursinum</i>	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	1	0
<i>Alnus glutinosa</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0
<i>Alopecurus pratensis</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Anthriscus sylvestris</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Artemisia vulgaris</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Avenella flexuosa</i>	1	1	1	1	0	0	1	1	0	1	1	1	1	0	0	0	1	0	1	1	0	1	1
<i>Betula pendula</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Bolboschoenus laticarpus</i>	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	1	0	0	1	1	0
<i>Bolboschoenus planiculmis</i>	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	1	0	1	0	0	1	1	0

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Region 11	Region 12	Region 13	Region 14	Region 15	Region 16	Region 17	Bohemian Thermophyticum	Bohemian Moravian Mesophyticum	Bohemian Moravian Oreophyticum	Pannonian Thermophyticum	Carpathian Mesophyticum	Carpathian Oreophyticum
<i>Brachypodium sylvaticum</i>	0	0	0	0	1	0	0	0	1	0	0	1	1	1	1	1	1	1	1	0	1	1	0
<i>Bromus erectus</i>	0	0	0	0	1	1	0	0	1	0	0	0	1	0	1	0	1	1	0	0	1	1	0
<i>Bromus inermis</i>	0	0	0	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0
<i>Calamagrostis canescens</i>	1	0	1	1	0	0	1	1	0	1	0	1	1	0	0	1	0	0	1	0	0	1	0
<i>Calamagrostis epigejos</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Calamagrostis villosa</i>	1	1	1	1	0	0	1	1	0	1	1	1	1	0	0	0	1	0	1	1	0	1	1
<i>Calluna vulgaris</i>	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
<i>Calystegia sepium</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	1	0
<i>Carex acutiformis</i>	0	0	0	0	1	0	0	0	1	1	0	0	1	0	1	1	0	1	1	0	1	1	0
<i>Carex brizoides</i>	1	1	1	1	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	0	1	0
<i>Carex buekii</i>	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	0
<i>Carex hirta</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
<i>Carex rostrata</i>	0	0	0	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
<i>Carpinus betulus</i>	0	0	0	0	0	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Cerastium glomeratum</i>	0	0	1	1	0	1	1	1	1	1	0	1	0	1	0	1	1	1	1	1	0	0	1
<i>Cerastium glutinosum</i>	0	0	1	1	1	1	1	1	1	0	0	1	0	1	1	1	1	1	1	1	0	1	0
<i>Cerastium semidecandrum</i>	0	0	1	1	1	0	1	0	1	1	0	0	0	1	1	1	0	1	1	0	1	1	0
<i>Ceratophyllum submersum</i>	0	0	0	0	1	0	1	0	1	0	0	0	0	0	1	0	0	1	1	0	1	0	0
<i>Chaerophyllum aromaticum</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
<i>Chaerophyllum aureum</i>	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
<i>Chelidonium majus</i>	0	0	0	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	0
<i>Chenopodium album</i> agg.	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Cirsium eriophorum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
<i>Cirsium heterophyllum</i>	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0
<i>Cirsium oleraceum</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	0	1	1
<i>Cirsium vulgare</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1	0
<i>Clematis vitalba</i>	0	0	1	1	1	1	0	0	1	0	0	1	1	1	1	1	1	1	1	0	1	1	0
<i>Cornus sanguinea</i>	0	0	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0
<i>Crataegus</i> sp. div.	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0
<i>Crepis biennis</i>	0	0	0	1	0	0	1	1	0	1	0	0	0	0	0	1	0	0	1	0	0	1	0
<i>Dactylis glomerata</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Deschampsia cespitosa</i>	1	1	0	1	1	0	1	1	1	1	1	1	1	0	0	1	1	0	1	1	0	1	1
<i>Draba muralis</i>	0	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
<i>Elymus caninus</i>	0	0	0	0	1	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	0	1	0
<i>Elymus repens</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Epilobium angustifolium</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
<i>Epilobium lamyi</i>	0	0	1	1	1	1	1	0	1	1	0	0	1	0	1	1	0	1	1	0	1	1	0
<i>Eupatorium cannabinum</i>	0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	1	1	0	1	0	0	1	0
<i>Fagus sylvatica</i>	1	0	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Fallopia dumetorum</i>	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1	0	0	1	0	0	1	0	0
<i>Festuca arundinacea</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Region 11	Region 12	Region 13	Region 14	Region 15	Region 16	Region 17	Bohemian Thermophyticum	Bohemian Moravian Mesophyticum	Bohemian Moravian Oreophyticum	Pannonian Thermophyticum	Carpathian Mesophyticum	Carpathian Oreophyticum
<i>Filipendula ulmaria</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
<i>Frangula alnus</i>	1	0	1	1	1	0	1	1	0	1	0	1	1	1	0	1	1	0	1	0	0	1	0
<i>Fraxinus excelsior</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Galeopsis tetrahit</i> agg.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Galium aparine</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0
<i>Galium saxatile</i>	1	1	1	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	0	0
<i>Geranium pratense</i>	1	0	1	1	1	0	1	1	0	1	0	1	1	1	0	1	1	0	1	0	0	1	0
<i>Geranium robertianum</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
<i>Geum urbanum</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
<i>Glyceria maxima</i>	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	0	1	0
<i>Hedera helix</i>	1	0	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Holcus lanatus</i>	1	0	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	0	0	1	0
<i>Holcus mollis</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0	1
<i>Humulus lupulus</i>	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Hypericum maculatum</i>	1	1	1	1	0	0	1	1	0	1	1	1	1	0	0	1	1	0	1	1	0	1	1
<i>Ligustrum vulgare</i>	0	0	0	0	1	1	0	0	1	0	0	0	1	1	1	1	1	1	1	1	0	1	0
<i>Lolium perenne</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
<i>Lysimachia vulgaris</i>	1	1	1	1	1	0	1	1	1	1	0	1	1	0	0	1	1	1	1	1	0	0	1
<i>Melica uniflora</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	0
<i>Molinia caerulea</i> agg.	0	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	0	1	1	0	1	1
<i>Najas marina</i>	0	0	0	0	1	0	1	0	1	0	0	0	0	0	1	1	0	1	1	0	1	1	0
<i>Najas minor</i>	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0
<i>Nardus stricta</i>	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	1	1	0	1	1
<i>Persicaria hydropiper</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	0	0	1
<i>Persicaria lapathifolia</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	0	1	0
<i>Petasites hybridus</i>	1	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1	1	0	1	1	0	1	1
<i>Phalaris arundinacea</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Phragmites australis</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Picea abies</i>	1	1	1	1	0	1	1	1	0	1	1	1	1	0	0	0	1	0	1	1	0	1	1
<i>Pinus mugo</i>	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0
<i>Pinus sylvestris</i>	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1	1	0	1	1	0
<i>Poa chaixii</i>	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	1	0	0	1
<i>Poa trivialis</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0
<i>Polygonum aviculare</i> agg.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
<i>Populus alba</i>	0	0	0	0	1	0	0	0	1	0	0	0	1	1	1	0	0	1	0	0	1	0	0
<i>Populus tremola</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
<i>Prunus mahaleb</i>	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1	0	0	1	0	0	1	0	0
<i>Prunus padus</i> subsp. <i>padus</i>	0	0	0	0	0	0	1	1	1	1	0	0	1	0	0	1	0	1	1	0	0	1	0
<i>Prunus spinosa</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Pteridium aquilinum</i>	1	1	1	1	1	0	1	1	1	1	0	1	1	0	0	1	1	0	1	1	0	1	1
<i>Puccinellia distans</i>	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Region 11	Region 12	Region 13	Region 14	Region 15	Region 16	Region 17	Bohemian Thermophyticum	Bohemian Moravian Mesophyticum	Bohemian Moravian Oreophyticum	Pannonian Thermophyticum	Carpathian Mesophyticum	Carpathian Oreophyticum
<i>Ranunculus repens</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
<i>Ranunculus rionii</i>	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	1	1	0	0	0	0
<i>Rosa canina</i> agg.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Rubus caesius</i>	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Rubus fruticosus</i> agg.	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Rubus idaeus</i>	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	0	1	1	0	1	1
<i>Rumex obtusifolius</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0
<i>Salix alba</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	1	0
<i>Salix aurita</i>	1	1	1	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
<i>Salix caprea</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
<i>Salix cinerea</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
<i>Salix euxina</i>	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Sambucus nigra</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
<i>Saxifraga tridactylites</i>	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Scirpus sylvaticus</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1
<i>Senecio nemorensis</i> agg.	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	0	1	1
<i>Spergularia marina</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Tilia cordata</i>	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	0	1	0	1	0	1	1	0
<i>Torilis japonica</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Trifolium pratense</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0
<i>Tussilago farfara</i>	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	0	1
<i>Typha latifolia</i>	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Ulmus minor</i>	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1	0	0	1	0	0	1	0	0
<i>Urtica dioica</i>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Vaccinium myrtillus</i>	1	1	1	1	0	0	1	1	0	1	1	1	1	0	0	0	1	0	1	1	0	1	1
<i>Valerianella locusta</i>	0	0	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	1	1	0	1	0
<i>Veratrum album</i> subsp. <i>lobelianum</i>	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	1
<i>Viscum album</i>	1	0	1	1	0	0	0	0	1	1	0	1	1	1	1	1	1	0	1	0	1	1	0

## References

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