

StartClim2012.D-Appendix

Adapting Austrian forestry to climate change: Assessing the drought tolerance of Austria's autochthonous tree species

Appendix

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Department für Integrative Biologie
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Appendix

A1: Locations of the dry relevés for each species (i.e. the driest 10 % of each species total relevés) with respect to the forest ecoregions according to Kilian et al (1994).

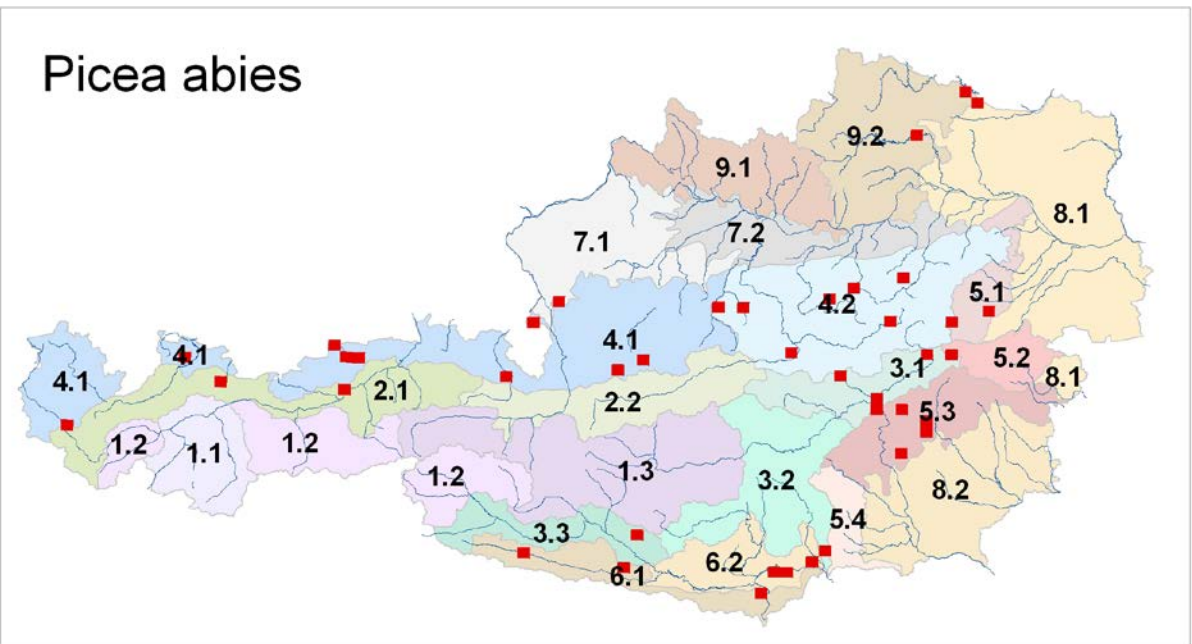
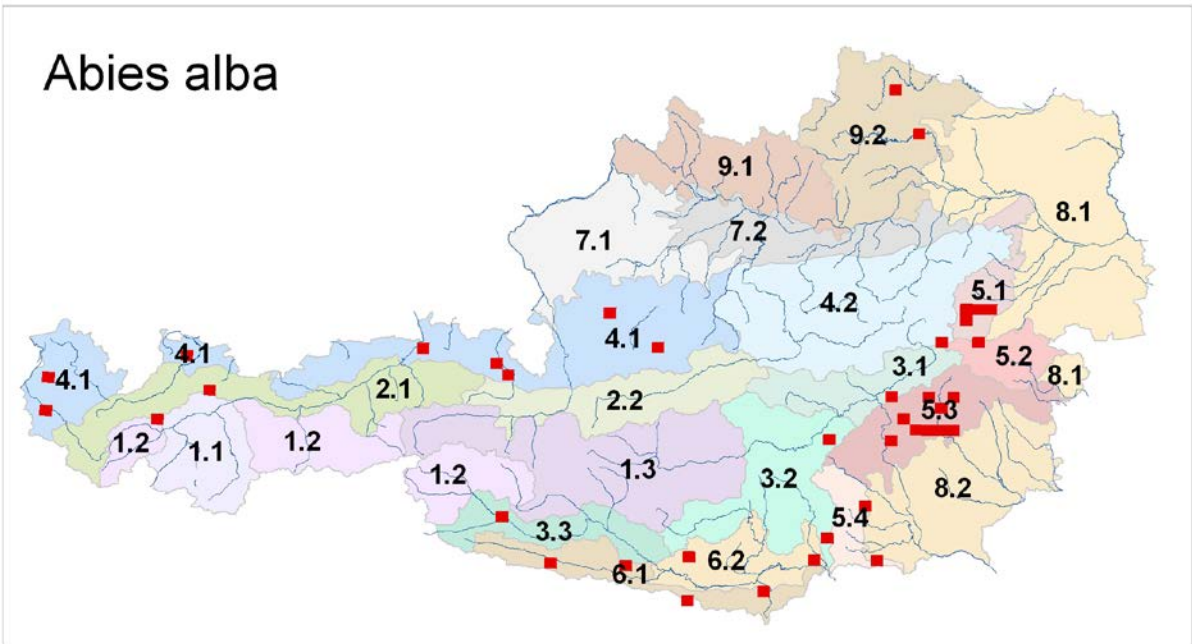
Legend:

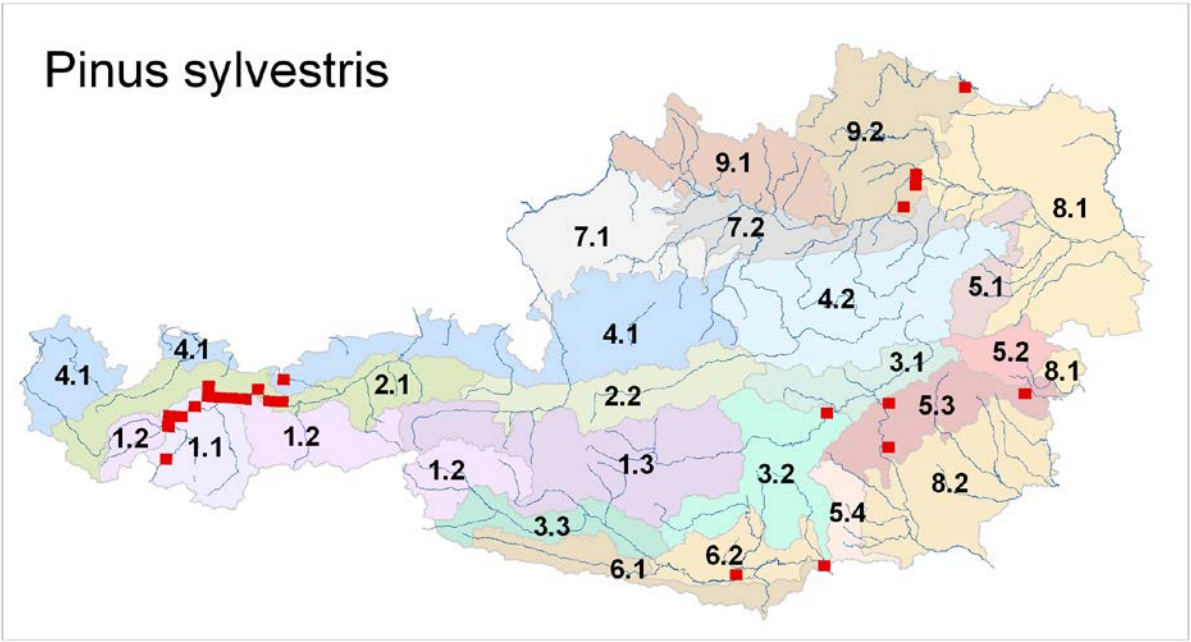
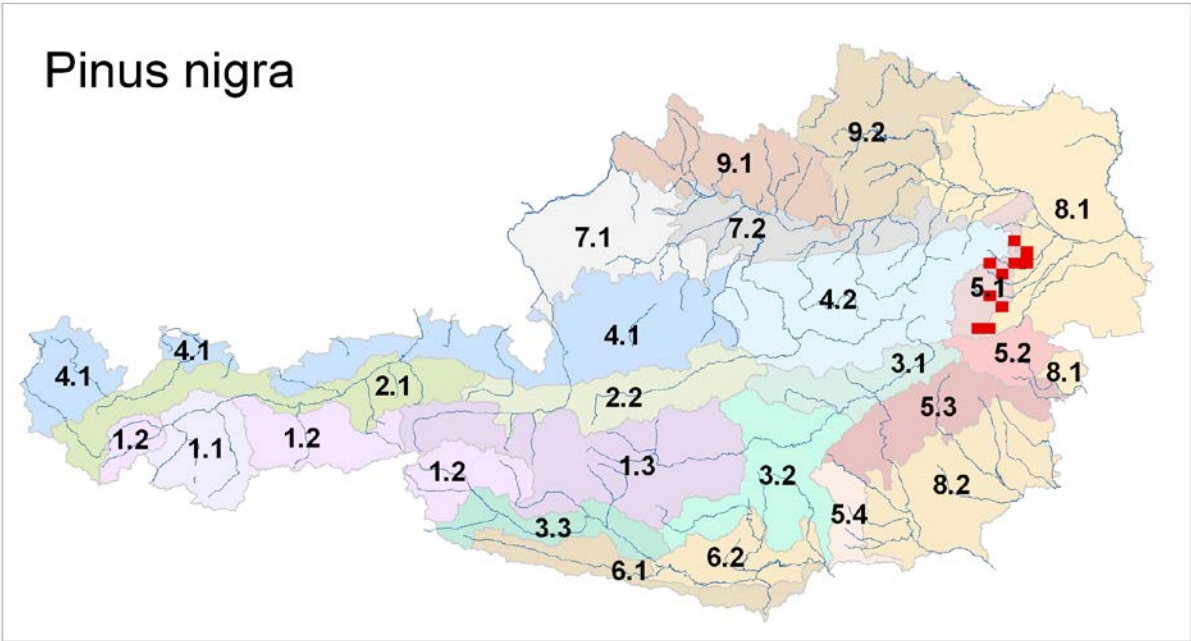
Red grid cells: Quadrants corresponding to the locations of the dry relevés

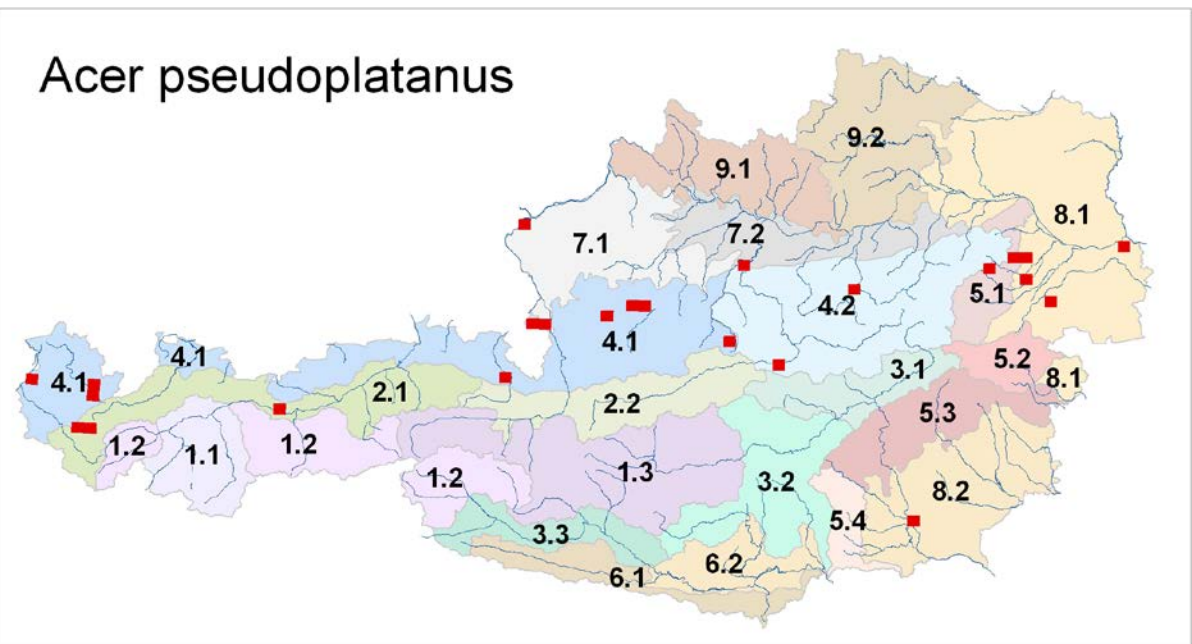
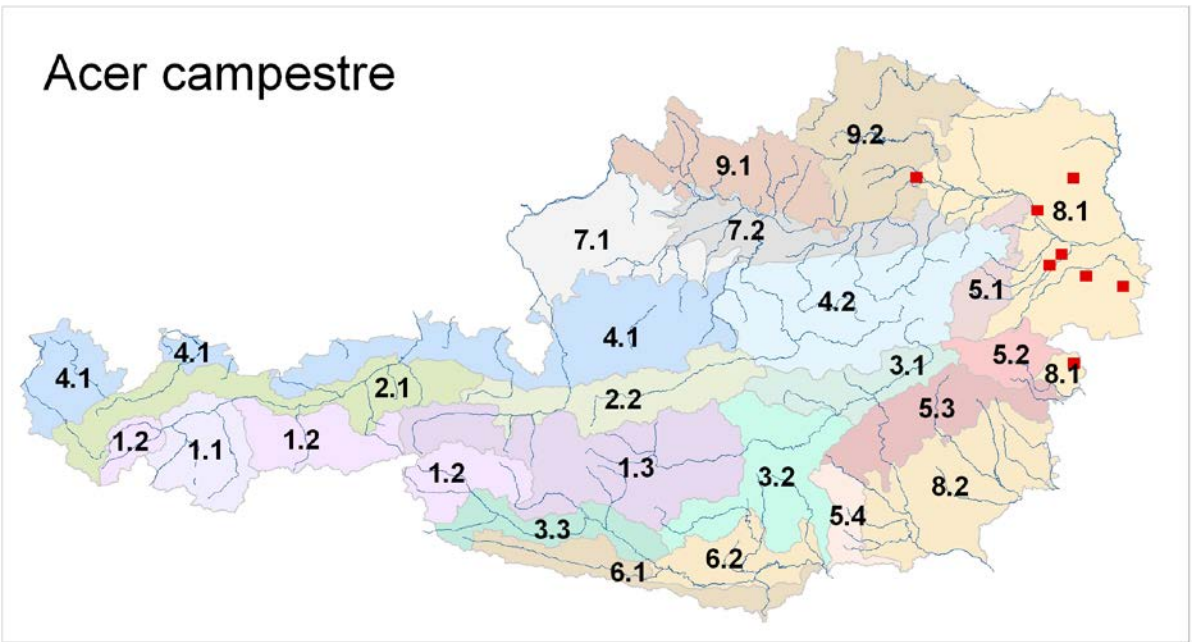
Nomenclature of the forest ecoregions:

Nr.	Forest ecoregion
1.1	Interior Alps – Continental core
1.2	Subcontinental Interior Alps - West
1.3	Subcontinental Interior Alps - East
2.1	Northern Intermediate Alps - West
2.2	Northern Intermediate Alps - East
3.1	Eastern Intermediate Alps – North
3.2	Eastern Intermediate Alps – South
3.3	Southern Intermediate Alps
4.1	Northern Alpine Border - West
4.2	Northern Alpine Border - East
5.1	Lower Austrian Eastern Alpine Border
5.2	<i>Bucklige Welt</i>
5.3	East and Central Styrian Mountains
5.4	West Styrian Mountains
6.1	Southern Border Mountains
6.2	Klagenfurt Basin
7.1	Northern Alpine Foothills - West
7.2	Northern Alpine Foothills - East
8.1	Pannonian Lowlands and Hills
8.2	Subillyric Hills and Steppe
9.1	<i>Mühlviertel</i>
9.2	<i>Waldviertel</i>

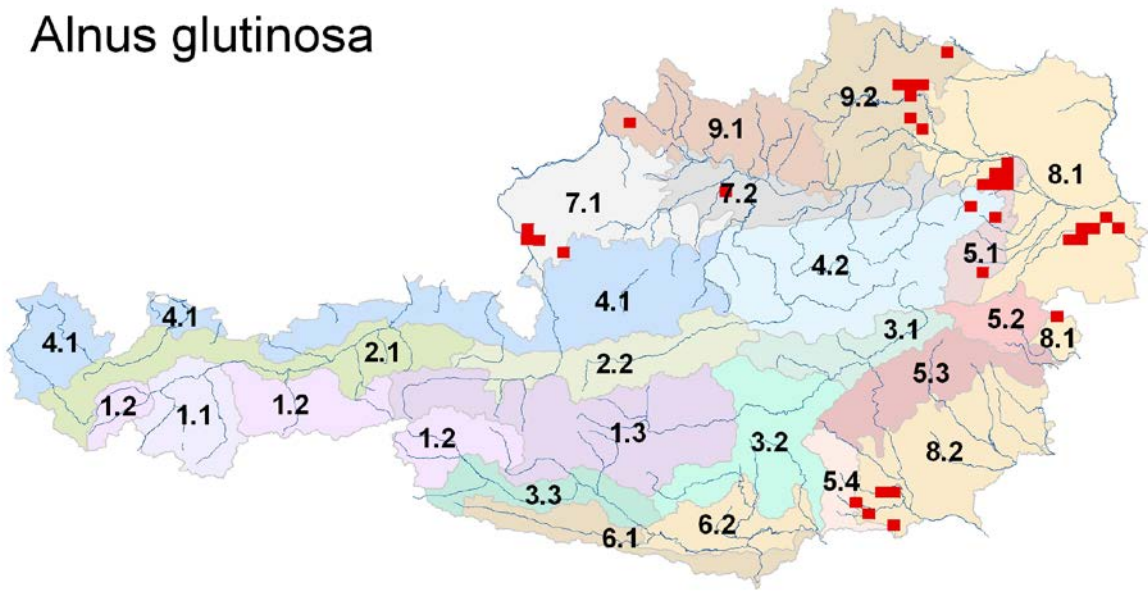
Map: ÖK 200, BEV.



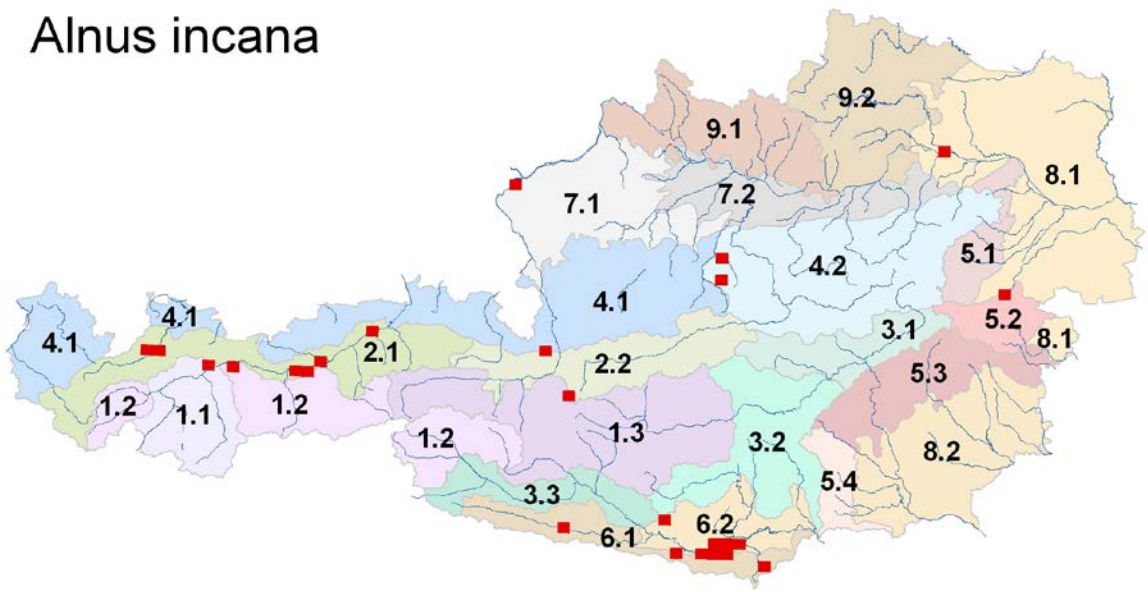


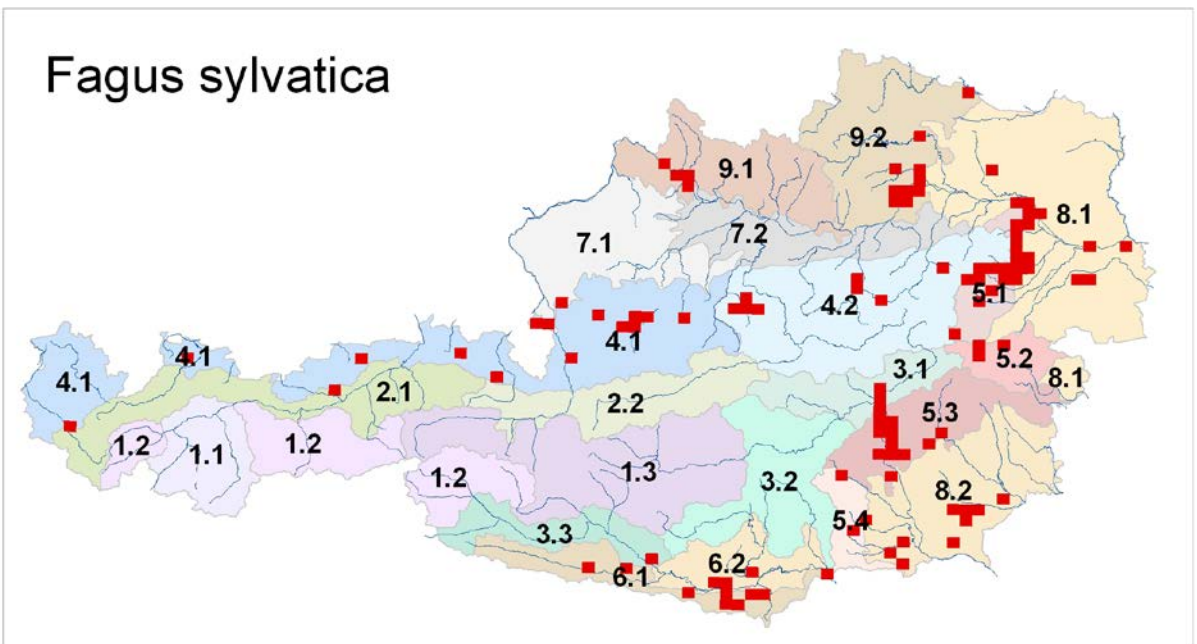
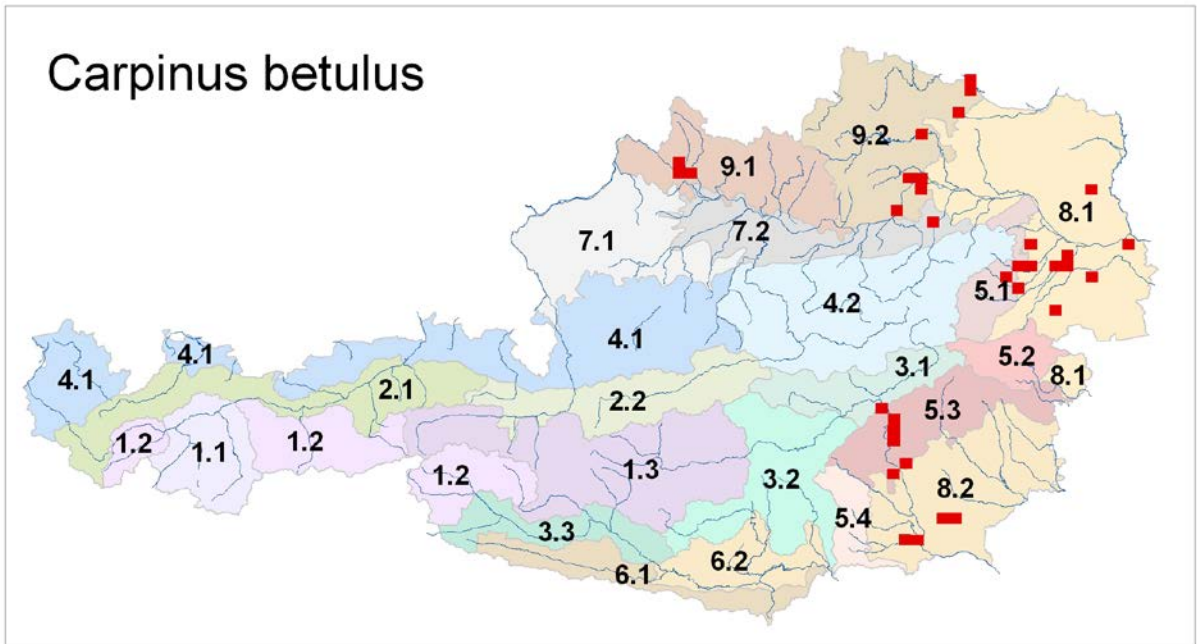


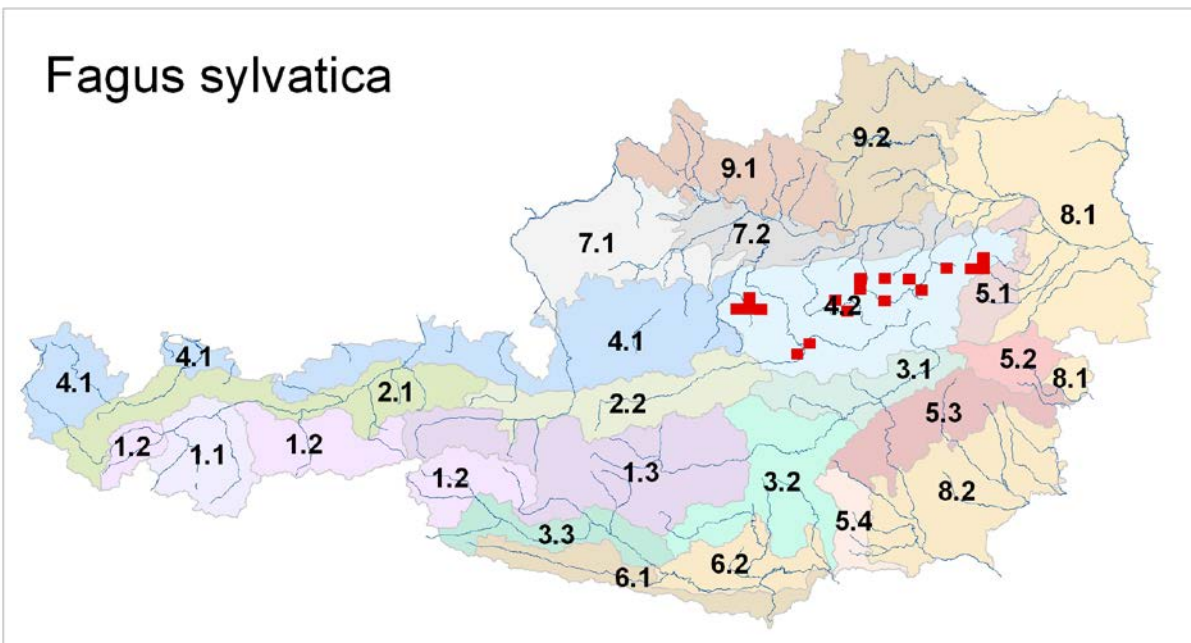
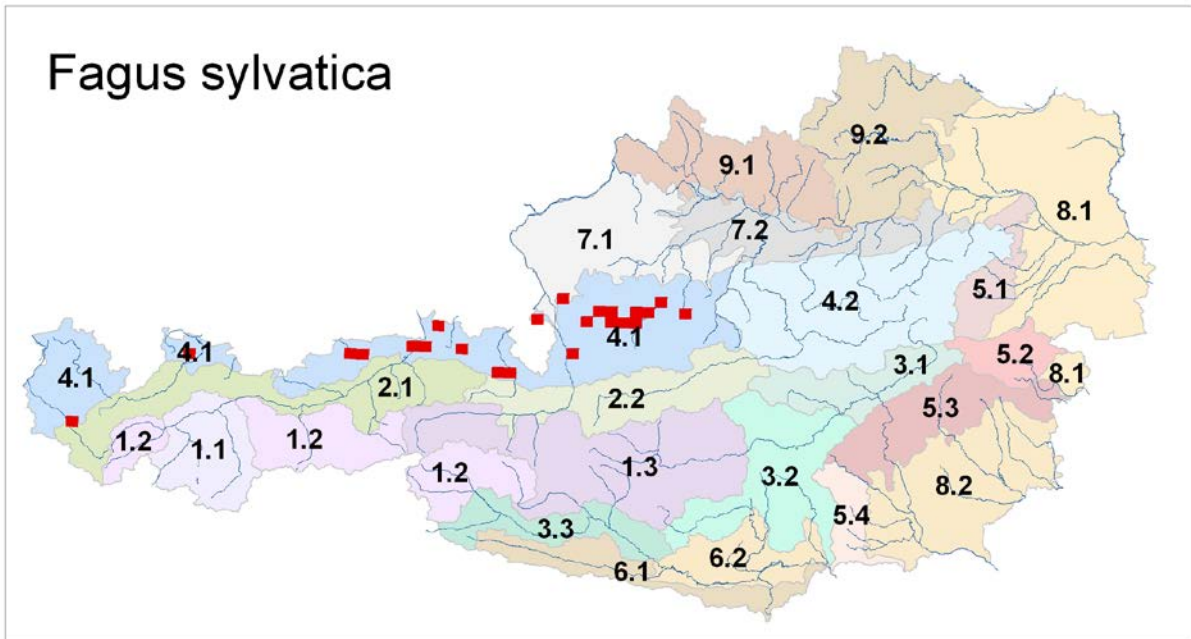
Alnus glutinosa



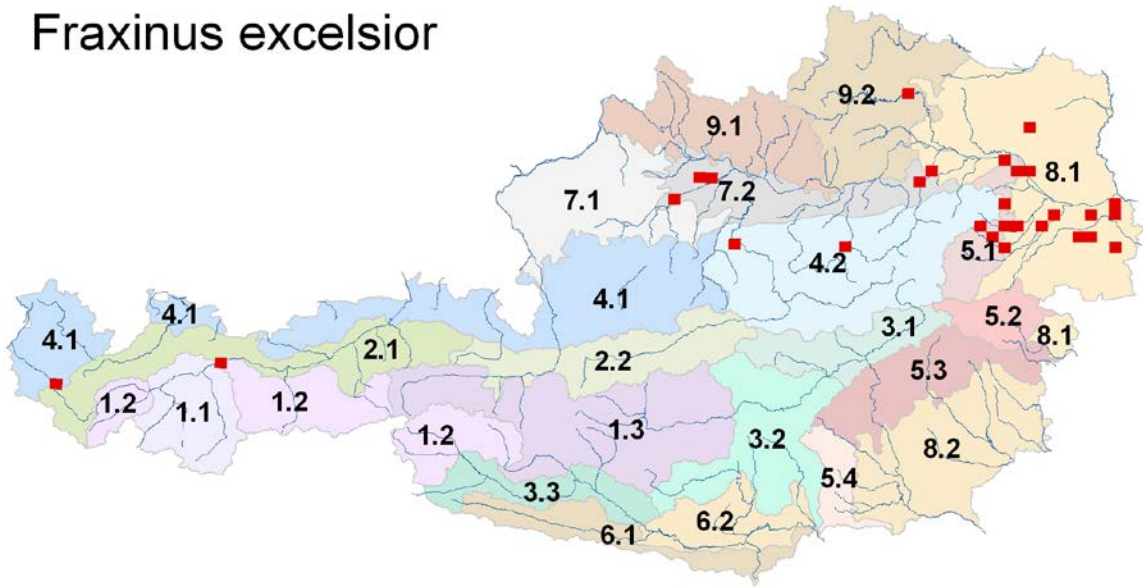
Alnus incana



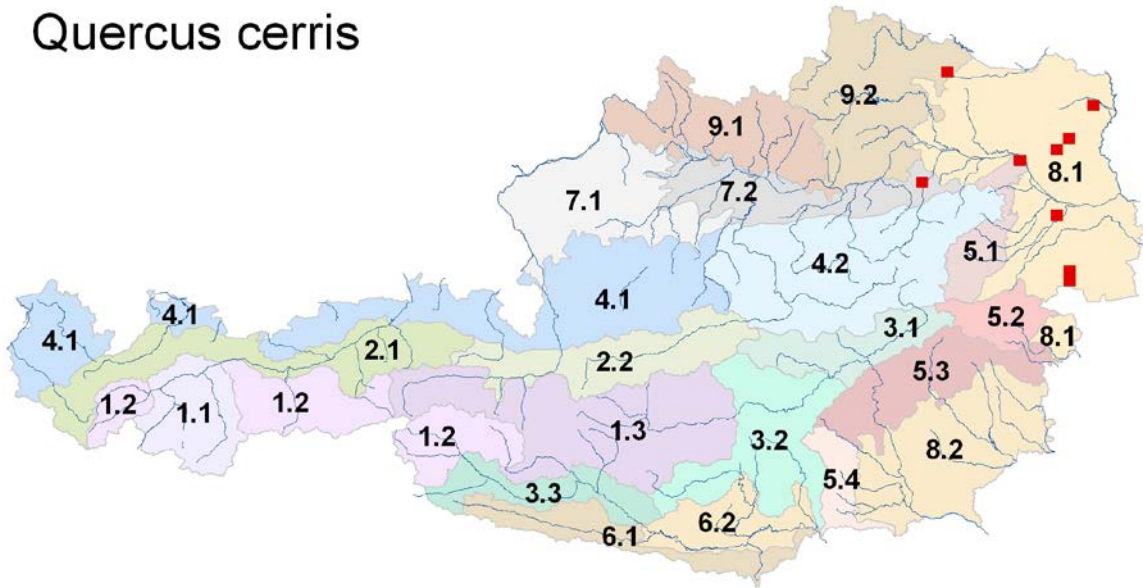




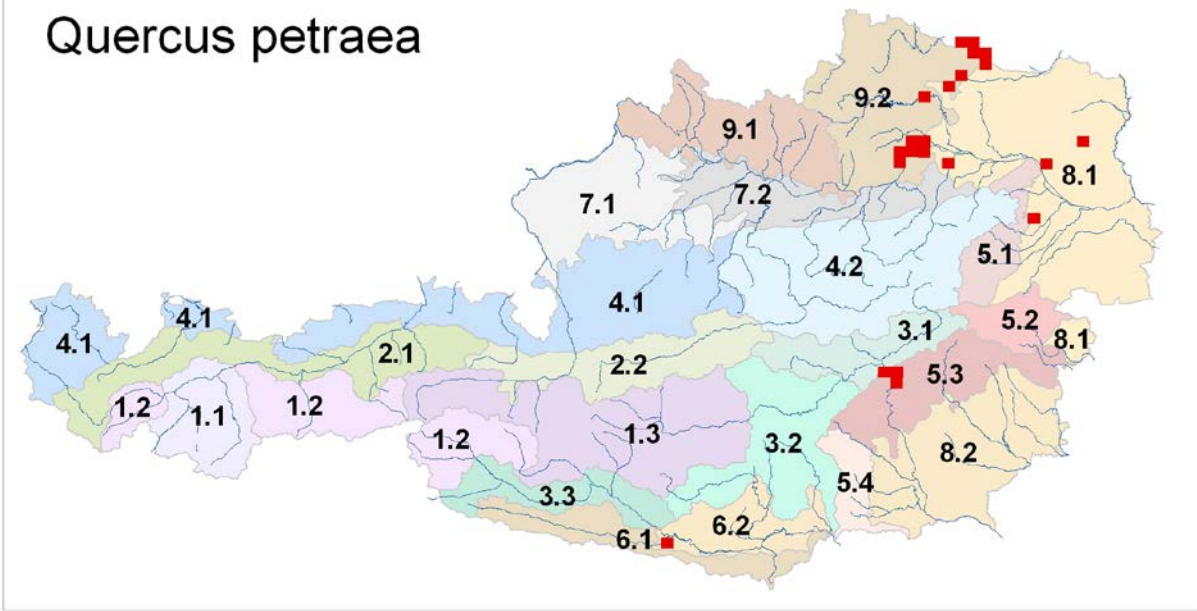
Fraxinus excelsior



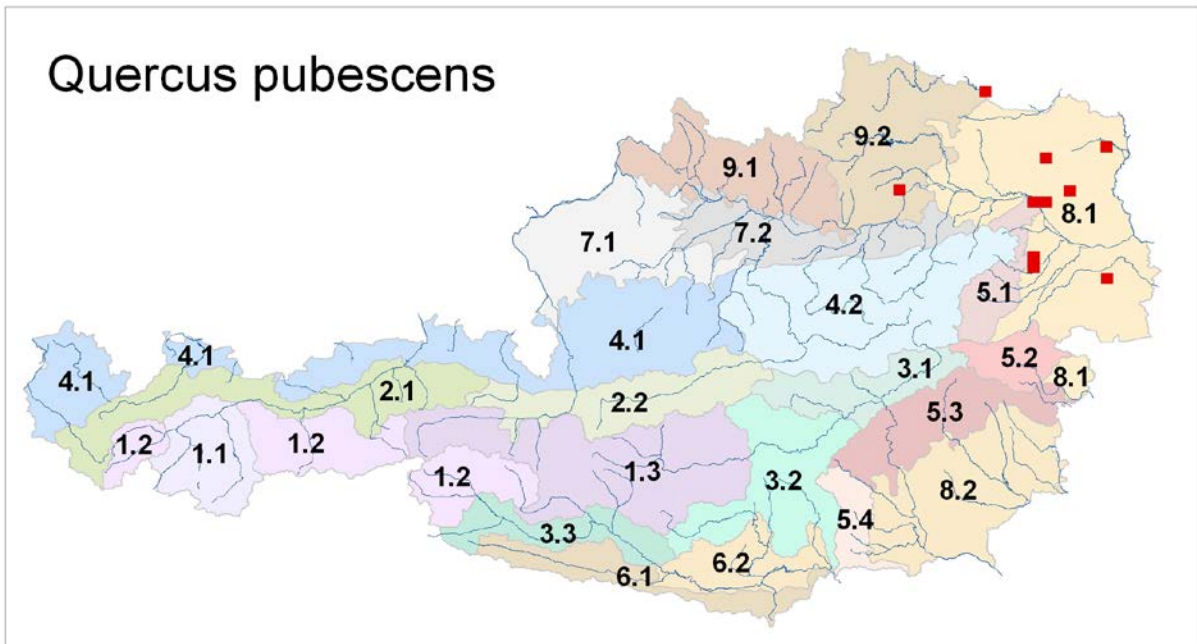
Quercus cerris



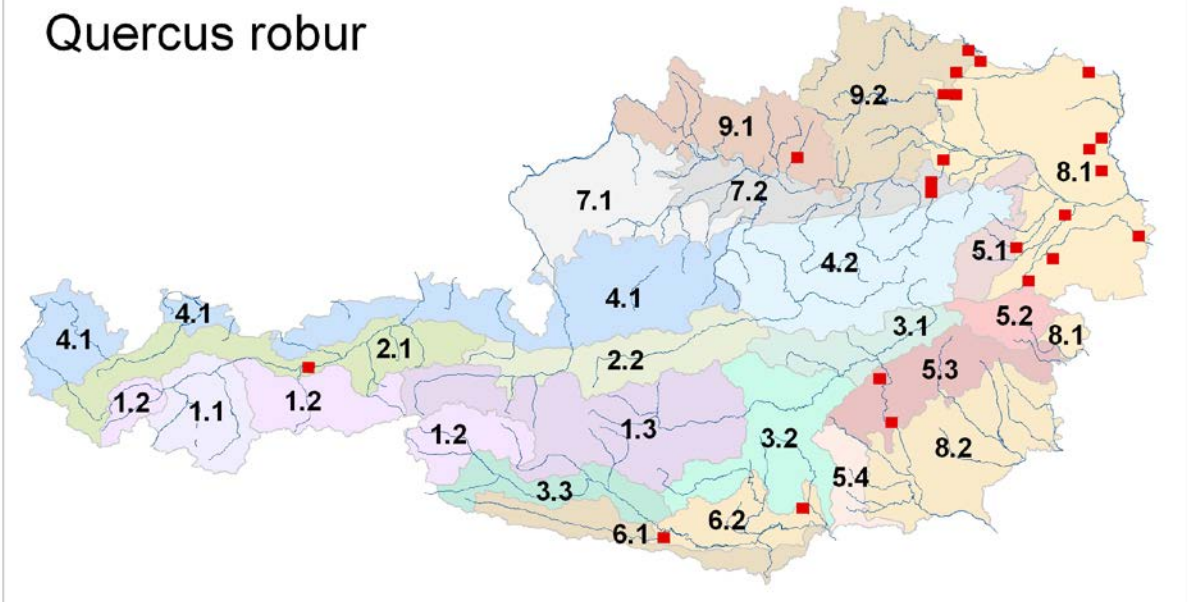
Quercus petraea



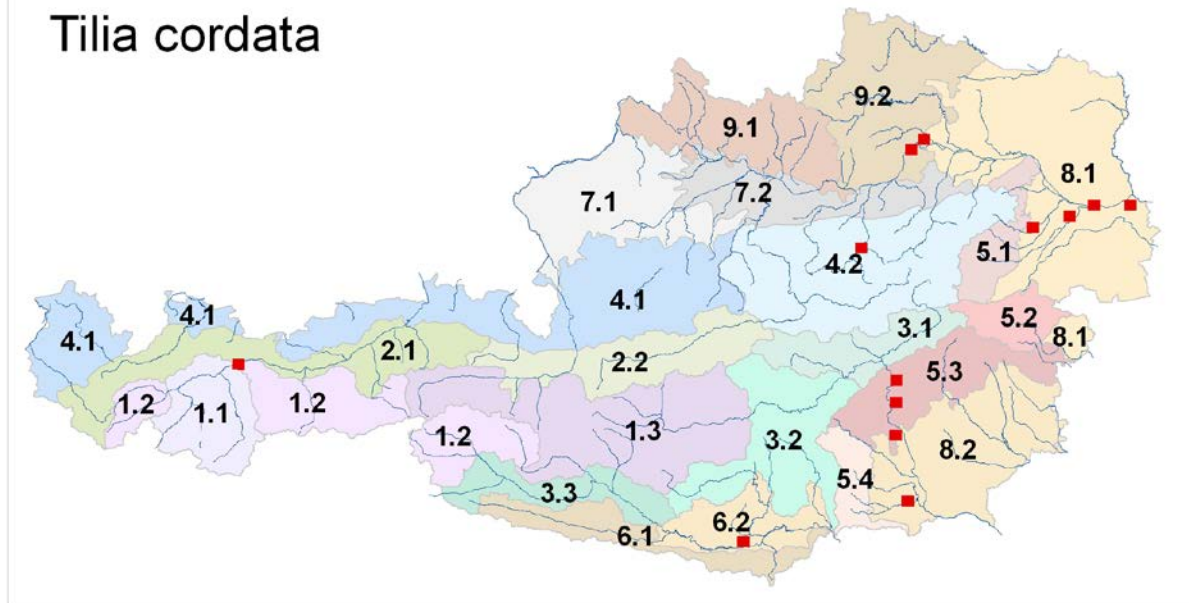
Quercus pubescens

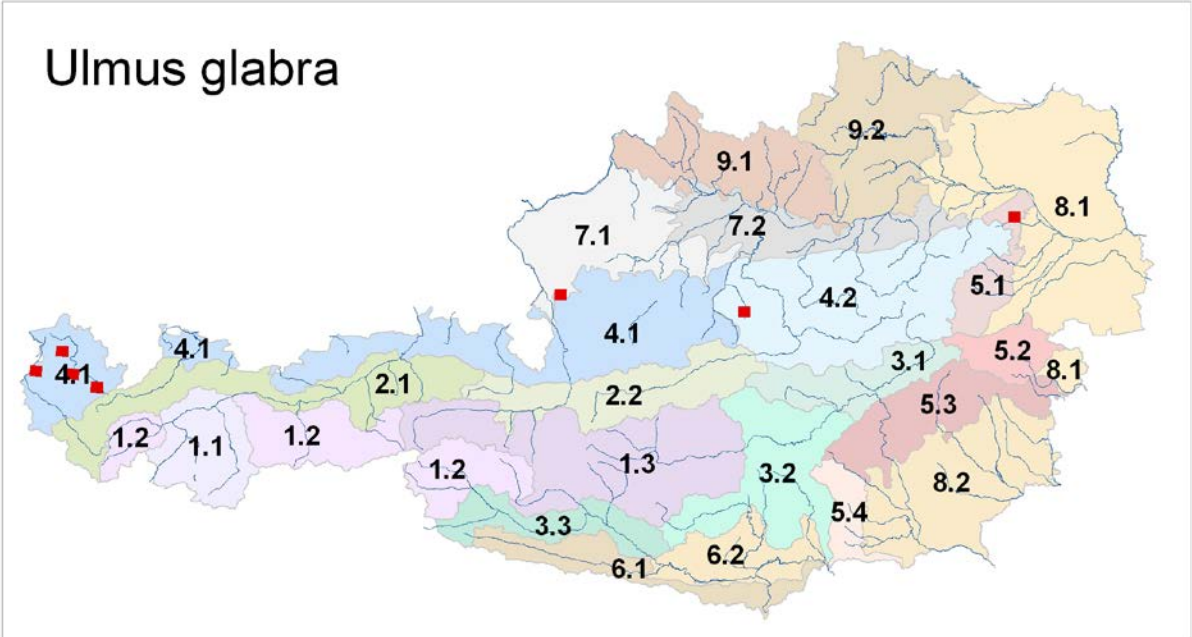
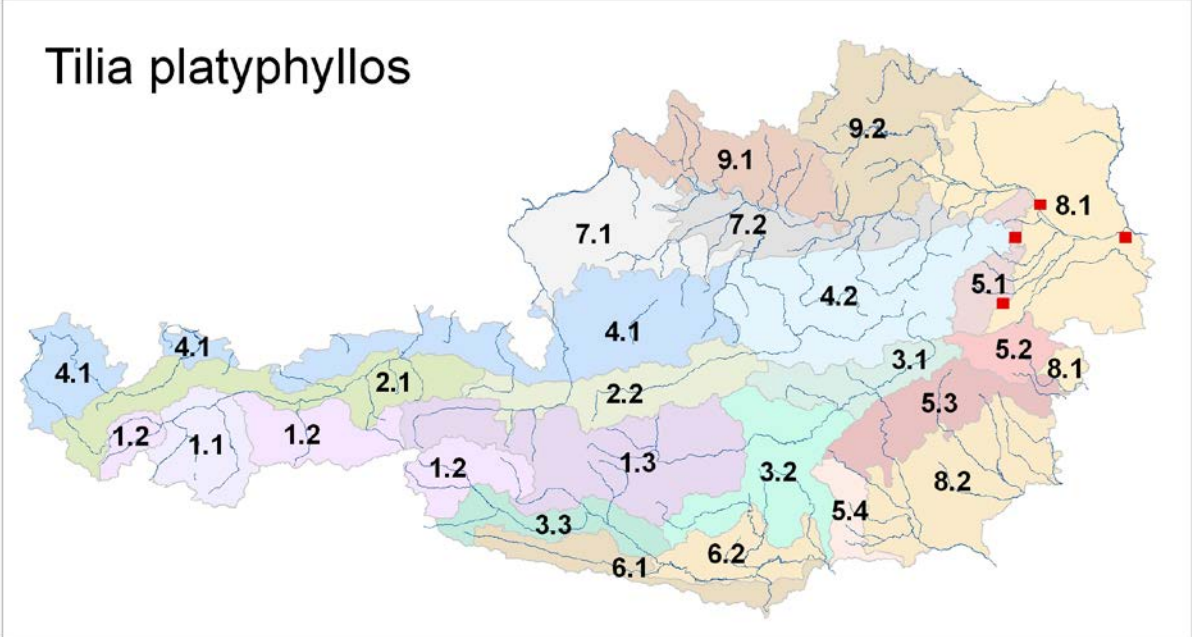


Quercus robur



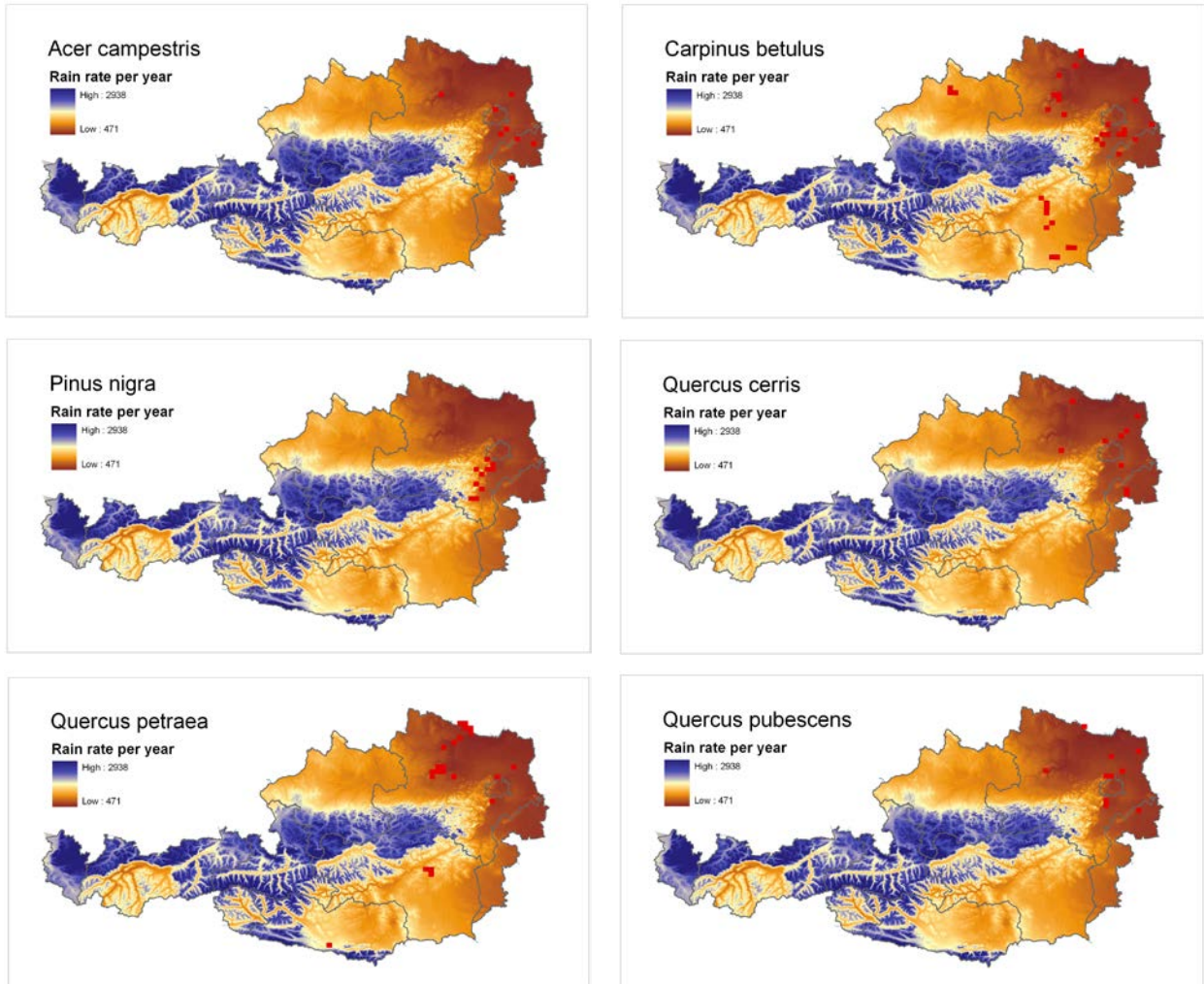
Tilia cordata



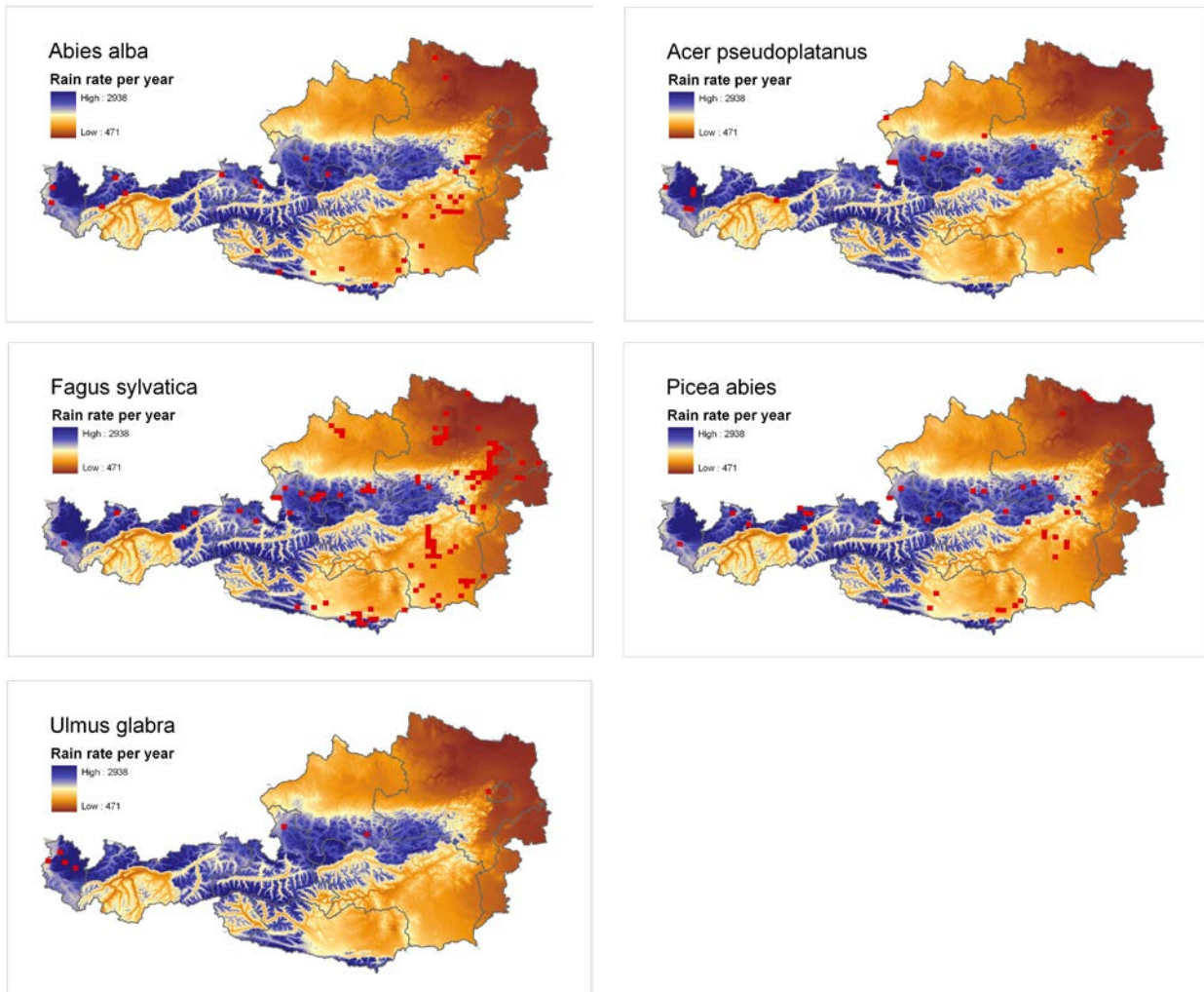


A2: Locations of the dry relevés for each species (i.e. the driest 10 % of each species total relevés) with respect to spatial distribution of mean annual precipitation (30 year mean for the period 1971-2000) (Data source: ZAMG: ÖKLIM, Auer et al. (2010), Map: ÖK 200, BEV).

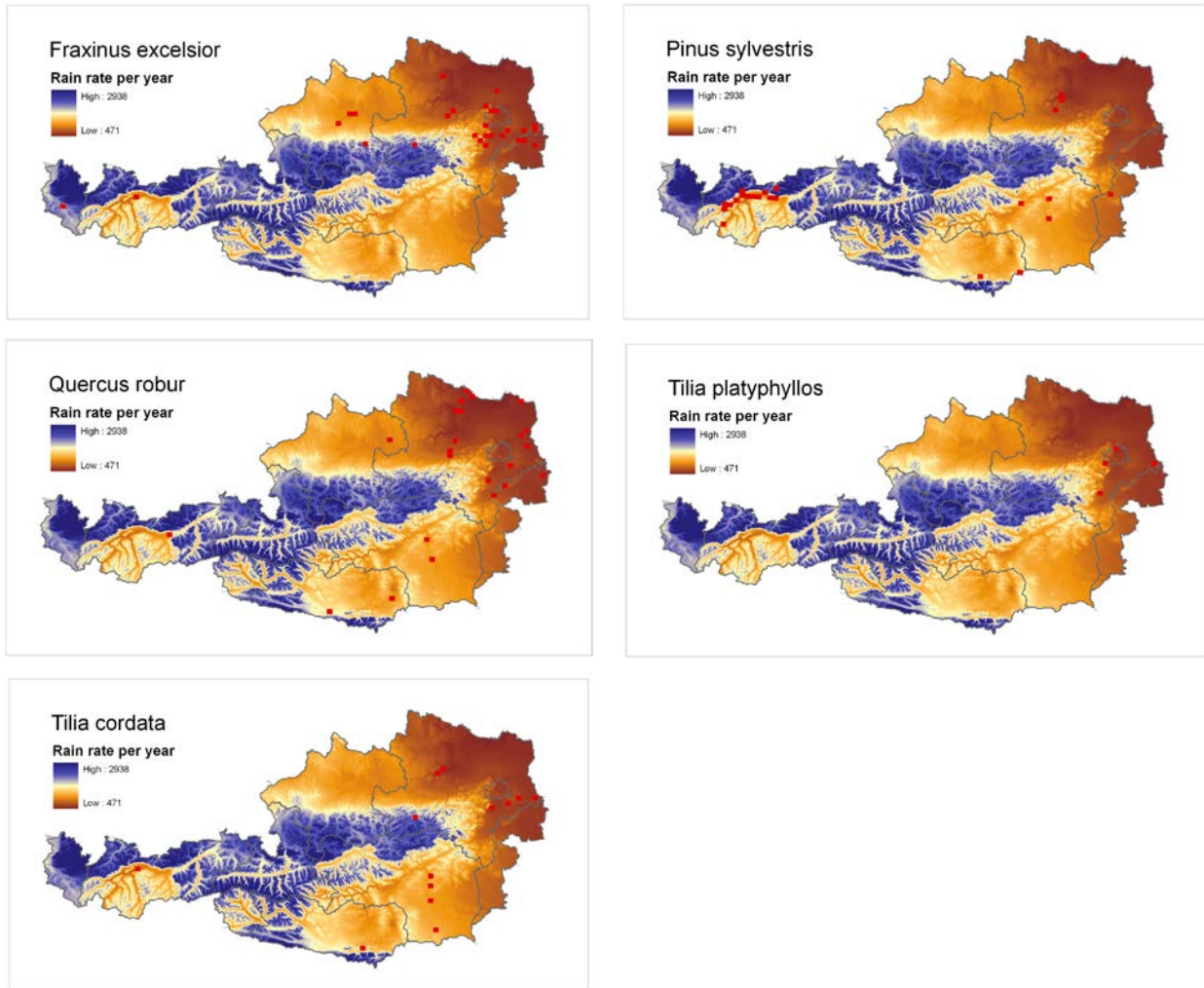
a) Species with relevés located predominantly in Eastern Austria:



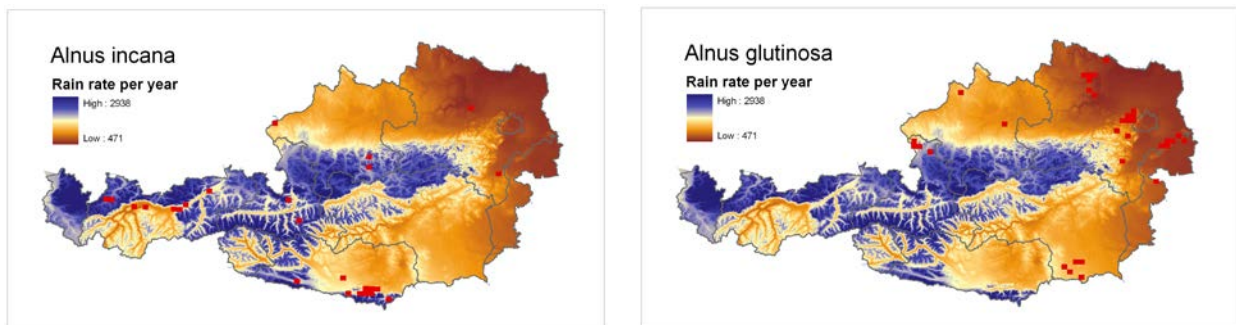
b) Species with relevés distributed over the whole of Austria.



c) Species with relevés distributed over the whole of Austria, but with dry relevés restricted to lower rainfall areas.



d) Species with relevés distributed over the whole of Austria, but restricted to azonal wet sites



A3: Ecological indicator values for taxa that changed names or taxonomical status since the indicator values were published by Ellenberg & al. (1991), Englisch & al. (1991), Karrer and Herzberger (1992), and Karrer and Kilian (1992). In the lower part of the table few taxa are listed with their ecological indicator values being corrected/adapted to Austria.

Layer codes (LC): A = tree layer, D = shrub layer, F = herb layer, G = moss layer

Codes for indicator values: L: light, T: temperature, K: continentality, F: moisture, R: (soil) reaction, N: nitrogen; additional codes for the moisture value: ~: at sites affected by varying water supply; =: at sites affected by floods

Taxon name	LC	L	T	K	F	R	N
<i>Abietinella abietina</i>	G	8	x	6	2	7	
<i>Achillea atrata</i> agg.	F	9	2	4	5	8	3
<i>Achillea clavennae</i>	F	8	2	5	5	8	3
<i>Achillea stricta</i>	F	7	5	5	2	7	2
<i>Aconitum degenii</i> ssp. <i>paniculatum</i>	F	6	2	4	6	7	7
<i>Aconitum lycoctonum</i> s.lat.	F	3	4	4	7	7	8
<i>Aconitum lycoctonum</i> s.str.	F	3	4	4	7	7	8
<i>Aconitum lycoctonum</i> ssp. <i>vulparia</i>	F	3	4	4	7	7	8
<i>Aconitum tauricum</i>	F	8	2	5	5	7	7
<i>Aconitum variegatum</i> ssp. <i>variegatum</i>	F	5	4	4	7=	8	7
<i>Agrostis agrostiflora</i>	F	8	2	6	5	4	4
<i>Agrostis vinealis</i>	F	9	7	3	2	2	1
<i>Alchemilla plicata</i>	F	8	3	3	6	7	
<i>Allium carinatum</i> ssp. <i>carinatum</i>	F	8	5	4	3~	8	2
<i>Allium flavum</i>	F	7	7	6	2	8	2
<i>Allium senescens</i>	F	9	x	5	2	6	2
<i>Allium senescens</i> ssp. <i>montanum</i>	F	9	x	5	2	6	2
<i>Alnus alnobetula</i>	D	7	3	x	6	5	
<i>Alnus alnobetula</i>	F	7	3	4	6	5	7
<i>Alyssum montanum</i>	F	9	6	4	2	7	1
<i>Amblystegium humile</i>	G	5	5	5	6	4	
<i>Amblystegium serpens</i>	G	5	x	5	4	6	
<i>Anastrophyllum minutum</i>	G	7	2	6	5	3	
<i>Anemonastrum narcissiflorum</i>	F	8	3	2	5~	7	4
<i>Aneura pinguis</i>	G	8	x	5	8	7	
<i>Anthoxanthum odoratum</i> agg.	F	x	x	x	x	x	x
<i>Anthyllis vulneraria</i> ssp. <i>alpicola</i>	F	8	2	4	4	8	2
<i>Aquilegia einseleana</i>	F	7	3	4	5	9	4
<i>Aquilegia nigricans</i>	F	6	4	4	4	8	4
<i>Aquilegia vulgaris</i> agg.	F	6	6	4	4	7	4
<i>Arabis alpina</i> agg.	F	7	3	3	5	9	3
<i>Arabis bellidifolia</i> s.str.	F	9	2	4	x	9	2
<i>Arabis soyeri</i>	F	9	2	4	9=	9	2
<i>Arabis stellulata</i>	F	9	2	4	4	9	2
<i>Arenaria serpyllifolia</i> agg.	F	8	x	x	4	7	x
<i>Arenaria serpyllifolia</i> s.str.	F	8	x	x	4	7	x
<i>Artemisia campestris</i> agg.	F	9	x	6	x	x	2
<i>Asarum europaeum</i> ssp. <i>caucasicum</i>	F	3	6	6	5	7	6
<i>Asarum europaeum</i> ssp. <i>europaeum</i>	F	3	6	5	5	7	6
<i>Asplenium scolopendrium</i>	F	4	5	2	5	8	4
<i>Astrantia bavarica</i> s.str.	F	7	2	4	5	8	4
<i>Astrantia carniolica</i>	F	7	2	4	5	8	4
<i>Aticion rupestre</i>	F	9	3	2	3	3	1
<i>Atriplex prostrata</i>	F	8	6	x	6	x	9
<i>Avenula adsurgens</i>	F	7	6	7	3	3	2
<i>Avenula adsurgens</i> ssp. <i>adsurgens</i>	F	7	6	7	3	3	2
<i>Avenula pratensis</i>	F	7	6	4	3~	x	2
<i>Avenula pratensis</i> agg.	F	7	6	4	3~	x	2
<i>Avenula pubescens</i>	F	5	x	3	3	x	4

<i>Avenula versicolor</i>	F	9	2	3	5	3	2
<i>Bazzania flaccida</i>	G	4	4	7	5	2	
<i>Bidens frondosus</i>	F	7	6	x	8=	7	8
<i>Bidens radiatus</i>	F	9	6	5	9=	6	8
<i>Bidens tripartitus</i>	F	8	6	x	9=	x	8
<i>Brachypodium pinnatum</i> agg.	F	6	5	5	4	7	4
<i>Brachypodium sylvaticum</i> ssp. <i>sylvaticum</i>	F	3	5	3	5	6	6
<i>Brachytheciastrum velutinum</i>	G	5	3	5	4	6	
<i>Brachythecium oedipodium</i>	G	3	4	7	6	3	
<i>Brachythecium rutabulum</i>	G	5	x	5	4		
<i>Bromus racemosus</i> agg.	F	6	6	3	x~	7	x
<i>Bromus ramosus</i> agg.	F	6	6	2	5	7	6
<i>Bupleurum falcatum</i>	F	6	6	6	3	9	3
<i>Calamintha nepeta</i>	F	8	7	3	3	9	3
<i>Callianthemum anemonoides</i>	F	6	4	5	3	9	2
<i>Calypogeia azurea</i>	G	4	3	6	6	3	
<i>Campanula beckiana</i>	F	6	5	5	4	8	2
<i>Campanula gentilis</i>	F	7	6	5	3	9	2
<i>Campanula pulla</i>	F	7	3	4	4	7	3
<i>Campanula rotundifolia</i> agg.	F	x	x	x	x	x	2
<i>Campanula sibirica</i>	F	8	8	7	2	8	2
<i>Campanula spicata</i>	F	8	4	6	3	7	3
<i>Campanula zozysii</i>	F	9	2	4	4	x	2
<i>Cardamine amara</i> ssp. <i>amara</i>	F	7	6	6	9=	6	4
<i>Cardamine pratensis</i> s.str.	F	4	x	x	6	x	x
<i>Carduus crassifolius</i> sensu LGM	F	7	x	6	4	9	4
<i>Carduus defloratus</i> s.lat.	F	7	x	4	4~	8	4
<i>Carduus defloratus</i> sensu LGM	F	7	x	4	4~	8	4
<i>Carduus defloratus</i> ssp. <i>crassifolius</i>	F	7	3	6	4	9	4
<i>Carduus defloratus</i> ssp. <i>glaucus</i>	F	6	5	6	4	9	4
<i>Carduus defloratus</i> ssp. <i>viridis</i>	F	7	x	4	4~	8	4
<i>Carduus nutans</i>	F	8	6	6	3	7	6
<i>Carex acuta</i>	F	7	5	7	9=	6	4
<i>Carex curvata</i>	F	6	8	8	5~	6	4
<i>Carex halleriana</i>	F	6	8	2	3	8	3
<i>Carex hartmanii</i>	F	7	6	6	7~	x	2
<i>Carex liparocarpos</i>	F	9	8	8	3~	7	2
<i>Carex ornithopoda</i> agg.	F	6	x	4	3	9	3
<i>Carex paupercula</i>	F	8	3	x	9	3	2
<i>Carex praecox</i>	F	9	6	6	3~	x	4
<i>Carex viridula</i>	F	8	x	3	9	x	2
<i>Carlina acaulis</i>	F	9	4	5	4	3	2
<i>Carlina acaulis</i> ssp. <i>caulescens</i>	F	9	x	4	4	x	2
<i>Carlina vulgaris</i> agg.	F	7	5	4	4	7	3
<i>Centaurea jacea</i> ssp. <i>jacea</i>	F	7	6	4	5	6	3
<i>Centaurea nigrescens</i> ssp. <i>nigrescens</i>	F	8	6	5	4~	6	4
<i>Centaurea nigrescens</i> ssp. <i>vochinensis</i>	F	8	6	6	4~	6	4
<i>Centaurea phrygia</i> agg.	F	8	x	5	5	x	4
<i>Centaurea stoebe</i> s.lat.	F	8	7	6	2	8	3
<i>Centaurium littorale</i>	F	9	6	5	7	8	3
<i>Cerastium alpinum</i> s.str.	F	9	1	2	4	6	2
<i>Cerinthe minor</i> ssp. <i>minor</i>	F	8	6	5	4	8	4
<i>Chiloscyphus polyanthos</i> s.lat.	G		4	6	9	6	
<i>Chlorocrepis stacticifolia</i>	F	9	4	4	4~	8	2
<i>Circaea lutetiana</i> ssp. <i>lutetiana</i>	F	4	5	3	6	7	7
<i>Cladonia furcata</i>	G	6	5	6	x	4	3
<i>Clinopodium vulgare</i> ssp. <i>vulgare</i>	F	7	x	3	4	7	3
<i>Consolida regalis</i>	F	6	7	6	4	8	5
<i>Corallorrhiza trifida</i>	F	x	4	7	5	3	x
<i>Crepis jacquinii</i> s.lat.	F	9	2	4	5	9	3
<i>Cruciata pedemontana</i>	F	8	8	5	3	7	3
<i>Cynodontium tenellum</i>	G	3	2	6	5	2	

<i>Cystopteris alpina</i>	F	6	3	3	7	8	3
<i>Cytisus nigricans</i>	D	6	6	x	4	6	2
<i>Cytisus nigricans</i>	F	6	6	5	4	6	2
<i>Cytisus nigricans</i> ssp. <i>nigricans</i>	D	6	6	x	4	6	2
<i>Cytisus nigricans</i> ssp. <i>nigricans</i>	F	6	6	5	4	6	2
<i>Dactylis glomerata</i> agg.	F	7	x	x	5	x	6
<i>Dactylorhiza maculata</i> s.lat. (inkl. <i>fuchsii</i>)	F	7	x	2	x	x	2
<i>Dactylorhiza maculata</i> sensu LGM	F	7	x	2	8~	x	2
<i>Danthonia decumbens</i> ssp. <i>decumbens</i>	F	8	x	2	x	3	2
<i>Dentaria trifolia</i>	F	3	5	3	5	7	6
<i>Dianthus alpinus</i>	F	9	2	3	4	9	2
<i>Dianthus armeria</i>	F	6	6	3	5	x	3
<i>Dianthus carthusianorum</i> agg.	F	8	x	x	3	x	2
<i>Dianthus pontederæ</i>	F	8	8	8	3	x	2
<i>Dianthus superbus</i>	F	7	x	7	x	7	2
<i>Dianthus sylvaticus</i>	F	7	6	4	4~	3	2
<i>Dicranella crispa</i>	G	8	3	6	7	5	
<i>Diphasiastrum alpinum</i>	F	8	3	3	5	2	2
<i>Diphasiastrum complanatum</i>	F	6	4	7	4	1	2
<i>Diphasiastrum issleri</i>	F	9	5	5	5	1	1
<i>Dorycnium pentaphyllum</i> agg.	F	7	6	4	x	9	2
<i>Dryopteris affinis</i>	F	3	x	3	6	5	6
<i>Dryopteris affinis</i> x <i>filix-mas</i>	F	3	x	3	6	5	6
<i>Dryopteris carthusiana</i> agg.	F	5	x	3	x	4	3
<i>Dryopteris carthusiana</i> s.str.	F	5	x	3	x	4	3
<i>Dryopteris filix-mas</i> agg.	F	3	x	3	5	5	6
<i>Drytodon patens</i>	G	9	2	6	3	1	
<i>Eleocharis palustris</i> agg.	F	8	x	x	10	x	x
<i>Elymus athericus</i>	F	9	7	2	5~	7	5
<i>Elymus caninus</i>	F	6	6	3	6	7	8
<i>Elymus hispidus</i>	F	7	6	6	3~	7	3
<i>Elymus hispidus</i> ssp. <i>barbulatus</i>	F	7	6	6	3~	7	3
<i>Elymus hispidus</i> ssp. <i>hispidus</i>	F	7	6	6	3~	7	3
<i>Elymus repens</i>	F	7	6	7	x~	x	7
<i>Empetrum nigrum</i> agg.	F	7	x	3	6	x	2
<i>Epilobium ciliatum</i>	F	7	6	x	5	7	8
<i>Epilobium tetragonum</i>	F	7	6	4	8	6	5
<i>Epipactis helleborine</i> agg.	F	3	5	3	5	7	5
<i>Erechtites hieraciifolius</i>	F	8	6	5	5	x	7
<i>Erica carnea</i>	F	7	x	3	3	x	2
<i>Erigeron annuus</i> ssp. <i>strigosus</i>	F	7	6	x	6	x	8
<i>Erigeron glabratus</i>	F	9	2	4	5	7	3
<i>Erysimum strictum</i>	F	6	6	7	5	9	8
<i>Erysimum sylvestre</i>	F	9	6	5	2	7	2
<i>Euonymus europæus</i>	D	6	5	x	5	8	5
<i>Euonymus europæus</i>	F	6	5	3	5	8	5
<i>Euonymus latifolius</i>	D	4	5	x	5	8	4
<i>Euonymus latifolius</i>	F	4	6	4	5	8	5
<i>Euonymus verrucosa</i>	D	6	6	8	4	7	3
<i>Euonymus verrucosus</i>	D	6	6	8	4	7	3
<i>Euonymus verrucosus</i>	F	6	6	8	4	7	3
<i>Euphorbia angulata</i>	F	5	7	5	4	8	5
<i>Euphorbia kernerii</i>	F	7	6	5	2	9	2
<i>Euphorbia platyphyllos</i>	F	6	7	4	5	7	5
<i>Euphorbia saxatilis</i>	F	7	5	4	2	9	2
<i>Euphrasia minima</i> agg.	F	7	2	x	5	2	3
<i>Euphrasia officinalis</i>	F	6	x	3	x	x	4
<i>Euphrasia officinalis</i> agg.	F	6	x	3	x	x	4
<i>Euphrasia officinalis</i> ssp. <i>picta</i>	F	6	2	3	6	6	4
<i>Euphrasia officinalis</i> ssp. <i>rostkoviana</i>	F	6	x	3	x	x	4
<i>Euphrasia stricta</i>	F	8	x	4	4	x	2
<i>Eurhynchium crassinervium</i>	G	4	5	4	5	8	

<i>Eurhynchium hians</i>	G	7	4	5	5	7	
<i>Eurhynchium hians</i> var. <i>swartzii</i>	G	7	4	5	5	7	
<i>Eurhynchium praelongum</i>	G	6	4	5	6	5	
<i>Eurhynchium pumilum</i>	G	3	7	4	5	8	
<i>Fagus sylvatica</i> mod. "prostrata"	D	3	5	x	5		
<i>Fagus sylvatica</i> mod. "prostrata"	F	(3)	5	2	5	x	x
<i>Fallopia japonica</i>	F	8	6	2	8=	5	7
<i>Fallopia sachalinensis</i>	F	7	7	2	8=	7	8
<i>Festuca arundinacea</i>	F	8	5	x	7~	7	5
<i>Festuca brevipila</i>	F	8	6	6	3	x	2
<i>Festuca filiformis</i>	F	7	6	2	4	3	2
<i>Festuca firmula</i>	F	6	6	5	2	2	1
<i>Festuca guestfalica</i> auct.	F	6	6	5	2	2	1
<i>Festuca pallens</i> "Pannon. Sippe" (4x)	F	9	8	7	1	8	1
<i>Festuca pallens</i> s.lat.	F	9	7	4	1	8	1
<i>Festuca pratensis</i> agg.	F	8	x	3	6	x	6
<i>Festuca pratensis</i> s.str.	F	8	5	3	6	x	6
<i>Festuca pseudodura</i>	F	9	2	6	3	5	2
<i>Festuca rubra</i>	F	x	x	5	x	x	x
<i>Festuca rupicola</i>	F	8	7	7	3	8	2
<i>Festuca stricta</i>	F	8	7	6	2	8	2
<i>Festuca vaginata</i>	F	9	8	8	1	x	1
<i>Festuca varia</i> agg.	F	9	3	5	3	x	2
<i>Festuca violacea</i> agg.	F	9	3	5	4~	x	x
<i>Ficaria calthifolia</i>	F	5	7	4	5	7	7
<i>Ficaria verna</i>	F	4	5	3	6	7	7
<i>Ficaria verna</i> agg.	F	4	5	3	6	7	7
<i>Ficaria verna</i> ssp. <i>bulbifer</i>	F	4	5	3	6	7	7
<i>Ficaria verna</i> ssp. <i>bulbilifer</i>	F	4	5	3	6	7	7
<i>Ficaria verna</i> ssp. <i>nudicaulis</i>	F	5	7	4	5	7	7
<i>Fissidens dubius</i>	G		4	5	4	8	
<i>Fraxinus angustifolia</i>	F	4	7	4	7	6	6
<i>Fraxinus angustifolia</i> ssp. <i>danubialis</i>	F	4	7	4	7	6	6
<i>Gagea pratensis</i> ssp. <i>pratensis</i>	F	8	7	5	4	8	7
<i>Galeobdolon flavidum</i>	F	3	4	5	6	5	6
<i>Galeobdolon luteum</i> agg.	F	2	x	5	6	6	6
<i>Galeobdolon montanum</i>	F	2	5	5	6	6	6
<i>Galeopsis ladanum</i> agg.	F	8	6	5	3	8	3
<i>Galium album</i> s.lat.	F	7	x	5	x	7	6
<i>Galium album</i> s.str.	F	7	x	5	x	7	6
<i>Galium anisophyllum</i>	F	7	2	4	4	x	3
<i>Galium boreale</i> agg.	F	6	6	8	6~	8	2
<i>Galium laevigatum</i>	F	5	5	5	4	7	4
<i>Galium meliodorum</i>	F	8	2	4	4	9	2
<i>Galium pycnotrichum</i>	F	7	6	6	4	7	4
<i>Galium saxatile</i>	F	7	5	2	5	2	3
<i>Galium verum</i>	F	7	6	x	4~	7	3
<i>Galium wirtgenii</i>	F	7	6	6	5~	7	4
<i>Genista sagittalis</i>	F	8	5	4	4	4	2
<i>Gentianella austriaca</i>	F	8	4	5	x	8	2
<i>Gentianella campestris</i> agg.	F	8	x	2	5	4	2
<i>Gentianella germanica</i> agg.	F	7	x	4	4~	6	2
<i>Gentianella germanica</i> s.str.	F	7	x	4	4~	8	2
<i>Gentianopsis ciliata</i>	F	7	x	4	3	8	2
<i>Glechoma hederacea</i> agg.	F	5	5	3	5	x	7
<i>Glyceria fluitans</i> agg.	F	7	x	x	9=	x	7
<i>Glyceria notata</i>	F	8	5	3	10~	8	8
<i>Hackelia deflexa</i>	F	8	x	7	4	x	8
<i>Helianthemum alpestre</i>	F	9	2	4	4	9	2
<i>Helianthemum glabrum</i>	F	8	2	4	4	9	3
<i>Helianthemum grandiflorum</i> s.lat.	F	7	3	4	4	8	3
<i>Helianthemum grandiflorum</i> s.str.	F	7	3	4	4	8	3

<i>Helianthemum nummularium</i> agg.	F	8	6	4	3	7	2
<i>Hesperis matronalis</i> agg.	F	6	5	6	7=	7	7
<i>Hesperis matronalis</i> s.lat.	F	6	5	6	7=	7	7
<i>Hieracium murorum</i>	F	4	x	3	5	5	4
<i>Hieracium piloselloides</i>	F	9	6	4	4~	8	2
<i>Hippocrepis emerus</i>	D	7	6	x	3	9	2
<i>Hippocrepis emerus</i>	F	7	6	4	3	9	2
<i>Hypericum maculatum</i> agg.	F	8	x	3	6~	3	2
<i>Hypericum maculatum</i> s.str.	F	8	x	3	6~	3	2
<i>Hypnum cupressiforme</i> agg.	G	5	x	5	4	4	
<i>Hypnum lacunosum</i>	G	9	4	5	2	6	
<i>Hypnum mammilatum</i>	G	3	4	3	6	3	
<i>Hypnum resupinatum</i>	G	6	5	3	5	5	
<i>Hypochaeris glabra</i>	F	9	7	2	3	3	1
<i>Hypochaeris maculata</i>	F	7	6	5	4~	6	2
<i>Hypochaeris radicata</i>	F	8	5	3	5	4	3
<i>Hypochaeris uniflora</i>	F	8	2	4	4~	4	2
<i>Isopterygiopsis pulchella</i>	G	4	2	6	6	8	
<i>Juncus alpinoarticulatus</i>	F	8	x	6	9	8	2
<i>Juncus bufonius</i> agg.	F	7	5	x	7~	3	4
<i>Juncus compressus</i> agg.	F	8	5	x	x=	7	x
<i>Jungermannia gracillima</i>	G	8	4	5	7	3	
<i>Jungermannia leiantha</i>	G	4	3		6	1	
<i>Juniperus communis</i> ssp. <i>nana</i>	F	9	2	7	4	7	2
<i>Knautia maxima</i>	F	5	4	4	6	6	6
<i>Koeleria pyramidata</i>	F	7	6	4	4	7	2
<i>Kurzia pauciflora</i>	G	9	2	4	8	1	
<i>Laburnum alpinum</i>	F	5	6	5	3	8	4
<i>Lactuca muralis</i>	F	4	6	2	5	x	6
<i>Lathraea squamaria</i> ssp. <i>squamaria</i>	F	3	5	3	6	7	6
<i>Lathyrus laevigatus</i> ssp. <i>occidentalis</i>	F	8	3	4	5	8	4
<i>Lathyrus pannonicus</i> s.lat.	F	8	7	6	3~	9	2
<i>Lembotropis nigricans</i>	F	6	6	x	4		
<i>Leontodon hispidus</i> ssp. <i>hyoseroides</i>	F	8	4	3	5	7	4
<i>Leontopodium</i> sp.	F	8	2	5	4	8	2
<i>Leonurus cardiaca</i>	F	8	6	6	5	8	9
<i>Leptodictyum riparium</i>	G		x	5	7	5	
<i>Lethraria vulpina</i>	G	7	3	5	8	2	1
<i>Leucanthemopsis alpina</i>	F	8	2	4	7	2	2
<i>Leucanthemum atratum</i> agg.	F	9	2	4	5	9	2
<i>Leucanthemum vulgare</i>	F	7	x	3	4	x	3
<i>Lophocolea bidentata</i>	G	7	3	5	6	5	
<i>Lotus corniculatus</i> agg.	F	7	x	3	4	7	3
<i>Lotus maritimus</i>	F	8	7	4	x	9	1
<i>Lotus pedunculatus</i>	F	7	5	2	8	6	4
<i>Luzula alpinopilosa</i>	F	7	2		7	4	3
<i>Luzula campestris</i> agg.	F	7	x	x	4	x	3
<i>Luzula luzuloides</i> ssp. <i>luzuloides</i>	F	4	x	4	5	3	4
<i>Luzula multiflora</i> s.lat.	F	7	x	4	x	4	2
<i>Luzula multiflora</i> s.str.	F	7	x	4	x	4	2
<i>Lycopus europaeus</i>	F	7	6	5	9=	7	7
<i>Matricaria chamomilla</i>	F	7	6	5	5	5	5
<i>Melilotus albus</i>	F	9	6	6	3	7	4
<i>Melittis melissophyllum</i>	F	5	7	2	4	6	3
<i>Mentha piperita</i> agg.	F	8	7		6	7	6
<i>Mentha verticillata</i> agg.	F	7	5		8~	7	
<i>Mentha x verticillata</i>	F	7	5		8~	7	
<i>Mercurialis x paxii</i> (<i>ovata</i> x <i>perennis</i>)	F	x	7	4	3	8	4
<i>Microrrhinum minus</i>	F	8	6	3	4	8	5
<i>Minuartia verna</i> agg.	F	9	x	x	x	x	1
<i>Mnium ambiguum</i>	G	6	3	6	6	7	
<i>Monotropa hypopitys</i>	F	4	x	5	5	3	2

Myosotis palustris agg.	F	7	x	5	8~	x	5
Myosotis scorpioides	F	7	x	5	8~	x	5
Nasturtium microphyllum	F	7	6	3	10	7	7
Nasturtium officinale	F	7	6	3	10	7	7
Nigritella nigra	F	8	2	4	4	6	2
°Cyclamen purpurascens ssp. Immaculatum	F	4	6	4	5	7	5
Odontites ruber agg.	F	6	6	3	5~	7	5
Oenothera biennis agg.	F	9	7	3	4	x	4
Onobrychis viciifolia agg.	F	8	7	6	3	8	3
Ononis spinosa agg.	F	8	x	x	4~	7	3
°Pulsatilla alpina ssp. alba auct. sudet. & carpat.	F	8	4	4	5	2	2
Ornithogalum pyrenaicum s.lat.	F	4	6	2	5	6	5
Ornithogalum umbellatum agg.	F	7	7	4	x	7	x
Ornithogalum umbellatum s.str.	F	5	6	4	5	7	6
Orthodicranum montanum	G	6	3	6	5	2	
Oxalis stricta	F	6	6		5	5	7
Papaver alpinum s.lat.	F	9	x	4	4	9	2
Pedicularis rostratocapitata	F	8	2	4	5	9	3
Pedicularis rostratospicata	F	7	2	4	5	9	4
Pellia endiviifolia	G		4	5	8	9	
Persicaria amphibia	F	7	6	x	11	6	4
Persicaria amphibia var. terrestre	F	8	6	x	x	x	6
Persicaria bistorta	F	7	4	7	7	5	5
Persicaria dubia	F	7	6	3	8	6	7
Persicaria hydropiper	F	7	6	x	8=	5	8
Persicaria lapathifolia	F	6	6	4	8	x	8
Persicaria lapathifolia ssp. brittingeri	F	8	6	5	7=	x	5
Persicaria lapathifolia ssp. lapathifolia	F	6	6	4	8	x	8
Persicaria lapathifolia ssp. pallida	F	7	6	4	6	x	8
Persicaria maculosa	F	6	6	3	5	7	7
Persicaria minor	F	7	6	3	8=	5	8
Peucedanum austriacum agg.	F	5	5	5	4	8	4
Peucedanum austriacum s.str.	F	5	5	5	4	8	4
Peucedanum rablense	F	5	5	5	4	8	4
Phegopteris connectilis	F	2	4	3	6	4	6
Phleum alpinum agg.	F	8	2	3	5	6	7
Phleum alpinum s.str.	F	9	1	3	5	6	7
Phleum commutatum	F	9	1	3	5	6	7
Phleum rhaeticum	F	8	3	3	5	6	7
Phyteuma confusum	F	8	2	5	5	4	2
Phyteuma michelii agg.	F	8	3	4	5	2	1
Phyteuma persicifolium	F	8	3	4	5	2	1
Picris hieracioides	F	8	x	5	4	8	4
Pimpinella saxifraga agg.	F	7	x	5	3	x	2
Pimpinella saxifraga s.str.	F	7	x	5	3	x	2
Pinus mugo agg.	F	8	x	3	x	x	3
Pinus mugo s.str.	F	8	3	3	x	x	3
Pinus uncinata	F	8	3	x	x	x	3
Pinus x rotundata	F	(8)	3	5	8	2	2
Plagiopus oederi	G	4	1		6	8	
Plagiothecium laetum s.lat.	G	4	3	6	4	2	
Plantago atrata	F	8	3	4	6	8	5
Plantago major	F	8	x	x	5	x	6
Plantago maritima agg.	F	8	x	x	x	7	4
Plantago media agg.	F	7	x	7	4	7	3
Plantago strictissima	F	9	6	6	4	6	2
Platydictya jungermanniioides	G	3	2	4	6	9	
Platydictya minutissimum	G	7	1	6	6	6	
Platydictya subtilis	G	7	4	7	5	6	
Poa nemoralis agg.	F	5	x	5	5	5	4
Polygala alpestris	F	8	2	4	4	7	2
Polygala amara agg.	F	8	x	4	x	8	2

<i>Polygala amara</i> ssp. <i>amara</i>	F	8	3	4	4~	8	2
<i>Polypodium vulgare</i> agg.	F	5	5	3	4	x	2
<i>Polytrichastrum alpinum</i>	G	7	1	6	6	2	
<i>Polytrichum commune</i>	G	6	2	6	7	2	
<i>Polytrichum strictum</i>	G	8	2	6	6	1	
<i>Populus x canescens</i>	F	6	7	7	5	x	x
<i>Potentilla argentea</i>	F	9	6	3	2	3	1
<i>Potentilla collina</i> agg.	F	9	7	4	2	2	1
<i>Potentilla incana</i>	F	9	7	6	1	8	1
<i>Pritzelago alpina</i>	F	8	2	2	5	9	2
<i>Prunus cerasus</i>	F	(4)	5	4	5	7	5
<i>Prunus cerasus</i> agg.	F	(4)	5	4	5	7	5
<i>Prunus padus</i> ssp. <i>padus</i>	F	(5)	5	3	8=	7	6
<i>Prunus spinosa</i> ssp. <i>spinosa</i>	F	7	5	5	x	x	x
<i>Prunus spinosa</i> agg.	F	7	5	5	x	x	x
<i>Prunus spinosa</i> ssp. <i>spinosa</i>	F	7	5	5	x	x	x
<i>Pseudoleskea catenulata</i>	G	8	3	6	4	8	
<i>Pseudolysimachion orchideum</i>	F	7	7	6	3	7	2
<i>Pseudolysimachion spicatum</i> agg.	F	7	7	6	3	7	2
<i>Pseudotaxiphyllum elegans</i>	G	4	4	4	5	4	
<i>Pulmonaria mollis</i> ssp. <i>mollis</i>	F	5	5	4	5~	8	5
<i>Pulsatilla alpina</i> s.lat.	F	8	2	2	5	x	3
<i>Pulsatilla alpina</i> ssp. <i>alpina</i> s.lat.	F	8	2	2	5	8	3
<i>Pyrus communis</i>	F	(6)	6	5	5	8	x
<i>Quercus petraea</i> s.lat.	F	(6)	6	2	5	x	x
<i>Quercus petraea</i> ssp. <i>petraea</i>	F	(6)	6	2	5	x	x
<i>Quercus pubescens</i> s.lat.	F	(7)	8	4	3	7	x
<i>Quercus pubescens</i> s.str.	F	(7)	8	4	3	7	x
<i>Ranunculus auricomus</i>	F	5	6	3	x	7	x
<i>Ranunculus auricomus</i> s.lat.	F	5	6	3	x	7	x
<i>Ranunculus breyninus</i>	F	8	3	4	5	8	3
<i>Ranunculus ficaria</i> ssp. <i>bulbilifer</i>	F	4	5	3	6	7	7
<i>Ranunculus villarsii</i>	F	9	1		x	2	3
<i>Rhamnus cathartica</i>	D	7	5	x	4	8	
<i>Rhamnus cathartica</i>	F	7	5	5	4	8	4
<i>Rhamnus pumila</i>	D	8	2	4	3	9	2
<i>Rhamnus pumila</i>	F	8	2	4	3	9	2
<i>Rhynchostegium riparioides</i>	G		3	5	8	6	
<i>Rhytidiadelphus subpinnatus</i>	G	7	2	6	6	5	
<i>Ribes uva-crispa</i> ssp. <i>grossularia</i>	D	4	5	2	x	x	6
<i>Ribes uva-crispa</i> ssp. <i>grossularia</i>	F	4	5	2	x	x	6
<i>Rorippa palustris</i>	F	7	x	x	8=	x	8
<i>Rosa canina</i>	F	8	5	x	4		
<i>Rosa canina</i> agg.	D	8	5	3	4	x	x
<i>Rosa canina</i> s.lat. (= agg.)	D	8	5	3	4	x	x
<i>Rosa canina</i> s.lat. (= agg.)	F	8	5	3	4	x	x
<i>Rosa canina</i> s.latiss.	D	8	5	x	4		
<i>Rosa canina</i> s.latiss.	F	8	5	x	4		
<i>Rosa canina</i> s.str.	D	8	5	3	4	x	x
<i>Rosa canina</i> s.str.	F	8	5	3	4	x	x
<i>Rosa canina</i> s.str. (= sensu LGM)	D	8	5	3	4	x	x
<i>Rosa canina</i> s.str. (= sensu LGM)	F	8	5	3	4	x	x
<i>Rosa coriifolia</i> agg.	F	8	6	x	3	8	3
<i>Rosa corymbifera</i>	F	8	6	x	4	7	
<i>Rosa deseglisei</i>	F	8	6	x	4	7	
<i>Rosa dumalis</i> s.lat.	D	8	4	3	3	8	4
<i>Rosa dumalis</i> s.lat.	F	8	4	3	3	8	4
<i>Rosa obtusifolia</i> agg.	F	7	6	x	4	8	4
<i>Rosa villosa</i> agg.	D	6	5	2	3	8	2
<i>Rosa villosa</i> agg.	F	6	5	2	3	8	2
<i>Rubus hirtus</i> s.lat.	F	7	4	4	5	x	x
<i>Rumex acetosella</i> s.lat.	F	8	x	3	4	2	1

<i>Salix nigricans</i> agg.	D	7	4	x	7=	8	6
<i>Salix nigricans</i> agg.	F	7	4	x	7=	8	6
<i>Saussurea alpina</i>	F	9	1	7	5	5	3
<i>Saxifraga biflora</i>	F	9	1	4	6	8	
<i>Saxifraga burseriana</i>	F	9	3	4	4	9	2
<i>Saxifraga cuneifolia</i> ssp. <i>robusta</i>	F	4	4	5	6	3	2
<i>Scirpoides holoschoenus</i>	F	8	6		8~	7	8
<i>Securigera varia</i>	F	7	6	5	4	9	3
<i>Sedum rupestre</i>	F	7	5	4	2	5	1
<i>Sedum telephium</i> agg.	F	7	6	x	4	7	x
<i>Sedum telephium</i> s.str.	F	7	6	x	4	7	x
<i>Selinum carvifolia</i>	F	7	5	5	7	5	3
<i>Senecio abrotanifolius</i>	F	7	3	4	4	7	2
<i>Senecio cordatus</i>	F	7	3	4	6	8	9
<i>Senecio germanicus</i> ssp. <i>germanicus</i>	F	7	6	6	5	7	8
<i>Senecio incanus</i> s.lat.	F	8	2	5	5	1	1
<i>Senecio ovatus</i> ssp. <i>ovatus</i>	F	7	x	4	5	x	8
<i>Senecio sarracenicus</i>	F	7	7	5	9=	7	8
<i>Serratula tinctoria</i> agg.	F	6	6	5	x	7	3
<i>Seseli libanotis</i> ssp. <i>libanotis</i>	F	7	x	5	3	8	2
<i>Sesleria varia</i> agg.	F	7	3	2	4	9	3
<i>Silene acaulis</i> ssp. <i>exscapa</i>	F	9	1	5	4	2	1
<i>Silene acaulis</i> ssp. <i>longiscapa</i>	F	9	1	3	4	8	1
<i>Silene latifolia</i>	F	8	6	x	4	x	7
<i>Silene latifolia</i> ssp. <i>alba</i>	F	8	6	x	4	x	7
<i>Silene nutans</i> s.lat.	F	7	x	5	3	7	3
<i>Silene nutans</i> ssp. <i>nutans</i>	F	7	x	5	3	7	3
<i>Silene pusilla</i> ssp. <i>pusilla</i>	F	7	3	4	7	8	2
<i>Silene vulgaris</i> ssp. <i>vulgaris</i>	F	8	x	x	4~	7	4
<i>Soldanella austriaca</i>	F	8	3	4	7	8	3
<i>Soldanella hungarica</i>	F	4	3	4	6	2	3
<i>Soldanella major</i>	F	4	3	4	6	2	3
<i>Soldanella montana</i> agg.	F	5	4	4	6	2	2
<i>Solidago virgaurea</i> ssp. <i>minuta</i>	F	5	3	x	5	2	3
<i>Sorbus aria</i>	F	6	5	x	4	7	3
<i>Sorbus aria</i> agg.	A	(6)	5	2	4	7	3
<i>Sorbus aria</i> agg.	D	(6)	5	2	4	7	3
<i>Sorbus chamaemespilus</i>	D	7	3	x	4	8	3
<i>Sorbus chamaemespilus</i>	F	7	3	4	4	8	3
<i>Sparganium erectum</i>	F	7	6	5	10	7	7
<i>Sparganium natans</i>	F	7	5	5	11	5	3
<i>Sphagnum palustre</i> s.lat.	G	6	4	6	6	2	
<i>Stellaria alsine</i>	F	5	4	3	8	4	4
<i>Stellaria media</i>	F	6	x	x	x	7	8
<i>Stellaria montana</i>	F	4	5	4	7	6	7
<i>Stellaria nemorum</i> agg.	F	4	x	4	7	5	7
<i>Stellaria nemorum</i> s.str.	F	4	4	4	7	5	7
<i>Symphoricarpos rivularis</i>	F	7	5	5	6	6	7
<i>Symphytum officinale</i>	F	7	6	3	7	x	8
<i>Symphytum tuberosum</i>	F	4	x	4	6	7	5
<i>Symphytum tuberosum</i> agg.	F	4	x	4	6	7	5
<i>Tanacetum clusii</i>	F	6	7	5	4	8	4
<i>Tanacetum corymbosum</i> agg.	F	6	7	5	4	7	4
<i>Taraxacum erythrospermum</i>	F	8	6	5	3	7	2
<i>Taraxacum palustre</i>	F	8	x	2	8~	8	2
<i>Taraxacum</i> sect. <i>Alpestris</i>	F	7	3	4	5	7	6
<i>Taraxacum</i> sect. <i>Palustria</i>	F	8	x	2	8~	8	2
<i>Taraxacum</i> sect. <i>Ruderalia</i>	F	7	x	x	5	x	8
<i>Telaranea</i> sp.	G	5	3	6	6	3	
<i>Telaranea</i> sp. (= <i>Bleph. trichophyllum</i>)	G	5	3	6	6	3	
<i>Tephrosieris crispa</i>	F	6	4	4	8	6	7
<i>Tephrosieris helenitis</i>	F	7	6	2	7	x	2

<i>Tephrosia helenitis</i> ssp. <i>salisburgensis</i>	F	8	6	2	8	x	2
<i>Tephrosia integrifolia</i> ssp. <i>integrifolia</i>	F	7	6	7	4~	8	
<i>Tephrosia tenuifolia</i>	F	8	3	4	6	8	8
<i>Thalictrum minus</i> s.lat.	F	6	x	7	3	8	3
<i>Thalictrum simplex</i> s.lat.	F	8	6	7	6~	8	2
<i>Thlaspi alpestre</i>	F	8	4	2	5	5	4
<i>Thlaspi caerulescens</i> s.lat.	F	8	4	2	5	5	4
<i>Thymus chamaedrys</i> agg.	F	8	x	4	4	x	1
<i>Thymus odoratissimus</i>	F	8	7	7	3	7	2
<i>Thymus praecox</i> agg.	F	8	x	4	2	8	1
<i>Thymus pulegioides</i>	F	8	x	4	4	x	1
<i>Thymus pulegioides</i> ssp. <i>chamaedrys</i>	F	8	x	4	4	x	1
<i>Toninia sedifolia</i>	G	8	x	6	x	8	2
<i>Torilis japonica</i>	F	6	6	3	5	8	8
<i>Trifolium medium</i>	F	7	6	4	4	6	3
<i>Tripleurospermum inodorum</i>	F	7	6	3	x	6	6
<i>Trisetum distichophyllum</i> agg.	F	8	2	4	5	9	2
<i>Typha minima</i>	F	8	x	7	9=	8	2
<i>Utricularia minor</i>	F	8	6	x	12	6	2
<i>Vaccinium oxycoccos</i>	F	7	5	3	9	x	1
<i>Vaccinium oxycoccos</i> agg.	F	7	5	3	9	x	1
<i>Verbascum chaixii</i>	F	7	6	5	4	7	6
<i>Verbascum chaixii</i> ssp. <i>austriacum</i>	F	7	6	5	4	7	6
<i>Veronica bellidioides</i>	F	8	2	4	4	1	1
<i>Vicia cracca</i> agg.	F	7	x	x	x	x	x
<i>Vicia incana</i>	F	7	5	7	4	x	x
<i>Vicia villosa</i> agg.	F	7	6	5	4	6	5
<i>Vincetoxicum hirundinar</i> ssp. <i>hirundinar</i>	F	6	5	5	3	7	3
<i>Vincetoxicum hirundinar</i> ssp. <i>hirundinar</i>	F	6	5	5	3	7	3
<i>Viola tricolor</i>	F	7	x	x	4	x	x
<i>Viola tricolor</i> ssp. <i>saxatilis</i>	F	8	4	x	5	5	4
<i>Viscum album</i> s.lat.	A	7	6	3			
<i>Viscum album</i> ssp. <i>abietis</i>	A	7	5	3			
<i>Viscum album</i> ssp. <i>album</i>	A	7	6	3			
<i>Viscum album</i> ssp. <i>laxum</i>	A	7	6	3			
<i>Vitis vinifera</i>	F	9	8	3	4	7	x
<i>Willemetia stipitata</i>	F	9	3	4	9	7	4
<i>Bromus ramosus</i>	F	6	6	4	6	7	6
<i>Campanula cochlearifolia</i>	F	8	3	4	4~	x	3
<i>Campanula glomerata</i>	F	7	x	7	4~	7	3
<i>Campanula persicifolia</i>	F	5	5	4	4	x	3
<i>Campanula scheuchzeri</i>	F	8	3	4	5	x	3
<i>Carex ornithopodoides</i>	F	8	1	4	6	9	3
<i>Centaurea nigrescens</i>	F	8	6	6	4~	6	4
<i>Cornus sanguinea</i>	D	7	5	x	x	8	x
<i>Cyclamen purpurascens</i>	F	4	6	4	5	7	5
<i>Danthonia decumbens</i>	F	8	x	2	x	x	2
<i>Dorycnium herbaceum</i>	F	7	6	4	5~	9	2
<i>Dryopteris assimilis</i>	F	5	x	4	6	4	3
<i>Dryopteris cristata</i>	F	4	6	4	9	3	6
<i>Dryopteris dilatata</i>	F	4	x	3	6	x	4
<i>Dryopteris expansa</i>	F	5	x	4	6	4	3
<i>Dryopteris remota</i>	F	3	4	3	6	4	5
<i>Eleocharis palustris</i>	F	8	x	x	10	x	5
<i>Epilobium adenocaulon</i>	F	7	6	x	5	7	8
<i>Erigeron polymorphus</i>	F	9	2	4	5	7	3
<i>Erysimum rhaeticum</i>	F	9	4	5	4	7	2
<i>Euphorbia verrucosa</i>	F	8	6	2	4~	8	3
<i>Euphorbia villosa</i>	F	8	7	5	7	7	3
<i>Festuca pallens</i>	F	9	7	4	1	8	1
<i>Festuca pratensis</i>	F	8	5	3	6	x	6

<i>Festuca trichophylla</i>	F	8	7	6	7	7	2
<i>Galium sylvaticum</i>	F	5	5	4	5	x	5
<i>Galium truniacum</i>	F	8	3	4	3	9	2
<i>Gentianella germanica</i>	F	7	x	4	4~	8	3
<i>Helianthemum ovatum</i>	F	8	6	5	3	7	1
<i>Lembotropis nigricans</i> ssp. <i>nigricans</i>	D	6	6	x	4	6	2
<i>Lotus tenuis</i>	F	7	6	6	7~	8	4
<i>Pinus mugo</i>	A	8	3	x	x	x	3
<i>Pinus mugo</i>	D	8	3	x	x	x	3
<i>Pinus sylvestris</i>	A	8	x	x	x	x	x
<i>Pinus sylvestris</i>	D	7	x	x	x	x	x
<i>Polygala amarella</i>	F	9	x	4	7~	9	1
<i>Polypodium interjectum</i>	F	5	6	3	5	x	3
<i>Polypodium vulgare</i>	F	5	5	3	4	x	2
<i>Ribes uva-crispa</i>	D	4	5	x	x	x	6