

Appendix S1 Lists of species that significantly respond to climatic variables.

Lososová et al. 2011. Native and alien floras in urban habitats: a comparison across 32 cities of Central Europe

nat = native species

arc = archaeophyte

neo = neophyte

Difference between July and January mean temperature			
	status	<i>P</i>	slope
<i>Cardamine hirsuta</i>	arc	0.01571	-1.84452
<i>Matricaria discoidea</i>	neo	0.04552	-1.81594
<i>Geranium robertianum</i>	nat	0.016524	-1.61262
<i>Mycelis muralis</i>	nat	0.010408	-1.61243
<i>Senecio inaequidens</i>	neo	0.006891	-1.50811
<i>Digitalis purpurea</i>	neo	0.027999	-1.48909
<i>Epilobium ciliatum</i>	neo	0.01807	-1.33871
<i>Polycarpon tetraphyllum</i>	arc	0.021027	-1.29922
<i>Holcus lanatus</i>	nat	0.014533	-1.14647
<i>Veronica arvensis</i>	arc	0.025805	-1.09066
<i>Juncus bufonius</i>	nat	0.006857	-1.07222
<i>Rosa rugosa</i>	neo	0.016698	-0.96475
<i>Lavandula angustifolia</i>	neo	0.009381	-0.96282
<i>Eragrostis pilosa</i>	nat	0.006031	-0.95113
<i>Heracleum mantegazzianum</i>	neo	0.009547	-0.93605
<i>Platanus occidentalis</i>	neo	0.037116	-0.89926
<i>Campanula poscharskyana</i>	neo	0.010175	-0.87463
<i>Rubus fruticosus</i> agg.	nat	0.019456	-0.86911
<i>Epilobium montanum</i>	nat	0.015592	-0.8661
<i>Corispermum leptopterum</i>	neo	0.037516	-0.86345
<i>Sisymbrium officinale</i>	arc	0.036636	-0.83711
<i>Buddleja davidii</i>	neo	0.00997	-0.83207
<i>Cytisus scoparius</i>	neo	0.039332	-0.79913
<i>Linaria purpurea</i>	neo	0.039984	-0.78432
<i>Oxalis debilis</i>	neo	0.007061	-0.78135
<i>Aesculus hippocastanum</i>	neo	0.024763	-0.75645
<i>Brassica nigra</i>	arc	0.041486	-0.756
<i>Geranium molle</i>	arc	0.006894	-0.74408
<i>Coronopus didymus</i>	neo	0.010382	-0.71289
<i>Digitaria ischaemum</i>	arc	0.007181	-0.71162
<i>Atriplex prostrata</i> subsp. <i>latifolia</i>	nat	0.007657	-0.68075
<i>Spergula arvensis</i>	arc	0.047971	-0.67964
<i>Sorbus aria</i>	nat	0.047971	-0.67964
<i>Eupatorium cannabinum</i>	nat	0.008599	-0.66727
<i>Circaea lutetiana</i>	nat	0.008485	-0.65821
<i>Alliaria petiolata</i>	nat	0.042929	-0.65345
<i>Chenopodium rubrum</i>	nat	0.010564	-0.6493
<i>Veronica serpyllifolia</i>	nat	0.019159	-0.64209
<i>Ulmus laevis</i>	nat	0.029794	-0.63964
<i>Epilobium angustifolium</i>	nat	0.010251	-0.63261
<i>Holcus mollis</i>	nat	0.009948	-0.63004
<i>Ilex aquifolium</i>	nat	0.01591	-0.60793

<i>Rumex sanguineus</i>	nat	0.012846	-0.60602
<i>Typha latifolia</i>	nat	0.036288	-0.5899
<i>Vicia sativa</i> agg.	arc	0.046945	-0.55836
<i>Juncus effusus</i>	nat	0.01207	-0.55306
<i>Aquilegia vulgaris</i> agg.	nat	0.028833	-0.54055
<i>Epipactis helleborine</i>	nat	0.037974	-0.50479
<i>Sorbus aucuparia</i>	nat	0.049588	-0.49847
<i>Gnaphalium uliginosum</i>	nat	0.017531	-0.49032
<i>Cardamine pratensis</i> agg.	nat	0.039363	-0.45765
<i>Glyceria fluitans</i>	nat	0.040767	-0.45273
<i>Symphoricarpos albus</i>	neo	0.040611	-0.41384
<i>Spergularia rubra</i>	nat	0.037783	-0.40436
<i>Alcea rosea</i>	neo	0.036301	-0.39455
<i>Lycopus europaeus</i>	nat	0.044401	-0.37667
<i>Bidens frondosa</i>	neo	0.048706	-0.37476
<i>Sedum album</i>	nat	0.042622	-0.37198
<i>Sedum acre</i>	nat	0.044082	-0.36726
<i>Securigera varia</i>	nat	0.041599	0.373957
<i>Leucanthemum vulgare</i> agg.	nat	0.036954	0.389085
<i>Tilia cordata</i>	nat	0.045517	0.412334
<i>Helianthus tuberosus</i>	neo	0.030303	0.414032
<i>Tragopogon pratensis</i> agg.	nat	0.043706	0.417674
<i>Galium verum</i>	nat	0.033284	0.430326
<i>Amaranthus powellii</i>	neo	0.036332	0.430461
<i>Silene latifolia</i> subsp. <i>alba</i>	arc	0.038431	0.433941
<i>Euphorbia cyparissias</i>	nat	0.042521	0.440368
<i>Digitaria sanguinalis</i>	arc	0.043731	0.443011
<i>Bromus inermis</i>	nat	0.03693	0.444116
<i>Juglans regia</i>	arc	0.040767	0.452733
<i>Armoracia rusticana</i>	arc	0.028246	0.455506
<i>Medicago falcata</i>	nat	0.033967	0.457905
<i>Lysimachia nummularia</i>	nat	0.029344	0.470107
<i>Verbena officinalis</i>	arc	0.022928	0.476263
<i>Centaurea jacea</i>	nat	0.016446	0.498203
<i>Malva neglecta</i>	arc	0.01641	0.506347
<i>Silene vulgaris</i>	nat	0.014859	0.516581
<i>Odontites vernus</i> agg.	nat	0.03681	0.52332
<i>Astragalus glycyphyllos</i>	nat	0.035749	0.529642
<i>Picris hieracioides</i>	nat	0.013764	0.530702
<i>Poa nemoralis</i>	nat	0.02196	0.547708
<i>Medicago sativa</i> agg.	neo	0.014663	0.552686
<i>Parthenocissus quinquefolia</i> agg.	neo	0.019253	0.571035
<i>Aster novae-angliae</i>	neo	0.017878	0.585662
<i>Ballota nigra</i>	arc	0.009937	0.594707
<i>Rubus caesius</i>	nat	0.021898	0.607704
<i>Stachys annua</i>	arc	0.038878	0.607986
<i>Acer negundo</i>	neo	0.007657	0.680748
<i>Eragrostis minor</i>	arc	0.007713	0.700654
<i>Portulaca oleracea</i>	arc	0.007026	0.702583
<i>Festuca pratensis</i>	nat	0.006315	0.766561
<i>Sisymbrium loeselii</i>	neo	0.009227	0.875505
<i>Vitis</i> sp.	neo	0.012488	0.881121
<i>Centaurea stoebe</i>	nat	0.033398	0.88722

<i>Artemisia absinthium</i>	arc	0.018112	0.912168
<i>Cichorium intybus</i>	arc	0.00603	0.928738
<i>Epilobium tetragonum</i> agg.	nat	0.006838	0.956055
<i>Vicia tenuifolia</i>	nat	0.029788	0.960973
<i>Potentilla reptans</i>	nat	0.016698	0.964754
<i>Onopordum acanthium</i>	arc	0.015476	1.045279
<i>Erigeron annuus</i>	neo	0.040112	1.079425
<i>Chenopodium hybridum</i>	nat	0.005916	1.12953
<i>Amaranthus retroflexus</i>	neo	0.007326	1.18031
<i>Pimpinella saxifraga</i>	nat	0.006927	1.183416
<i>Sambucus ebulus</i>	arc	0.034165	1.192942
<i>Gleditsia triacanthos</i>	neo	0.033491	1.2254
<i>Anchusa officinalis</i>	arc	0.023271	1.351731
<i>Asclepias syriaca</i>	neo	0.048851	1.37478
<i>Atriplex tatarica</i>	arc	0.031155	1.458829
<i>Eryngium campestre</i>	nat	0.031155	1.458829
<i>Crepis foetida</i>	arc	0.046516	1.536224
<i>Tagetes</i> sp.	neo	0.03113	1.556563
<i>Chondrilla juncea</i>	nat	0.031592	1.66864
<i>Verbascum chaixii</i> subsp. <i>austriacum</i>	nat	0.031592	1.66864
<i>Kochia scoparia</i>	neo	0.031592	1.66864
<i>Chenopodium vulvaria</i>	arc	0.040487	2.260863

Mean annual temperature

	status	<i>P</i>	slope
<i>Matricaria discoidea</i>	neo	0.045197	-2.57822
<i>Deschampsia cespitosa</i>	nat	0.005932	-2.37416
<i>Salix viminalis</i>	nat	0.04045	-2.07286
<i>Stellaria graminea</i>	nat	0.019387	-1.97995
<i>Galeopsis pubescens</i>	nat	0.048151	-1.88039
<i>Sisymbrium officinale</i>	arc	0.023985	-1.86131
<i>Alopecurus pratensis</i>	nat	0.030575	-1.73277
<i>Poa palustris</i>	nat	0.016622	-1.54939
<i>Puccinellia distans</i>	nat	0.033095	-1.46611
<i>Galeopsis tetrahit</i> agg.	nat	0.021418	-1.4623
<i>Potentilla anserina</i>	nat	0.030862	-1.40617
<i>Geranium pratense</i>	nat	0.042951	-1.39874
<i>Trifolium hybridum</i>	neo	0.026985	-1.35382
<i>Ulmus glabra</i>	nat	0.029569	-1.35161
<i>Epilobium montanum</i>	nat	0.038707	-1.25347
<i>Anthriscus sylvestris</i>	nat	0.047417	-1.1425
<i>Stachys palustris</i>	nat	0.046449	-1.13678
<i>Cerastium tomentosum</i> agg.	neo	0.049505	-1.13631
<i>Vicia sepium</i>	nat	0.046862	-1.11596
<i>Lepidium densiflorum</i>	neo	0.041847	1.13914
<i>Verbena officinalis</i>	arc	0.039362	1.180281
<i>Viola x wittrockiana</i>	neo	0.042876	1.343005
<i>Stachys annua</i>	arc	0.033945	1.364269
<i>Setaria verticillata</i>	arc	0.018625	1.510929
<i>Ailanthus altissima</i>	neo	0.033383	1.549667
<i>Sherardia arvensis</i>	arc	0.026767	1.57889
<i>Atriplex tatarica</i>	arc	0.044435	1.641885

<i>Eryngium campestre</i>	nat	0.044435	1.641885
<i>Chenopodium vulvaria</i>	arc	0.035017	1.857353
<i>Cannabis sativa</i>	neo	0.028324	2.211012
<i>Mercurialis annua</i>	arc	0.005843	2.247406
<i>Salvia nemorosa</i>	nat	0.044935	2.285633
<i>Abutilon theophrasti</i>	neo	0.027228	2.432835
<i>Commelina communis</i>	neo	0.0106	2.55214
<i>Papaver rhoeas</i>	arc	0.037663	3.149893

Annual precipitation

	status	<i>P</i>	slope
<i>Bromus japonicus</i>	arc	0.041524	-0.01955
<i>Falcaria vulgaris</i>	nat	0.027649	-0.0183
<i>Anchusa officinalis</i>	arc	0.029246	-0.01701
<i>Atriplex sagittata</i>	arc	0.007639	-0.01573
<i>Chenopodium murale</i>	arc	0.032531	-0.01528
<i>Ipomoea purpurea</i>	neo	0.017667	-0.0142
<i>Berteroa incana</i>	arc	0.036366	-0.01395
<i>Onopordum acanthium</i>	arc	0.022302	-0.01228
<i>Fallopia dumetorum</i>	nat	0.017855	-0.01193
<i>Sisymbrium loeselii</i>	neo	0.01095	-0.01118
<i>Persicaria lapathifolia</i>	nat	0.029904	-0.01099
<i>Lepidium rudemale</i>	arc	0.011259	-0.01098
<i>Rumex thyrsiflorus</i>	neo	0.011428	-0.01097
<i>Vicia tetrasperma</i>	nat	0.009274	-0.00978
<i>Atriplex oblongifolia</i>	arc	0.039981	-0.00922
<i>Pyrus communis</i>	arc	0.033463	-0.00823
<i>Potentilla argentea</i>	nat	0.015686	-0.00795
<i>Geranium pratense</i>	nat	0.039623	-0.00682
<i>Brassica napus</i>	arc	0.031394	-0.00609
<i>Potentilla anserina</i>	nat	0.049343	-0.00541
<i>Brassica oleracea</i>	arc	0.04801	0.00534
<i>Juncus tenuis</i>	neo	0.043742	0.005707
<i>Cirsium oleraceum</i>	nat	0.035501	0.006403
<i>Clinopodium vulgare</i>	nat	0.030637	0.00641
<i>Antirrhinum majus</i>	neo	0.024033	0.006724
<i>Prunus persica</i>	arc	0.029072	0.006766
<i>Parthenocissus tricuspidata</i>	neo	0.022352	0.006966
<i>Platanus x hispanica</i>	neo	0.048395	0.007
<i>Picea abies</i>	nat	0.031966	0.007094
<i>Cerastium glomeratum</i>	nat	0.022087	0.0071
<i>Primula veris</i>	nat	0.024389	0.007133
<i>Rhus hirta</i>	neo	0.024981	0.007323
<i>Stellaria nemorum</i>	nat	0.033953	0.007415
<i>Epilobium parviflorum</i>	nat	0.026655	0.007527
<i>Oxalis acetosella</i>	nat	0.028643	0.007563
<i>Leontodon hispidus</i>	nat	0.048529	0.007673
<i>Ranunculus acris</i>	nat	0.047179	0.007765
<i>Brachypodium pinnatum</i>	nat	0.021804	0.007969
<i>Circaea lutetiana</i>	nat	0.015236	0.007982
<i>Fumaria vaillantii</i>	arc	0.029763	0.008063
<i>Geranium columbinum</i>	arc	0.036192	0.008109

<i>Lepidium densiflorum</i>	neo	0.014633	0.008112
<i>Vulpia myuros</i>	arc	0.014347	0.008313
<i>Trisetum flavescens</i>	nat	0.014194	0.008347
<i>Carex sylvatica</i>	nat	0.016037	0.008371
<i>Agrostis capillaris</i>	nat	0.046256	0.00864
<i>Microrrhinum minus</i>	arc	0.028759	0.008742
<i>Coreopsis tinctoria</i>	neo	0.048964	0.008765
<i>Viburnum rhytidophyllum</i>	neo	0.027143	0.008817
<i>Allium oleraceum</i>	nat	0.046188	0.009153
<i>Betonica officinalis</i>	nat	0.044946	0.009368
<i>Festuca altissima</i>	nat	0.044946	0.009368
<i>Scrophularia scopolii</i>	nat	0.044946	0.009368
<i>Geranium phaeum</i>	nat	0.026255	0.009481
<i>Cardamine impatiens</i>	nat	0.020667	0.009509
<i>Epilobium ciliatum</i>	neo	0.047405	0.009719
<i>Sanguisorba officinalis</i>	nat	0.023457	0.009831
<i>Corylus avellana</i>	nat	0.045563	0.009914
<i>Thymus vulgaris</i>	neo	0.042159	0.010036
<i>Barbarea vulgaris</i>	nat	0.014609	0.010098
<i>Verbena officinalis</i>	arc	0.008293	0.010127
<i>Moehringia trinervia</i>	nat	0.012279	0.01025
<i>Geranium dissectum</i>	arc	0.006848	0.011047
<i>Holcus lanatus</i>	nat	0.024733	0.011611
<i>Silene armeria</i>	arc	0.040646	0.012129
<i>Melissa officinalis</i>	neo	0.005533	0.012668
<i>Duchesnea indica</i>	neo	0.013337	0.014211
<i>Oenothera biennis</i> agg.	neo	0.049761	0.01548
<i>Mycelis muralis</i>	nat	0.009278	0.015842
<i>Filipendula ulmaria</i>	nat	0.046198	0.01832
<i>Verbascum nigrum</i>	nat	0.030388	0.019418
<i>Berberis thunbergii</i>	neo	0.049937	0.038327
