

Catalogue changement abondance espèces

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Informations disponibles

Cette première version du catalogue donne pour 756 espèces les informations suivantes:

période passées (2005-2011) récentes (2015-2021), données IFN Arbres et certain arbustes exclus

N_past et N_recent Nombre d'occurrence dans les données passées et récentes (14167 placettes passées et 14167 placettes récentes)

N Nombre d'observations totales

Contrib_thermo Contribution de l'espèce brute à la thermophilisation. Plus la valeur absolue est grande, plus l'espèce contribue à la thermophilisation (valeur positive) ou la ralentie (valeur négative)

warm or cold Pourcentage de sylvoecorégion où l'espèce est considérée comme adaptée au climat chaud (par rapport à la moyenne des optima thermiques des autres espèces de la sylvoecorégion)

Topt ClimPlant La température optimale de l'espèce selon ClimPlant

Cartes: Evolution de la fréquence de la présence d'une espèce dans les points de la sylvoecorégion, en pourcentage (0.2 = 20%)

Critères de sélection des espèces: au moins 15 occurrences dans les données passées (2005-2011) et récentes (2015-2021)

species_name	N_past	N_recent	N	contrib_thermo	warm_or_cold	topt_climplant
Rubus ulmifolius	1191	1679	2870	1.0	1.00	12.95
Agrostis capillaris	1154	465	1619	0.9	0.00	6.01
Festuca ovina	524	258	782	0.8	0.00	5.66
Brachypodium pinnatum	1798	1350	3148	0.7	0.00	7.19
Hieracium murorum	879	576	1455	0.4	0.00	7.27
Molinia caerulea	2186	2019	4205	0.3	0.00	6.19
Crataegus monogyna	5736	6277	12013	0.3	1.00	10.19
Solidago virgaurea	630	531	1161	0.3	0.00	5.27
Sambucus nigra	1315	1562	2877	0.3	1.00	10.48
Poa nemoralis	962	773	1735	0.3	0.00	6.26
Rubus idaeus	1516	1277	2793	0.3	0.00	5.75
Avenella flexuosa	3270	2969	6239	0.3	0.00	6.01
Juniperus communis	1422	1215	2637	0.3	0.00	6.63
Luzula pilosa	1054	917	1971	0.2	0.00	4.94
Athyrium filix-femina	1637	1342	2979	0.2	0.00	6.15
Galium mollugo	820	653	1473	0.2	0.00	7.37
Holcus lanatus	905	637	1542	-0.2	1.00	9.85
Calluna vulgaris	2010	1756	3766	0.2	0.00	6.32
Deschampsia cespitosa	1946	1837	3783	0.2	0.00	5.45

species_name	N_past	N_recent	N	contrib_thermo	warm_or_cold	topt_climplant
Potentilla erecta	579	372	951	0.2	0.00	6.95
Glechoma hederacea	814	999	1813	-0.2	0.00	6.70
Rosa arvensis	3270	3038	6308	-0.2	1.00	10.38
Lonicera xylosteum	2351	2235	4586	0.2	0.00	5.87
Cardamine pratensis	381	275	656	0.2	0.00	4.68
Teucrium scorodonia	3311	3222	6533	-0.2	1.00	10.40
Luzula forsteri	319	198	517	-0.2	1.00	12.35
Vicia sepium	1159	930	2089	0.2	0.00	6.55
Epilobium montanum	684	461	1145	0.2	0.00	6.91
Carex pendula	524	708	1232	0.2	1.00	11.20
Anthoxanthum odoratum	242	187	429	0.2	0.00	6.02
Laurus nobilis	63	107	170	0.1	1.00	15.20
Epilobium angustifolium	313	119	432	0.1	0.00	6.46
Asplenium adiantum-nigrum	316	240	556	-0.1	0.98	9.76
Hedera helix	8982	9119	18101	0.1	1.00	10.93
Melampyrum pratense	312	214	526	0.1	0.00	5.65
Thymus serpyllum	115	81	196	0.1	0.00	5.17
Betonica officinalis	623	493	1116	0.1	0.11	7.89
Dryopteris carthusiana	1727	2045	3772	-0.1	0.00	5.85
Hippocrepis emerus	248	229	477	-0.1	1.00	12.63
Ruscus aculeatus	1580	1685	3265	0.1	1.00	13.45
Erica cinerea	933	783	1716	-0.1	1.00	10.19
Lonicera periclymenum	5620	5452	11072	-0.1	1.00	9.95
Veronica chamaedrys	666	549	1215	0.1	0.00	7.29
Daucus carota	31	171	202	0.1	1.00	10.30
Oxalis acetosella	1129	1125	2254	0.1	0.00	6.08
Agrostis canina	200	141	341	0.1	0.00	6.16
Luzula multiflora	202	119	321	0.1	0.00	5.75
Fragaria vesca	2554	2431	4985	0.1	0.00	6.71
Cytisus scoparius	2610	2432	5042	-0.1	0.99	9.88
Rumex acetosella	262	190	452	0.1	0.00	6.75
Pulmonaria longifolia	269	189	458	-0.1	1.00	11.03
Brachypodium sylvaticum	3608	4009	7617	0.1	0.92	9.47
Ranunculus repens	420	371	791	0.1	0.00	6.84
Arabis hirsuta	63	22	85	0.1	0.00	7.10
Dactylis glomerata	1728	1780	3508	0.1	0.46	8.56
Digitalis purpurea	887	893	1780	-0.1	1.00	11.04
Viola reichenbachiana	1916	1582	3498	-0.1	0.95	9.49
Cirsium oleraceum	168	43	211	0.1	0.00	6.05
Anemone nemorosa	1355	1131	2486	0.1	0.00	7.55
Heracleum sphondylium	317	330	647	-0.1	0.00	5.74
Eryngium campestre	178	137	315	-0.1	1.00	11.80
Carex digitata	737	709	1446	0.1	0.00	5.31
Silene dioica	285	248	533	0.1	0.00	6.50
Veronica officinalis	696	625	1321	0.1	0.00	7.12
Luzula sylvatica	641	586	1227	-0.1	1.00	9.72
Euphorbia amygdaloides	1741	1833	3574	-0.1	1.00	10.82
Hypericum pulchrum	989	777	1766	-0.1	0.97	9.64
Crataegus laevigata	1626	1406	3032	-0.1	0.92	9.31
Alchemilla acutiloba	113	54	167	0.1	0.00	5.10
Conopodium majus	218	178	396	-0.1	1.00	10.26
Polygonatum multiflorum	996	946	1942	0.1	0.15	8.04

species_name	N_past	N_recent	N	contrib_thermo	warm_or_cold	topt_climplant
Dioscorea communis	665	625	1290	-0.1	1.00	12.54
Teucrium chamaedrys	771	716	1487	-0.1	1.00	11.56
Rosa canina	2246	1965	4211	0.1	0.76	8.99
Campanula rotundifolia	91	83	174	0.1	0.00	4.97
Senecio hercynicus	45	65	110	-0.1	0.00	4.25
Anemone sylvestris	22	89	111	-0.1	0.00	5.82
Prunella vulgaris	290	429	719	-0.1	0.00	7.29
Clematis vitalba	1502	1567	3069	-0.1	1.00	11.30
Ranunculus acris	38	23	61	0.1	0.00	5.61
Rubus fruticosus	10564	9937	20501	0.1	0.59	8.77
Milium effusum	988	981	1969	-0.1	0.00	5.63
Ulex europaeus	1122	1063	2185	-0.1	1.00	10.14
Vaccinium myrtillus	1201	1155	2356	0.1	0.00	5.07
Viola riviniana	520	383	903	0.1	0.24	8.26
Rumex acetosa	242	228	470	0.1	0.00	6.87
Sambucus racemosa	654	514	1168	0.1	0.00	7.05
Linum suffruticosum	22	17	39	0.0	1.00	15.80
Euonymus europaeus	1548	1703	3251	0.0	0.58	8.75
Dryopteris dilatata	970	830	1800	0.0	0.89	8.99
Phleum pratense	41	22	63	0.0	0.00	7.49
Carex flacca	3030	2887	5917	0.0	1.00	10.25
Sesleria caerulea	165	140	305	0.0	0.00	7.40
Linaria repens	225	139	364	0.0	1.00	9.97
Primula vulgaris	75	76	151	0.0	1.00	10.56
Stellaria nemorum	77	46	123	0.0	0.00	5.52
Ranunculus auricomus	267	290	557	0.0	0.00	6.06
Lathyrus sylvestris	35	26	61	0.0	1.00	12.21
Lathyrus pratensis	113	89	202	0.0	0.00	6.07
Primula veris	281	151	432	0.0	0.00	7.48
Pilosella officinarum	309	269	578	0.0	0.09	7.75
Viscum album	94	159	253	0.0	1.00	9.85
Cardamine amara	13	54	67	0.0	0.00	6.07
Angelica sylvestris	285	288	573	0.0	0.00	5.87
Festuca heterophylla	871	695	1566	0.0	1.00	9.71
Paris quadrifolia	456	439	895	0.0	0.00	5.65
Carex humilis	171	88	259	0.0	0.61	8.88
Agrostis stolonifera	260	122	382	0.0	0.00	7.09
Arctostaphylos uva-ursi	41	25	66	0.0	0.00	4.19
Scrophularia nodosa	467	449	916	0.0	0.00	7.17
Jacobaea vulgaris	123	95	218	0.0	0.00	7.60
Galium palustre	67	48	115	0.0	0.00	6.31
Geranium sylvaticum	77	67	144	0.0	0.00	3.98
Cirsium arvense	300	335	635	0.0	0.00	7.43
Viola alba	137	110	247	0.0	1.00	11.92
Hieracium prenanthoides	18	12	30	0.0	0.00	5.31
Equisetum telmateia	59	55	114	0.0	1.00	10.73
Stachys sylvatica	722	699	1421	0.0	0.00	7.28
Euphorbia dulcis	197	171	368	0.0	1.00	9.98
Carex pallescens	110	41	151	0.0	0.00	6.38
Silene vulgaris	196	102	298	0.0	0.20	8.00
Daphne laureola	882	984	1866	0.0	1.00	11.92
Carex pilulifera	2479	2449	4928	0.0	0.20	8.18

species_name	N_past	N_recent	N	contrib_thermo	warm_or_cold	topt_climplant
Rubus caesius	152	337	489	0.0	0.17	7.83
Festuca rubra	12	2	14	0.0	0.00	6.65
Juncus conglomeratus	372	419	791	0.0	0.13	7.90
Dryopteris filix-mas	2590	2820	5410	0.0	0.00	7.35
Sedum rupestre	10	47	57	0.0	1.00	10.49
Crepis paludosa	35	18	53	0.0	0.00	5.73
Galium aparine	837	925	1762	0.0	0.85	9.20
Bistorta vivipara	6	1	7	0.0	0.00	2.62
Asplenium trichomanes	339	334	673	0.0	0.88	9.34
Ficaria verna	632	700	1332	0.0	0.19	8.18
Hypericum maculatum	28	27	55	0.0	0.00	5.73
Artemisia vulgaris	3	25	28	0.0	0.00	7.07
Phleum alpinum	9	4	13	0.0	0.00	3.69
Lactuca alpina	5	19	24	0.0	0.00	3.06
Achillea millefolium	266	272	538	0.0	0.00	5.64
Genista pilosa	374	283	657	0.0	0.92	9.62
Hieracium bifidum	11	0	11	0.0	0.00	5.62
Buglossoides	30	54	84	0.0	1.00	11.22
purpureocaerulea						
Leucanthemum vulgare	114	82	196	0.0	0.00	6.36
Senecio ovatus	442	365	807	0.0	0.88	8.88
Polygonatum odoratum	161	102	263	0.0	0.00	6.59
Poterium sanguisorba	320	282	602	0.0	1.00	10.74
Geranium robertianum	1596	1611	3207	0.0	0.35	8.49
Stellaria media	79	57	136	0.0	0.00	7.29
Berberis vulgaris	85	93	178	0.0	0.67	8.70
Carduus defloratus	2	21	23	0.0	0.00	5.33
Lathyrus vernus	240	211	451	0.0	0.00	6.28
Neottia ovata	105	94	199	0.0	0.00	6.74
Geum urbanum	1737	2108	3845	0.0	0.11	7.92
Frangula alnus	2350	2407	4757	0.0	0.00	6.40
Vicia cracca	115	98	213	0.0	0.00	6.81
Rubus saxatilis	99	91	190	0.0	0.00	4.19
Ceratocarpus claviculata	60	39	99	0.0	1.00	10.62
Melittis melissophyllum	275	261	536	0.0	1.00	11.71
Rumex sanguineus	286	345	631	0.0	0.75	8.80
Juncus effusus	673	684	1357	0.0	0.51	8.65
Lysimachia nemorum	188	199	387	0.0	0.98	9.45
Hydrocotyle vulgaris	24	12	36	0.0	1.00	10.27
Loncomelos pyrenaicus	287	364	651	0.0	1.00	10.97
Primula elatior	573	665	1238	0.0	0.85	9.21
Viburnum opulus	699	836	1535	0.0	0.00	6.46
Viola palustris	21	5	26	0.0	0.00	4.10
Sanicula europaea	217	274	491	0.0	0.38	8.51
Cirsium palustre	177	117	294	0.0	0.00	6.91
Silene nutans	33	47	80	0.0	0.00	7.09
Digitalis lutea	54	79	133	0.0	1.00	9.71
Ranunculus platanifolius	64	38	102	0.0	0.00	5.64
Carex arenaria	64	32	96	0.0	0.60	8.57
Gentiana lutea	90	82	172	0.0	0.94	8.98
Phragmites australis	86	92	178	0.0	0.00	7.49
Malus sylvestris	440	357	797	0.0	0.70	8.96

species_name	N_past	N_recent	N	contrib_thermo	warm_or_cold	topt_climplant
Briza media	53	36	89	0.0	0.33	8.20
Orthilia secunda	93	79	172	0.0	0.00	4.29
Geranium pratense	6	3	9	0.0	0.00	4.96
Hypericum perforatum	897	800	1697	0.0	0.87	9.25
Helleborus foetidus	863	890	1753	0.0	1.00	11.65
Origanum vulgare	202	177	379	0.0	0.00	7.60
Alliaria petiolata	217	442	659	0.0	0.33	8.41
Bromopsis erecta	234	239	473	0.0	0.92	9.50
Hippocrepis comosa	95	130	225	0.0	1.00	10.06
Lathyrus latifolius	0	7	7	0.0	1.00	11.92
Poa trivialis	279	316	595	0.0	0.19	8.14
Actaea spicata	53	57	110	0.0	0.00	5.50
Equisetum sylvaticum	9	10	19	0.0	0.00	4.52
Campanula persicifolia	50	45	95	0.0	0.00	6.41
Bupleurum falcatum	17	28	45	0.0	1.00	9.95
Campanula rapunculus	6	1	7	0.0	1.00	11.89
Rhamnus alpina	48	47	95	0.0	1.00	10.57
Erigeron canadensis	100	37	137	0.0	0.33	8.52
Senecio vulgaris	39	19	58	0.0	0.24	8.45
Carlina acanthifolia	36	22	58	0.0	1.00	10.31
Hypericum humifusum	93	40	133	0.0	0.97	9.60
Dryas octopetala	3	0	3	0.0	0.00	5.39
Bromopsis ramosa	99	78	177	0.0	1.00	9.81
Cardamine hirsuta	6	8	14	0.0	1.00	11.17
Convallaria majalis	799	780	1579	0.0	0.00	7.12
Knautia arvensis	11	25	36	0.0	0.00	6.93
Carex acutiformis	100	145	245	0.0	0.00	7.65
Galium saxatile	344	279	623	0.0	1.00	9.85
Epilobium hirsutum	52	64	116	0.0	0.92	9.32
Cotinus coggygia	33	34	67	0.0	1.00	10.72
Asparagus officinalis	7	2	9	0.0	0.00	7.38
Vincetoxicum hirundinaria	195	168	363	0.0	0.21	8.15
Campanula rhomboidalis	35	34	69	0.0	0.00	4.72
Sedum album	6	4	10	0.0	1.00	12.03
Galium odoratum	1401	1593	2994	0.0	0.00	7.60
Euphorbia cyparissias	453	427	880	0.0	0.27	8.17
Pteridium aquilinum	4557	4492	9049	0.0	0.80	9.15
Myosotis scorpioides	36	24	60	0.0	0.00	6.92
Arrhenatherum elatius	43	63	106	0.0	0.81	9.21
Moneses uniflora	4	2	6	0.0	0.00	4.01
Alchemilla xanthochlora	0	51	51	0.0	1.00	9.24
Calamagrostis varia	42	60	102	0.0	0.91	9.18
Pimpinella major	23	34	57	0.0	0.81	9.14
Urtica dioica	1375	1529	2904	0.0	0.01	7.64
Ornithogalum umbellatum	6	11	17	0.0	1.00	11.37
Melica uniflora	1071	1132	2203	0.0	1.00	9.92
Holcus mollis	1720	1168	2888	0.0	0.57	8.73
Pulmonaria obscura	0	18	18	0.0	0.00	5.70
Potentilla reptans	131	116	247	0.0	1.00	10.11
Ribes rubrum	298	286	584	0.0	0.00	6.54
Maianthemum bifolium	98	79	177	0.0	0.00	4.76
Filipendula ulmaria	191	195	386	0.0	0.00	5.58

species_name	N_past	N_recent	N	contrib_thermo	warm_or_cold	topt_climplant
Equisetum hyemale	16	7	23	0.0	0.00	4.86
Teucrium montanum	79	62	141	0.0	1.00	10.15
Euphorbia peplus	0	2	2	0.0	1.00	10.42
Luzula campestris	73	33	106	0.0	0.92	9.28
Campanula scheuchzeri	30	13	43	0.0	0.00	6.90
Arum maculatum	1212	1144	2356	0.0	0.80	9.06
Galium rotundifolium	203	237	440	0.0	0.66	8.63
Epipactis atrorubens	24	7	31	0.0	0.00	6.17
Vaccinium uliginosum	4	2	6	0.0	0.00	4.34
Succisa pratensis	42	31	73	0.0	0.00	7.14
Lathyrus aphaca	14	3	17	0.0	1.00	12.92
Galeopsis tetrahit	817	823	1640	0.0	0.10	7.77
Chelidonium majus	38	22	60	0.0	0.15	8.05
Rhamnus cathartica	213	202	415	0.0	0.12	7.81
Galium uliginosum	11	6	17	0.0	0.00	5.06
Adoxa moschatellina	69	67	136	0.0	0.00	6.42
Centaurea scabiosa	5	9	14	0.0	0.00	7.00
Aconitum lycoctonum	17	14	31	0.0	0.00	1.75
Fragaria viridis	23	5	28	0.0	0.00	7.33
Ribes alpinum	936	938	1874	0.0	0.00	6.78
Cruciata laevipes	65	51	116	0.0	1.00	10.10
Cephalanthera longifolia	57	53	110	0.0	0.92	9.31
Anthyllis vulneraria	46	23	69	0.0	0.33	8.00
Lysimachia vulgaris	39	62	101	0.0	0.00	7.05
Galium verum	56	46	102	0.0	0.00	7.56
Alchemilla alpina	20	10	30	0.0	0.00	6.31
Plantago media	41	60	101	0.0	0.00	6.08
Libanotis pyrenaica	0	7	7	0.0	0.00	5.97
Homogyne alpina	26	17	43	0.0	0.00	6.17
Potentilla sterilis	1294	1336	2630	0.0	0.99	9.76
Clinopodium vulgare	224	226	450	0.0	0.73	8.93
Anemone hepatica	308	299	607	0.0	0.00	6.56
Lysimachia arvensis	2	11	13	0.0	1.00	11.30
Trollius europaeus	13	13	26	0.0	0.00	4.14
Pyrus communis	438	360	798	0.0	0.77	9.11
Lathyrus niger	35	17	52	0.0	0.21	7.89
Blechnum spicant	457	494	951	0.0	0.77	8.79
Phalaris arundinacea	49	64	113	0.0	0.00	6.58
Saxifraga rotundifolia	51	39	90	0.0	1.00	9.65
Mentha arvensis	25	19	44	0.0	0.00	6.29
Asplenium scolopendrium	151	177	328	0.0	1.00	9.83
Lythrum salicaria	13	37	50	0.0	0.00	7.76
Anthericum liliago	8	8	16	0.0	0.92	9.51
Hieracium umbellatum	18	12	30	0.0	0.00	6.04
Carex riparia	47	49	96	0.0	0.11	8.00
Aegopodium podagraria	33	59	92	0.0	0.00	6.71
Filipendula vulgaris	53	40	93	0.0	0.00	7.87
Lamium galeobdolon	1748	1721	3469	0.0	0.39	8.44
Rosa pendulina	175	171	346	0.0	0.92	8.94
Orchis mascula	46	41	87	0.0	1.00	9.57
Trifolium pratense	29	17	46	0.0	0.18	7.72
Cardamine flexuosa	160	121	281	0.0	0.89	9.26

species_name	N_past	N_recent	N	contrib_thermo	warm_or_cold	topt_climplant
Pimpinella saxifraga	53	28	81	0.0	0.00	6.70
Danthonia decumbens	111	104	215	0.0	0.08	8.06
Mercurialis perennis	804	869	1673	0.0	0.14	7.87
Ajuga pyramidalis	1	4	5	0.0	0.00	5.97
Equisetum arvense	15	17	32	0.0	0.00	6.26
Hieracium laevigatum	20	8	28	0.0	0.00	5.09
Galium aristatum	3	11	14	0.0	0.00	7.30
Agrimonia eupatoria	156	172	328	0.0	0.52	8.68
Sedum acre	27	9	36	0.0	0.08	7.79
Dactylorhiza maculata	63	80	143	0.0	0.00	6.07
Ribes uva-crispa	189	200	389	0.0	0.17	7.87
Erica tetralix	88	72	160	0.0	1.00	9.54
Lapsana communis	183	204	387	0.0	0.20	8.13
Geum rivale	25	24	49	0.0	0.00	4.58
Scabiosa columbaria	64	45	109	0.0	1.00	9.95
Picris hieracioides	5	5	10	0.0	0.12	7.71
Tussilago farfara	53	64	117	0.0	0.00	6.76
Platanthera bifolia	32	21	53	0.0	0.00	6.51
Ribes nigrum	3	8	11	0.0	0.00	5.32
Serratula tinctoria	39	32	71	0.0	1.00	9.65
Sonchus arvensis	6	1	7	0.0	0.00	7.07
Pyrola rotundifolia	6	7	13	0.0	0.00	4.38
Salvia glutinosa	19	21	40	0.0	0.90	9.59
Lathyrus linifolius	455	243	698	0.0	0.66	8.85
Polygala serpyllifolia	21	6	27	0.0	1.00	9.73
Goodyera repens	44	46	90	0.0	0.00	4.35
Bistorta officinalis	38	33	71	0.0	0.00	5.29
Carex ornithopoda	22	37	59	0.0	0.00	6.28
Polygala vulgaris	55	36	91	0.0	0.89	9.34
Cynosurus cristatus	5	7	12	0.0	0.71	8.57
Calamagrostis arundinacea	24	12	36	0.0	0.00	5.20
Bartsia alpina	1	0	1	0.0	0.00	2.73
Persicaria hydropiper	6	38	44	0.0	0.00	7.38
Sambucus ebulus	14	19	33	0.0	1.00	11.35
Carex elongata	25	18	43	0.0	0.00	6.04
Myosotis sylvatica	114	67	181	0.0	0.87	9.09
Potentilla recta	25	10	35	0.0	0.31	8.66
Genista anglica	21	9	30	0.0	1.00	10.33
Schedonorus giganteus	139	151	290	0.0	0.00	7.37
Arctium lappa	1	8	9	0.0	0.00	7.94
Daphne mezereum	339	316	655	0.0	0.00	5.35
Linaria vulgaris	6	14	20	0.0	0.00	6.37
Nardus stricta	25	10	35	0.0	0.00	6.29
Eupatorium cannabinum	663	563	1226	0.0	0.80	8.98
Inula conyza	12	21	33	0.0	1.00	10.82
Stachys palustris	4	6	10	0.0	0.00	6.76
Carex umbrosa	139	79	218	0.0	0.42	8.48
Solanum dulcamara	209	204	413	0.0	0.09	7.93
Campanula rapunculoides	6	6	12	0.0	0.00	7.07
Viola mirabilis	13	61	74	0.0	0.00	5.70
Moehringia trinervia	562	602	1164	0.0	0.22	8.08
Schedonorus pratensis	2	0	2	0.0	0.00	6.53

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Galium sylvaticum	80	69	149	0.0	0.26	8.14
Buxus sempervirens	722	713	1435	0.0	1.00	10.71
Rumex obtusifolius	96	117	213	0.0	0.19	8.07
Hieracium sabaudum	49	26	75	0.0	0.80	9.13
Carum carvi	10	4	14	0.0	0.00	5.55
Ervilia sylvatica	9	29	38	0.0	0.00	5.39
Genista tinctoria	15	16	31	0.0	0.54	8.51
Veronica montana	248	278	526	0.0	0.93	9.26
Saxifraga aizoides	1	0	1	0.0	0.00	5.20
Iris pseudacorus	98	77	175	0.0	0.90	9.27
Juncus bufonius	24	36	60	0.0	0.28	8.43
Hypericum montanum	118	72	190	0.0	0.67	8.75
Empetrum nigrum	1	0	1	0.0	0.00	3.80
Aquilegia vulgaris	132	137	269	0.0	0.11	7.72
Trifolium rubens	8	10	18	0.0	0.92	9.65
Lysimachia nummularia	103	87	190	0.0	0.18	7.86
Carex muricata	116	127	243	0.0	0.00	7.45
Rosa rubiginosa	17	6	23	0.0	0.73	9.27
Polystichum aculeatum	198	259	457	0.0	1.00	10.57
Impatiens noli-tangere	64	51	115	0.0	0.00	6.68
Calamagrostis epigejos	108	88	196	0.0	0.19	7.98
Melica nutans	93	90	183	0.0	0.00	5.97
Rumex hydrolapathum	7	5	12	0.0	0.00	7.37
Scutellaria galericulata	15	11	26	0.0	0.00	6.24
Poa alpina	2	4	6	0.0	0.00	3.38
Omalotheca sylvatica	4	5	9	0.0	0.00	6.10
Rumex longifolius	1	3	4	0.0	0.00	3.08
Helianthemum nummularium	69	83	152	0.0	0.82	9.10
Chrysosplenium alternifolium	14	8	22	0.0	0.00	5.81
Sanguisorba officinalis	4	6	10	0.0	0.00	5.77
Platanthera chlorantha	15	9	24	0.0	0.22	8.51
Hordelymus europaeus	401	437	838	0.0	0.46	8.27
Trifolium alpestre	6	8	14	0.0	0.00	7.36
Carex remota	498	636	1134	0.0	0.52	8.63
Potentilla micrantha	2	2	4	0.0	1.00	11.41
Ononis spinosa	27	22	49	0.0	0.91	9.68
Symphytum officinale	26	22	48	0.0	0.00	7.62
Cirsium acaulon	11	8	19	0.0	1.00	9.07
Asarum europaeum	261	257	518	0.0	0.00	6.58
Phyteuma nigrum	30	8	38	0.0	0.91	8.87
Myosotis arvensis	3	6	9	0.0	0.00	7.22
Cerastium arvense	11	8	19	0.0	0.00	5.96
Pyrola minor	5	3	8	0.0	0.00	4.84
Valeriana montana	45	45	90	0.0	1.00	9.05
Campanula cochleariifolia	2	5	7	0.0	0.00	5.60
Polystichum lonchitis	50	28	78	0.0	0.00	7.59
Carex pilosa	49	41	90	0.0	0.00	6.94
Cephalanthera damasonium	57	42	99	0.0	1.00	9.32
Luzula nivea	111	127	238	0.0	0.77	8.77
Hypochaeris radicata	12	6	18	0.0	1.00	10.49
Sedum annuum	2	0	2	0.0	0.00	5.49

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Viburnum lantana	1807	1879	3686	0.0	0.98	9.82
Knautia dipsacifolia	157	136	293	0.0	0.00	7.18
Potentilla verna	19	29	48	0.0	0.83	9.45
Carlina vulgaris	114	107	221	0.0	0.68	9.16
Carex sylvatica	3477	3744	7221	0.0	0.24	8.29
Mentha aquatica	25	32	57	0.0	0.96	9.32
Epilobium palustre	4	4	8	0.0	0.00	4.85
Clematis recta	5	0	5	0.0	0.00	7.99
Lychnis flos-cuculi	11	15	26	0.0	0.00	7.33
Luzula luzulina	20	24	44	0.0	0.44	8.06
Antennaria dioica	0	1	1	0.0	0.00	4.47
Cystopteris fragilis	21	10	31	0.0	0.00	6.30
Viola canina	10	14	24	0.0	0.00	6.69
Lotus corniculatus	100	109	209	0.0	0.93	9.38
Phyteuma spicatum	337	291	628	0.0	0.47	8.31
Cypripedium calceolus	2	0	2	0.0	0.00	5.77
Chrysosplenium oppositifolium	65	76	141	0.0	1.00	9.81
Asplenium ruta-muraria	6	15	21	0.0	1.00	9.52
Campanula cervicaria	2	0	2	0.0	0.00	5.65
Campanula patula	16	10	26	0.0	0.00	5.79
Lycopus europaeus	67	98	165	0.0	0.41	8.51
Malva sylvestris	2	7	9	0.0	1.00	12.08
Dianthus superbus	12	7	19	0.0	0.00	5.14
Muscari botryoides	3	0	3	0.0	1.00	10.72
Petasites albus	36	39	75	0.0	0.62	8.27
Cardamine pentaphyllos	51	38	89	0.0	0.00	7.02
Hylotelephium telephium	19	22	41	0.0	0.00	7.11
Vinca minor	221	231	452	0.0	1.00	10.13
Polygala comosa	3	0	3	0.0	0.00	6.86
Dianthus carthusianorum	5	3	8	0.0	1.00	9.67
Cephalanthera rubra	38	26	64	0.0	0.76	9.17
Myosotis stricta	0	1	1	0.0	0.00	6.46
Vaccinium vitis-idaea	39	38	77	0.0	0.00	4.35
Juncus tenuis	16	22	38	0.0	0.65	8.69
Achillea macrophylla	0	1	1	0.0	0.00	4.34
Arctium nemorosum	59	83	142	0.0	0.53	8.64
Carex vesicaria	1	1	2	0.0	0.00	5.45
Campanula glomerata	11	7	18	0.0	0.00	6.86
Bromopsis benekenii	109	147	256	0.0	0.00	7.29
Campanula latifolia	2	2	4	0.0	0.00	6.36
Cirsium vulgare	7	28	35	0.0	0.14	7.97
Cotoneaster integerrimus	28	23	51	0.0	0.14	7.67
Neottia nidus-avis	281	253	534	0.0	0.37	8.39
Viola biflora	6	7	13	0.0	0.00	4.53
Scrophularia auriculata	0	1	1	0.0	1.00	13.16
Polygonatum verticillatum	331	359	690	0.0	0.00	6.80
Cardamine impatiens	60	63	123	0.0	0.21	7.87
Hypericum hirsutum	310	427	737	0.0	0.00	7.49
Asplenium septentrionale	5	6	11	0.0	0.00	7.31
Valeriana dioica	26	6	32	0.0	0.85	8.93
Circaea alpina	5	3	8	0.0	0.00	5.34

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<i>Viola hirta</i>	211	182	393	0.0	0.00	7.11
<i>Coronilla minima</i>	76	77	153	0.0	1.00	12.63
<i>Chenopodium album</i>	0	1	1	0.0	1.00	11.49
<i>Torilis japonica</i>	46	61	107	0.0	0.56	8.78
<i>Stellaria holostea</i>	1307	1368	2675	0.0	0.00	7.01
<i>Luzula luzuloides</i>	377	298	675	0.0	0.18	7.76
<i>Dipsacus pilosus</i>	7	11	18	0.0	0.46	8.52
<i>Valeriana tripteris</i>	28	14	42	0.0	1.00	7.99
<i>Lactuca muralis</i>	622	622	1244	0.0	0.62	8.76
<i>Trifolium arvense</i>	9	9	18	0.0	0.33	8.35
<i>Stachys arvensis</i>	1	0	1	0.0	1.00	12.21
<i>Daphne alpina</i>	0	1	1	0.0	1.00	11.11
<i>Inula salicina</i>	1	2	3	0.0	0.00	6.88
<i>Melica ciliata</i>	9	9	18	0.0	1.00	11.03
<i>Carex echinata</i>	2	6	8	0.0	0.00	6.39
<i>Calamagrostis canescens</i>	1	0	1	0.0	0.00	5.28
<i>Euphorbia esula</i>	2	1	3	0.0	0.00	6.71
<i>Carex caryophylla</i>	10	6	16	0.0	0.12	8.27
<i>Trifolium repens</i>	4	17	21	0.0	0.20	7.88
<i>Polygaloides chamaebuxus</i>	21	34	55	0.0	0.62	8.18
<i>Silene latifolia</i>	4	3	7	0.0	0.00	6.34
<i>Anemone ranunculoides</i>	39	13	52	0.0	0.00	6.94
<i>Ligustrum vulgare</i>	3240	3278	6518	0.0	1.00	9.93
<i>Jasione montana</i>	22	12	34	0.0	0.20	8.14
<i>Pinguicula vulgaris</i>	0	1	1	0.0	0.00	5.25
<i>Bellidiastrum michelii</i>	14	17	31	0.0	0.00	7.22
<i>Gymnocarpium dryopteris</i>	31	35	66	0.0	0.00	4.63
<i>Lotus pedunculatus</i>	48	44	92	0.0	1.00	10.53
<i>Knautia arvernensis</i>	2	9	11	0.0	0.80	9.29
<i>Veronica urticifolia</i>	69	69	138	0.0	0.38	7.77
<i>Equisetum palustre</i>	2	0	2	0.0	0.00	5.39
<i>Laserpitium latifolium</i>	41	47	88	0.0	0.71	8.80
<i>Carlina acaulis</i>	31	22	53	0.0	0.44	7.72
<i>Bromus racemosus</i>	11	1	12	0.0	1.00	9.83
<i>Juncus inflexus</i>	3	1	4	0.0	1.00	10.66
<i>Phleum nodosum</i>	0	2	2	0.0	1.00	10.99
<i>Melampyrum nemorosum</i>	39	22	61	0.0	0.00	6.20
<i>Oxalis corniculata</i>	3	2	5	0.0	1.00	11.96
<i>Artemisia campestris</i>	2	0	2	0.0	0.00	7.53
<i>Cruciata glabra</i>	41	52	93	0.0	0.93	9.87
<i>Genista germanica</i>	13	8	21	0.0	0.50	8.57
<i>Saxifraga granulata</i>	19	12	31	0.0	1.00	9.54
<i>Globularia cordifolia</i>	27	18	45	0.0	1.00	9.51
<i>Ranunculus bulbosus</i>	138	152	290	0.0	0.96	9.80
<i>Thesium alpinum</i>	2	1	3	0.0	1.00	8.45
<i>Symphytum tuberosum</i>	23	26	49	0.0	1.00	11.56
<i>Colchicum autumnale</i>	0	3	3	0.0	1.00	10.07
<i>Elymus caninus</i>	34	30	64	0.0	0.00	6.18
<i>Potentilla alba</i>	2	0	2	0.0	0.00	7.37
<i>Trifolium aureum</i>	3	0	3	0.0	0.00	6.49
<i>Geranium sanguineum</i>	26	18	44	0.0	0.68	8.99
<i>Ranunculus flammula</i>	18	22	40	0.0	0.00	7.31

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Epilobium ciliatum	1	2	3	0.0	0.00	4.49
Alyssum alyssoides	13	3	16	0.0	1.00	9.83
Turritis glabra	3	2	5	0.0	0.00	7.25
Carex rostrata	2	5	7	0.0	0.00	5.45
Lamium purpureum	46	33	79	0.0	0.26	8.25
Papaver rhoeas	1	0	1	0.0	1.00	11.10
Veronica beccabunga	9	9	18	0.0	0.22	7.79
Carex canescens	2	1	3	0.0	0.00	5.04
Alchemilla glaucescens	0	1	1	0.0	0.00	6.32
Geranium pyrenaicum	0	3	3	0.0	1.00	9.52
Carex brizoides	126	148	274	0.0	0.29	8.12
Verbascum thapsus	8	13	21	0.0	0.00	7.33
Sonchus oleraceus	1	0	1	0.0	0.00	8.42
Petasites hybridus	3	4	7	0.0	1.00	9.43
Corydalis solida	6	10	16	0.0	0.00	7.40
Myosoton aquaticum	4	1	5	0.0	0.00	7.59
Solanum nigrum	0	11	11	0.0	0.10	8.21
Lamium album	9	8	17	0.0	0.00	6.61
Trifolium medium	11	17	28	0.0	0.00	6.28
Veronica hederifolia	0	2	2	0.0	1.00	10.63
Ajuga reptans	1170	1138	2308	0.0	0.19	8.07
Circaea lutetiana	549	676	1225	0.0	0.37	8.40
Carex divulsa	8	3	11	0.0	1.00	10.24
Solidago gigantea	11	5	16	0.0	0.20	7.71
Adenostyles alliariae	83	79	162	0.0	0.00	7.53
Plantago lanceolata	165	157	322	0.0	0.98	9.87
Prunella laciniata	21	8	29	0.0	1.00	11.64
Argentina anserina	2	0	2	0.0	0.00	6.80
Galeopsis ladanum	5	7	12	0.0	0.00	6.86
Juncus filiformis	1	0	1	0.0	0.00	3.80
Cervaria rivini	28	18	46	0.0	0.81	9.52
Hypericum tetrapterum	5	5	10	0.0	1.00	9.95
Convolvulus sepium	89	74	163	0.0	0.34	8.34
Huperzia selago	0	2	2	0.0	0.00	4.21
Carex paniculata	24	26	50	0.0	0.89	9.03
Campanula trachelium	143	126	269	0.0	0.69	8.59
Poa pratensis	5	4	9	0.0	0.00	6.20
Bellis perennis	25	26	51	0.0	0.95	9.86
Anacamptis pyramidalis	8	8	16	0.0	1.00	10.81
Geranium lucidum	1	7	8	0.0	1.00	12.64
Parnassia palustris	1	1	2	0.0	0.00	6.01
Tanacetum vulgare	1	3	4	0.0	0.00	5.88
Calamagrostis villosa	0	1	1	0.0	0.00	6.65
Coronilla varia	17	15	32	0.0	0.64	8.96
Gentianopsis ciliata	3	1	4	0.0	1.00	10.08
Leontodon hispidus	4	7	11	0.0	0.40	8.01
Doronicum austriacum	14	11	25	0.0	0.00	7.23
Cardamine bulbifera	1	0	1	0.0	1.00	8.63
Draba muralis	0	2	2	0.0	1.00	10.68
Lonicera nigra	280	299	579	0.0	0.00	7.42
Coronilla coronata	10	11	21	0.0	1.00	9.26
Carex montana	356	361	717	0.0	0.00	7.61

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Rumex arifolius	9	9	18	0.0	1.00	8.68
Echinops ritro	28	30	58	0.0	0.00	7.52
Astragalus glycyphyllos	13	5	18	0.0	0.00	7.61
Cyanus triumfettii	0	1	1	0.0	1.00	9.75
Dictamnus albus	1	1	2	0.0	1.00	10.66
Verbascum lychnitis	1	4	5	0.0	0.00	7.31
Anthriscus caucalis	1	0	1	0.0	1.00	10.42
Aruncus dioicus	28	19	47	0.0	0.75	8.35
Comarum palustre	3	5	8	0.0	0.00	4.61
Veronica serpyllifolia	3	0	3	0.0	0.00	6.78
Blitum bonus-henricus	2	1	3	0.0	1.00	9.40
Carex alba	132	144	276	0.0	0.50	8.09
Pyrola chlorantha	2	1	3	0.0	0.00	5.12
Phegopteris connectilis	6	10	16	0.0	0.00	5.02
Cardamine heptaphylla	187	203	390	0.0	0.50	8.38
Carex panicea	7	6	13	0.0	0.00	7.03
Arabis alpina	8	3	11	0.0	0.33	8.11
Xanthoselinum alsaticum	2	1	3	0.0	1.00	8.46
Medicago lupulina	24	16	40	0.0	0.63	8.73
Centaurea jacea	9	11	20	0.0	0.00	6.56
Veronica alpina	0	3	3	0.0	0.00	2.58
Buphthalmum salicifolium	5	3	8	0.0	0.00	7.49
Lycopodium annotinum	3	2	5	0.0	0.00	4.06
Humulus lupulus	41	52	93	0.0	0.00	7.21
Veronica spicata	1	0	1	0.0	0.00	6.48
Cyanus montanus	29	28	57	0.0	0.22	7.67
Anthriscus sylvestris	38	47	85	0.0	0.00	6.13
Rhinanthus minor	2	1	3	0.0	0.00	6.62
Rumex conglomeratus	0	1	1	0.0	1.00	10.83
Carex leporina	10	6	16	0.0	0.00	6.67
Barbarea vulgaris	1	3	4	0.0	0.00	7.16
Polypodium vulgare	637	588	1225	0.0	0.12	7.95
Anisantha sterilis	3	0	3	0.0	1.00	9.82
Conium maculatum	1	0	1	0.0	1.00	9.96
Epilobium tetragonum	0	8	8	0.0	1.00	9.15
Astragalus danicus	1	0	1	0.0	0.00	4.07
Tanacetum parthenium	0	1	1	0.0	1.00	11.12
Aconitum anthora	1	0	1	0.0	0.00	6.92
Bromus hordeaceus	0	1	1	0.0	1.00	9.43
Polygonum aviculare	4	6	10	0.0	0.14	7.74
Gentiana asclepiadea	3	1	4	0.0	0.00	6.80
Thalictrum minus	3	3	6	0.0	0.00	7.56
Persicaria maculosa	16	15	31	0.0	0.67	8.40
Trifolium montanum	5	3	8	0.0	0.00	7.13
Drymochloa sylvatica	292	297	589	0.0	0.00	6.01
Senecio sylvaticus	0	9	9	0.0	1.00	8.73
Vaccinium oxycoccos	3	0	3	0.0	0.00	4.64
Viola odorata	23	14	37	0.0	0.72	8.98
Orchis purpurea	23	25	48	0.0	1.00	10.01
Ajuga genevensis	6	8	14	0.0	0.57	8.21
Polygala amarella	2	2	4	0.0	0.00	4.89
Euphrasia stricta	0	1	1	0.0	0.00	7.04

species_name	N_past	N_recent	N	contrib_thermo	warm_or_cold	topt_climplant
Eriophorum vaginatum	1	2	3	0.0	0.00	4.57
Epilobium parviflorum	4	6	10	0.0	0.86	9.26
Viola tricolor	3	2	5	0.0	0.00	5.99
Euphorbia helioscopia	1	0	1	0.0	1.00	9.90
Echium vulgare	11	8	19	0.0	0.62	8.56
Alopecurus pratensis	0	3	3	0.0	0.00	6.45
Carex lepidocarpa	12	4	16	0.0	0.64	8.66
Microthlaspi perfoliatum	1	0	1	0.0	1.00	11.51
Sparganium erectum	0	2	2	0.0	0.00	7.39
Solidago canadensis	12	12	24	0.0	0.60	8.29
Lactuca serriola	3	4	7	0.0	1.00	9.67
Chaerophyllum temulum	4	3	7	0.0	1.00	9.91
Draba aizoides	1	1	2	0.0	0.00	6.98
Digitalis grandiflora	13	11	24	0.0	0.50	7.82
Juncus compressus	2	0	2	0.0	0.00	7.35
Vicia tenuifolia	23	26	49	0.0	0.88	9.10
Pulicaria dysenterica	2	4	6	0.0	1.00	11.70
Puccinellia distans	1	0	1	0.0	0.00	6.63
Adenostyles alpina	6	8	14	0.0	0.00	7.54
Chaerophyllum hirsutum	23	21	44	0.0	0.80	8.57
Salvia pratensis	10	7	17	0.0	0.50	8.71
Draba verna	1	1	2	0.0	1.00	10.01
Galium glaucum	5	4	9	0.0	0.83	9.56
Filago arvensis	1	0	1	0.0	0.00	7.24
Glyceria fluitans	7	36	43	0.0	0.50	8.26
Lamium maculatum	74	112	186	0.0	0.25	8.29
Senecio viscosus	3	1	4	0.0	1.00	9.31
Oreopteris limbosperma	4	6	10	0.0	0.40	8.41
Polystichum braunii	1	0	1	0.0	0.00	6.09
Gagea lutea	0	2	2	0.0	0.00	6.98
Allium ursinum	58	54	112	0.0	0.78	8.97
Epipactis helleborine	141	116	257	0.0	0.50	8.56
Thymus praecox	0	1	1	0.0	0.00	6.92
Juncus bulbosus	1	1	2	0.0	0.00	7.52
Montia fontana	1	0	1	0.0	0.00	6.29
Persicaria lapathifolia	2	3	5	0.0	0.40	8.14
Lonicera alpigena	56	46	102	0.0	0.40	7.75
Tanacetum corymbosum	13	10	23	0.0	0.14	8.21
Trifolium campestre	5	2	7	0.0	1.00	11.24
Calla palustris	0	2	2	0.0	0.00	4.75
Poa chaixii	329	309	638	0.0	0.28	8.12
Lolium perenne	1	1	2	0.0	0.50	9.42
Veronica persica	0	1	1	0.0	1.00	10.18
Epilobium lanceolatum	4	4	8	0.0	1.00	11.69
Scorzonera humilis	2	1	3	0.0	0.00	7.68
Carex hirta	19	39	58	0.0	0.10	7.77
Tragopogon pratensis	5	3	8	0.0	0.29	7.91
Cerastium glomeratum	2	1	3	0.0	1.00	10.17
Monotropa hypopitys	8	7	15	0.0	0.00	7.39
Andromeda polifolia	1	0	1	0.0	0.00	3.24
Oreoselinum nigrum	1	1	2	0.0	0.00	7.82
Melilotus officinalis	3	1	4	0.0	0.00	7.48

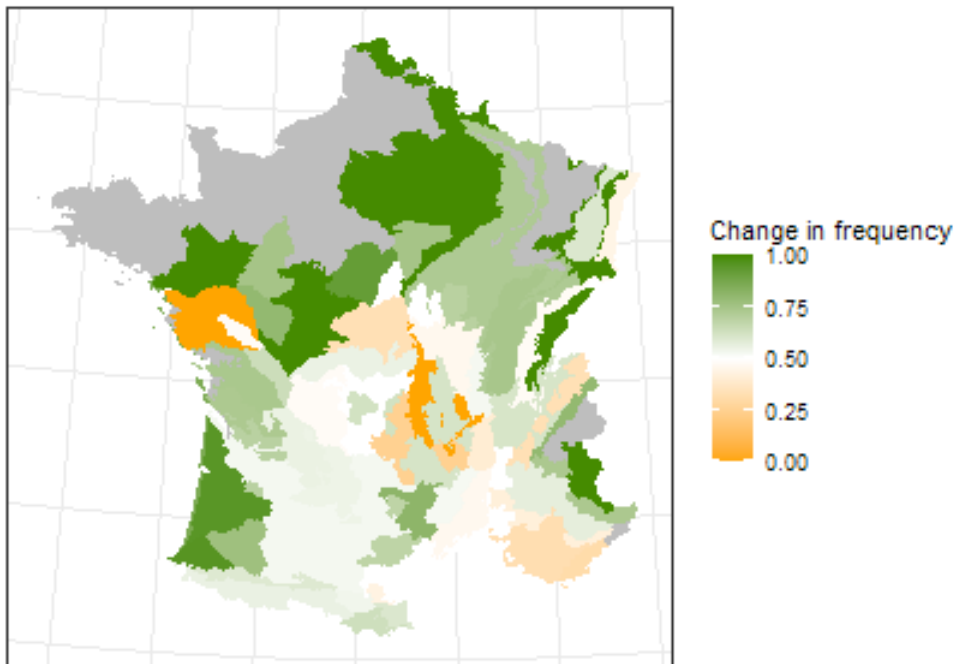
species_name	N_past	N_recent	N	contrib_thermo	warm_or_cold	topt_climplant
Gymnocarpium robertianum	26	26	52	0.0	0.46	8.09
Rhododendron hirsutum	1	0	1	0.0	0.00	6.00
Odontites vernus	0	1	1	0.0	0.00	8.10
Aethusa cynapium	29	13	42	0.0	0.00	8.04
Juncus acutiflorus	4	1	5	0.0	1.00	9.92
Hyacinthoides non-scripta	272	283	555	0.0	1.00	10.14
Plantago major	68	103	171	0.0	0.85	9.12
Carex demissa	0	1	1	0.0	0.00	7.64
Helleborus niger	1	0	1	0.0	0.00	8.13
Carex flava	0	1	1	0.0	0.00	7.15
Carex vulpina	3	1	4	0.0	0.00	8.81
Euphorbia angulata	4	1	5	0.0	0.50	8.91
Pulmonaria officinalis	55	5	60	0.0	0.40	8.31
Tripleurospermum inodorum	1	2	3	0.0	0.00	6.20
Centaureum erythraea	14	13	27	0.0	0.80	9.20
Anthericum ramosum	8	6	14	0.0	0.14	8.02
Bromus arvensis	0	2	2	0.0	0.00	7.97
Apera spica-venti	1	0	1	0.0	0.00	6.26
Cynoglossum germanicum	1	2	3	0.0	1.00	9.44
Sonchus asper	0	2	2	0.0	1.00	9.59
Fallopia convolvulus	0	1	1	0.0	0.00	7.76
Dianthus deltoides	0	1	1	0.0	0.00	6.32
Stellaria alsine	1	0	1	0.0	0.00	7.10
Galium album	15	10	25	0.0	0.00	7.61
Scirpus sylvaticus	8	14	22	0.0	0.00	6.84
Malva moschata	2	4	6	0.0	1.00	9.24
Verbascum nigrum	24	8	32	0.0	0.00	7.20
Allium vineale	2	3	5	0.0	1.00	10.28
Carex diandra	0	1	1	0.0	0.00	5.70
Cyclamen purpurascens	11	7	18	0.0	0.50	8.49
Cirsium erisithales	7	3	10	0.0	0.00	7.34
Stachys recta	33	34	67	0.0	0.47	8.68
Mentha longifolia	2	5	7	0.0	1.00	8.72
Artemisia absinthium	0	1	1	0.0	0.00	7.42
Stellaria graminea	16	17	33	0.0	0.00	6.14
Corynephorus canescens	0	1	1	0.0	1.00	9.57
Eriophorum angustifolium	1	0	1	0.0	0.00	4.95
Rumex crispus	0	1	1	0.0	0.00	8.42
Fallopia dumetorum	0	1	1	0.0	0.00	7.74
Astrantia major	23	16	39	0.0	0.70	8.20
Bothriochloa ischaemum	1	0	1	0.0	1.00	10.64
Dactylorhiza sambucina	2	1	3	0.0	1.00	9.89
Valeriana officinalis	253	205	458	0.0	0.00	6.83
Stellaria palustris	1	0	1	0.0	0.00	6.18
Prenanthes purpurea	401	410	811	0.0	0.32	7.96
Amaranthus retroflexus	1	0	1	0.0	1.00	9.01
Lamium amplexicaule	1	0	1	0.0	1.00	9.44
Cynoglossum officinale	0	3	3	0.0	0.00	7.93
Convolvulus arvensis	2	2	4	0.0	0.67	8.58
Lunaria rediviva	9	6	15	0.0	0.57	8.17
Teesdalia nudicaulis	1	1	2	0.0	1.00	9.70
Typha latifolia	0	2	2	0.0	0.50	8.04

species_name	N_past	N_recent	N	contrib_thermo	warm_or_cold	topt_climplant
Corydalis cava	11	2	13	0.0	0.29	8.26
Hieracium racemosum	0	1	1	0.0	1.00	10.79
Dianthus armeria	3	3	6	0.0	1.00	9.34
Astragalus sempervirens	4	1	5	0.0	0.33	8.00
Vicia sativa	1	2	3	0.0	0.67	8.46
Lathraea squamaria	2	5	7	0.0	0.00	7.53
Physalis alkekengi	0	1	1	0.0	1.00	10.09
Potentilla crantzii	1	0	1	0.0	0.00	4.82
Avenula pubescens	1	0	1	0.0	0.00	7.04
Datura stramonium	1	0	1	0.0	1.00	9.60
Fragaria moschata	1	0	1	0.0	0.00	6.98
Scilla bifolia	70	80	150	0.0	1.00	9.24
Trichophorum cespitosum	1	0	1	0.0	0.00	4.99
Genista sagittalis	36	28	64	0.0	0.95	9.71
Melampyrum cristatum	7	3	10	0.0	0.00	7.00
Matricaria chamomilla	0	1	1	0.0	1.00	8.46
Veronica anagallis-aquatica	0	1	1	0.0	1.00	9.69
Lipandra polysperma	1	1	2	0.0	0.50	8.07
Helictochloa pratensis	2	0	2	0.0	0.50	8.63
Sisymbrium officinale	0	1	1	0.0	1.00	9.55
Phelipanche purpurea	0	1	1	0.0	1.00	10.15
Thelypteris palustris	1	1	2	0.0	0.00	7.25
Galanthus nivalis	5	6	11	0.0	1.00	10.30
Asplenium viride	41	46	87	0.0	0.00	6.77
Thlaspi arvense	0	1	1	0.0	0.00	6.64
Geranium pusillum	0	1	1	0.0	0.00	8.53
Carex disticha	2	1	3	0.0	0.00	7.77
Oxalis dillenii	1	0	1	0.0	1.00	8.98
Ornithopus perpusillus	1	0	1	0.0	1.00	9.82
Drymocallis rupestris	1	0	1	0.0	1.00	8.69
Ranunculus lanuginosus	18	19	37	0.0	1.00	9.20
Cyanus segetum	0	1	1	0.0	0.00	6.96
Equisetum pratense	5	3	8	0.0	0.00	3.80
Lilium martagon	39	38	77	0.0	0.00	6.79
Carex spicata	0	2	2	0.0	1.00	8.64
Trisetum flavescens	1	1	2	0.0	0.50	9.26
Poa palustris	0	1	1	0.0	0.00	4.75
Trifolium hybridum	0	1	1	0.0	0.00	7.33
Leucojum vernum	8	9	17	0.0	0.57	8.55
Caltha palustris	52	56	108	0.0	0.00	5.38
Vicia dumetorum	13	6	19	0.0	0.36	8.16
Rubus hirtus	3	0	3	0.0	0.00	8.77
Geranium molle	4	4	8	0.0	1.00	10.82
Aposeris foetida	2	3	5	0.0	1.00	8.01
Melampyrum sylvaticum	47	58	105	0.0	0.00	3.14
Crepis capillaris	0	2	2	0.0	1.00	9.81
Galium pumilum	16	10	26	0.0	0.33	8.25
Impatiens parviflora	1	6	7	0.0	0.60	8.12
Thysselinum palustre	2	2	4	0.0	0.00	5.36
Lithospermum officinale	0	3	3	0.0	0.00	8.35
Potentilla heptaphylla	0	1	1	0.0	1.00	8.77
Elytrigia repens	1	0	1	0.0	0.00	7.28

species_name	N_past	N_recent	N	contrib_thermo	warm_or_cold	topt_climplant
<i>Clinopodium acinos</i>	1	2	3	0.0	0.00	8.31
<i>Ranunculus monspeliacus</i>	1	0	1	0.0	0.00	9.33
<i>Thymus pulegioides</i>	0	1	1	0.0	0.00	8.32
<i>Arabidopsis arenosa</i>	1	2	3	0.0	0.00	6.65
<i>Juncus squarrosus</i>	1	1	2	0.0	0.00	8.85
<i>Crepis biennis</i>	2	0	2	0.0	0.50	8.11
<i>Fumaria officinalis</i>	0	1	1	0.0	1.00	9.34
<i>Sedum sexangulare</i>	0	1	1	0.0	1.00	9.33
<i>Thalictrum aquilegiifolium</i>	14	19	33	0.0	0.00	7.49
<i>Cerastium fontanum</i>	2	2	4	0.0	0.00	6.34
<i>Galium boreale</i>	1	1	2	0.0	0.00	4.54
<i>Streptopus amplexifolius</i>	1	1	2	0.0	1.00	8.09

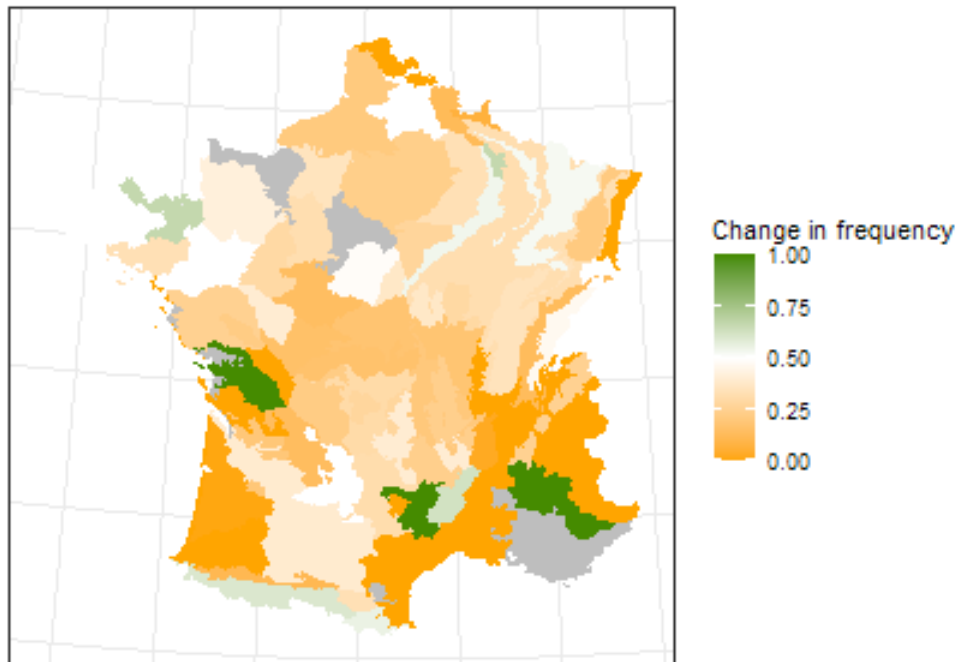
Rubus ulmifolius

Topt = 12.95 Ntot = 2870



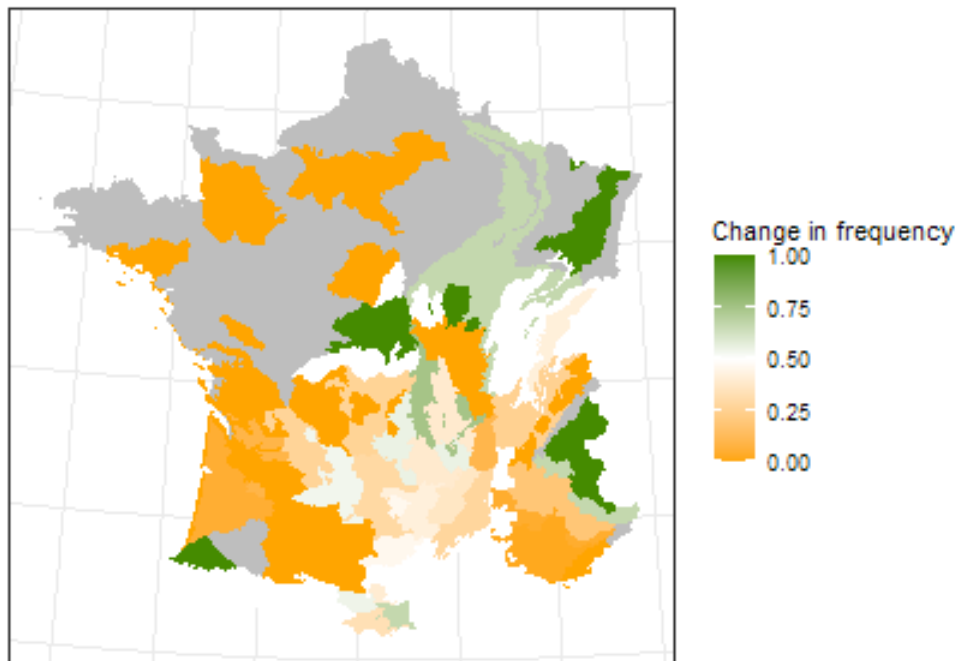
Agrostis capillaris

Topt = 6.01 Ntot = 1619



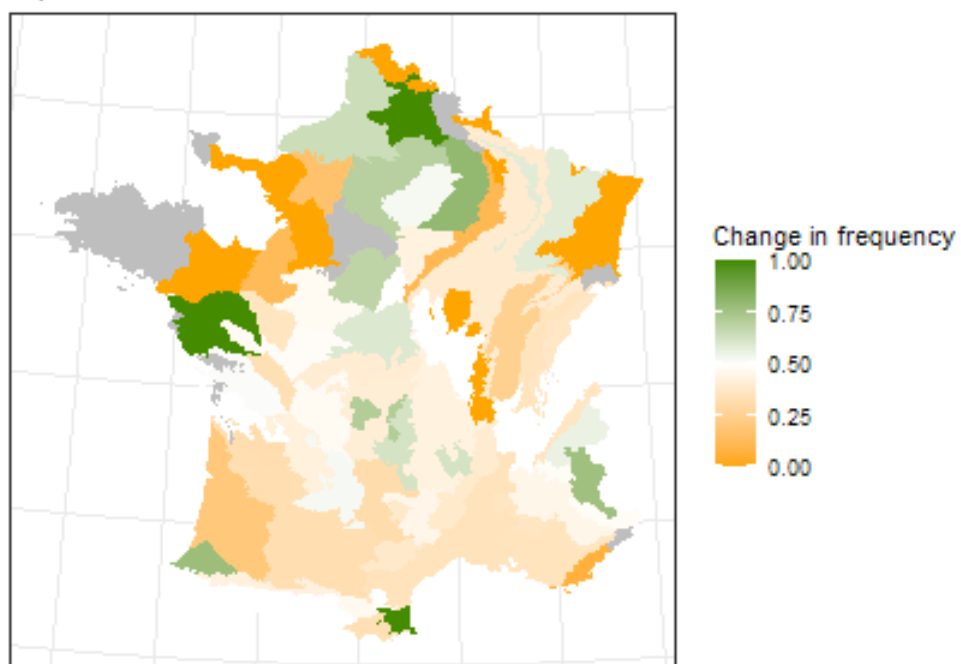
Festuca ovina

Topt = 5.66 Ntot = 782



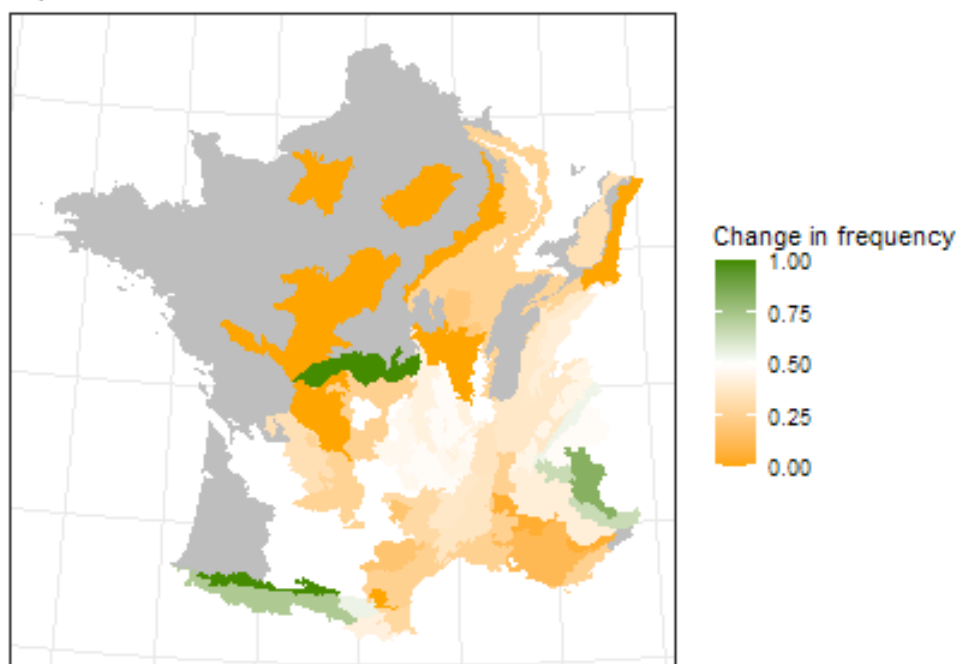
Brachypodium pinnatum

Topt = 7.19 Ntot = 3148



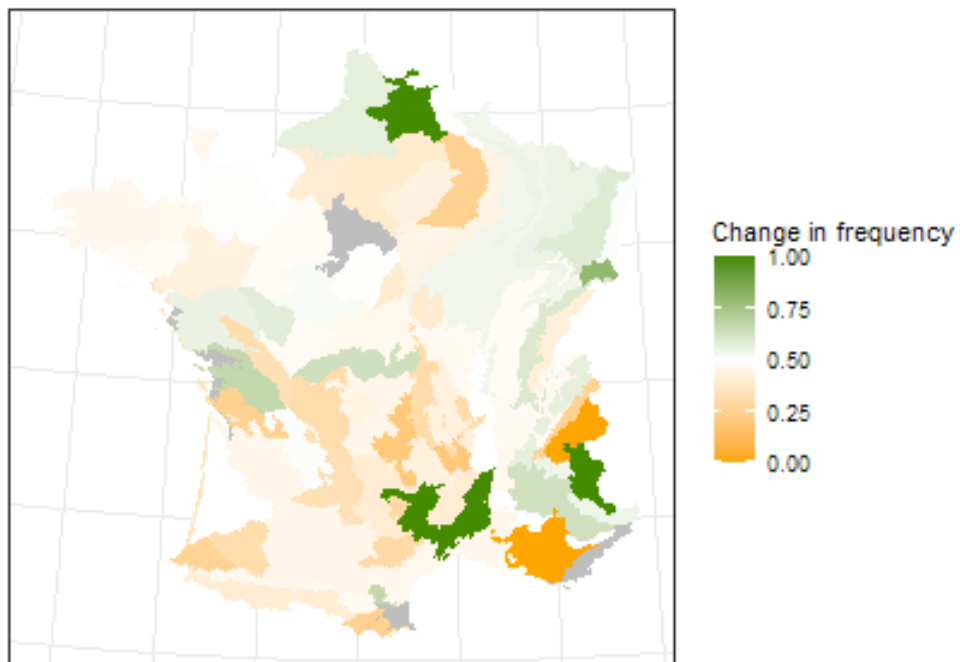
Hieracium murorum

Topt = 7.27 Ntot = 1455



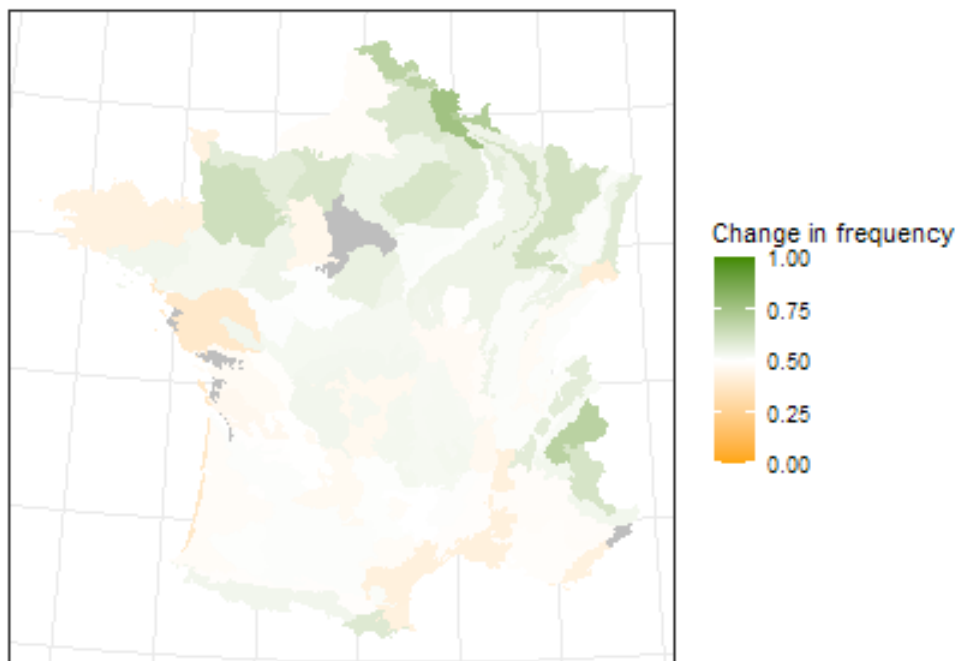
Molinia caerulea

Topt = 6.19 Ntot = 4205



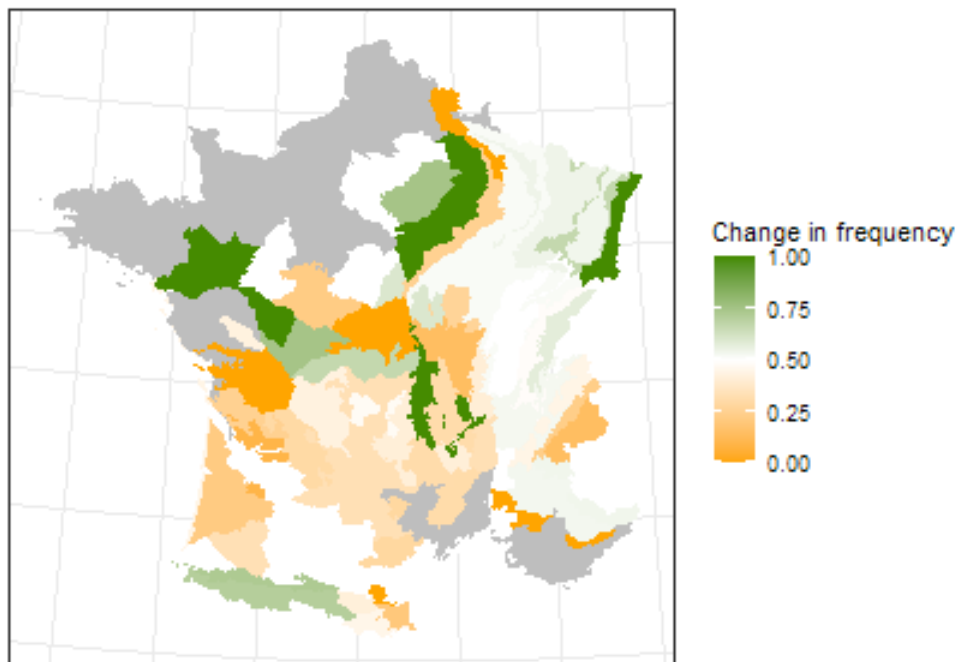
Crataegus monogyna

Topt = 10.19 Ntot = 12013



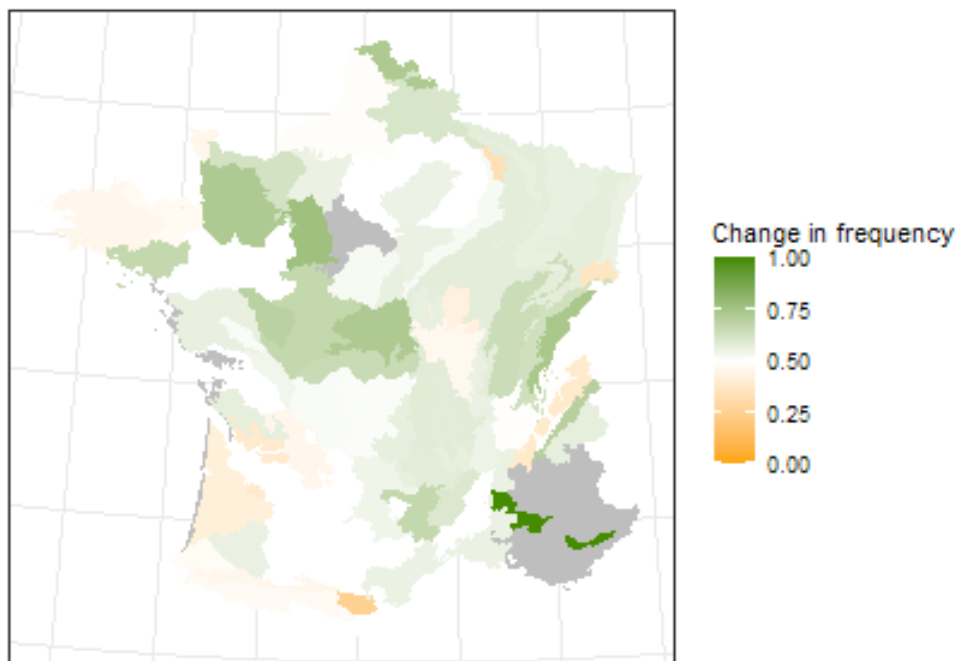
Solidago virgaurea

Topt = 5.27 Ntot = 1161



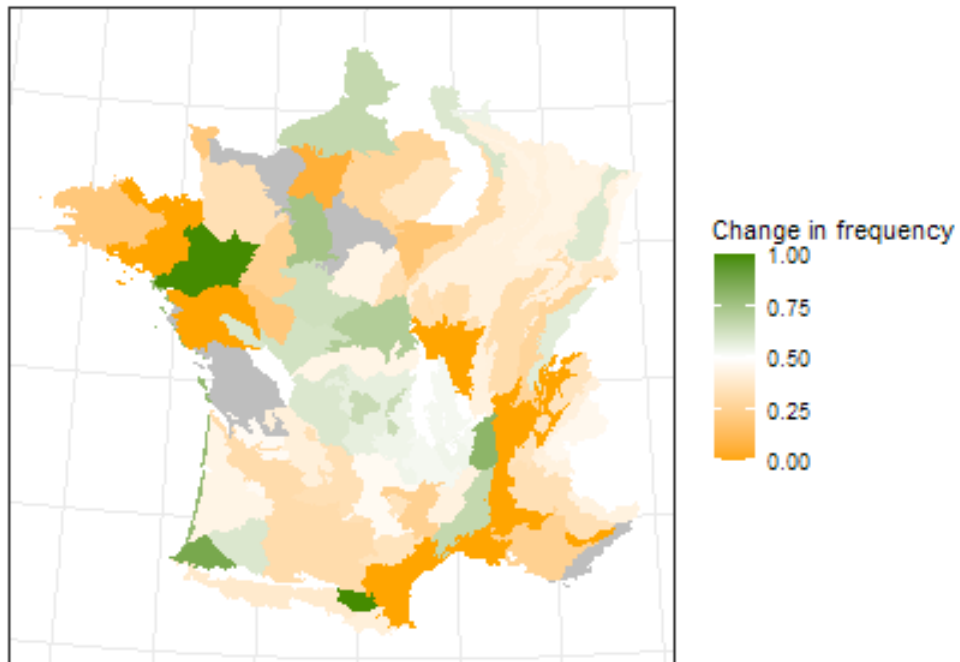
Sambucus nigra

Topt = 10.48 Ntot = 2877



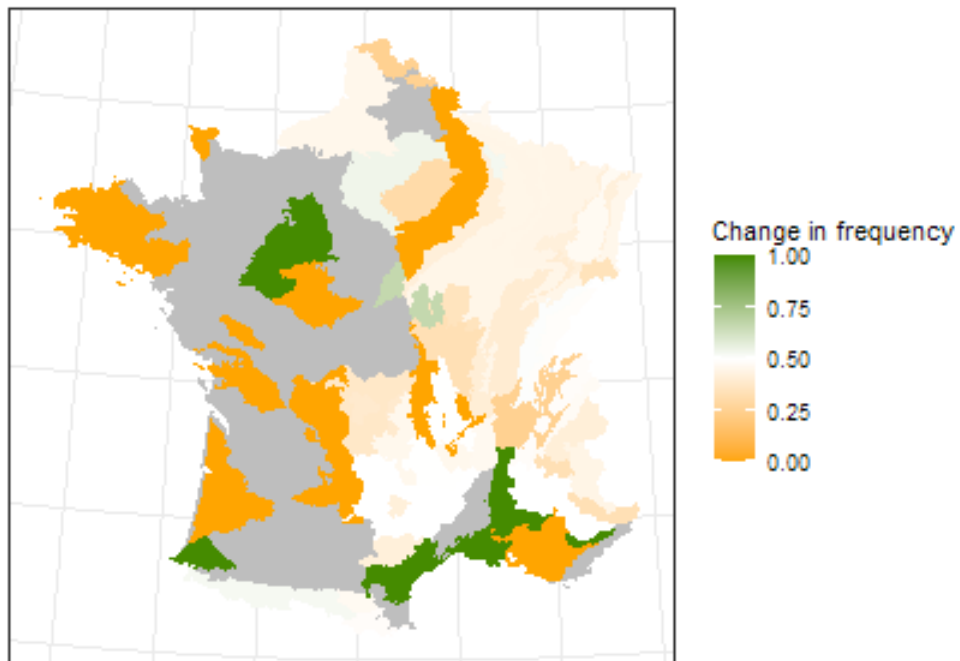
Poa nemoralis

Topt = 6.26 Ntot = 1735



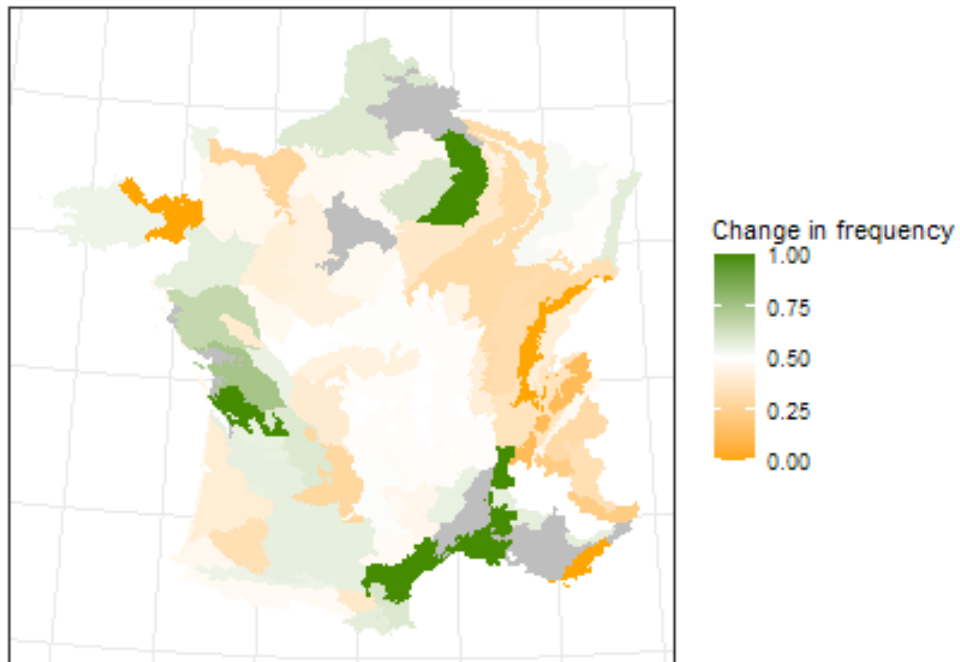
Rubus idaeus

Topt = 5.75 Ntot = 2793



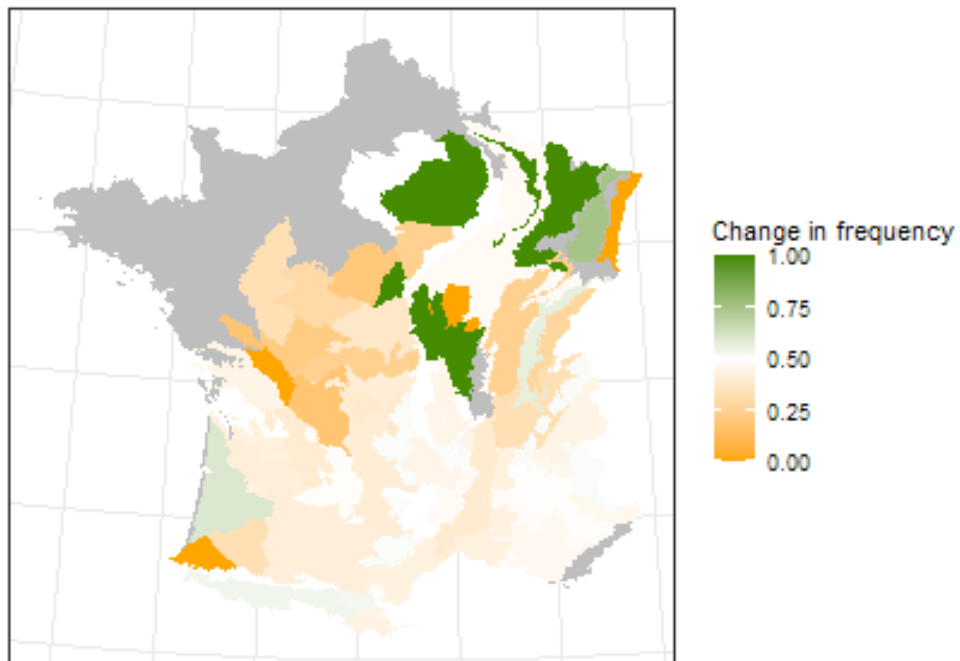
Avenella flexuosa

Topt = 6.01 Ntot = 6239



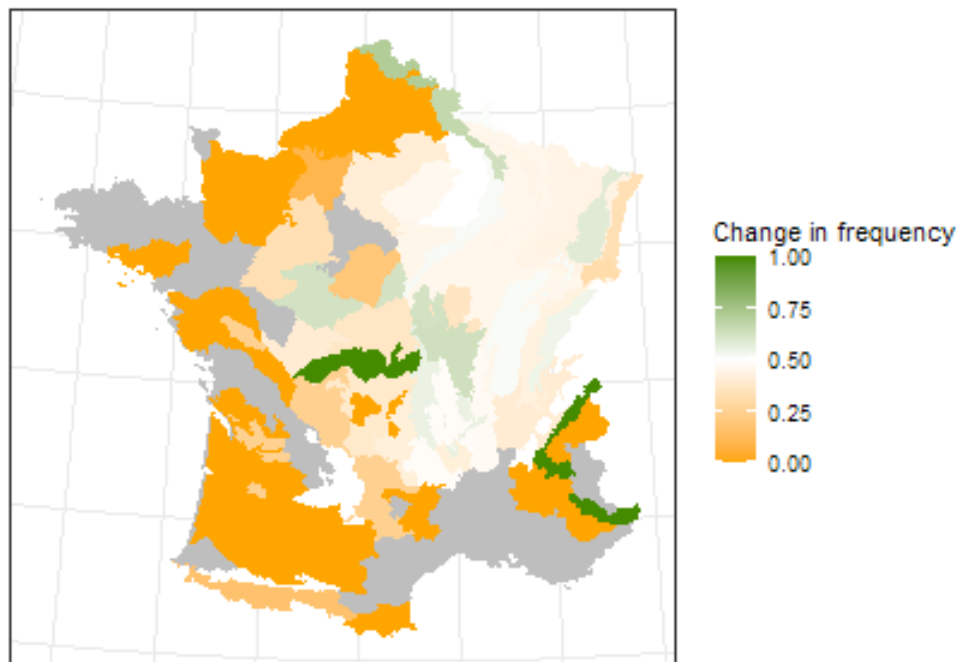
Juniperus communis

Topt = 6.63 Ntot = 2637



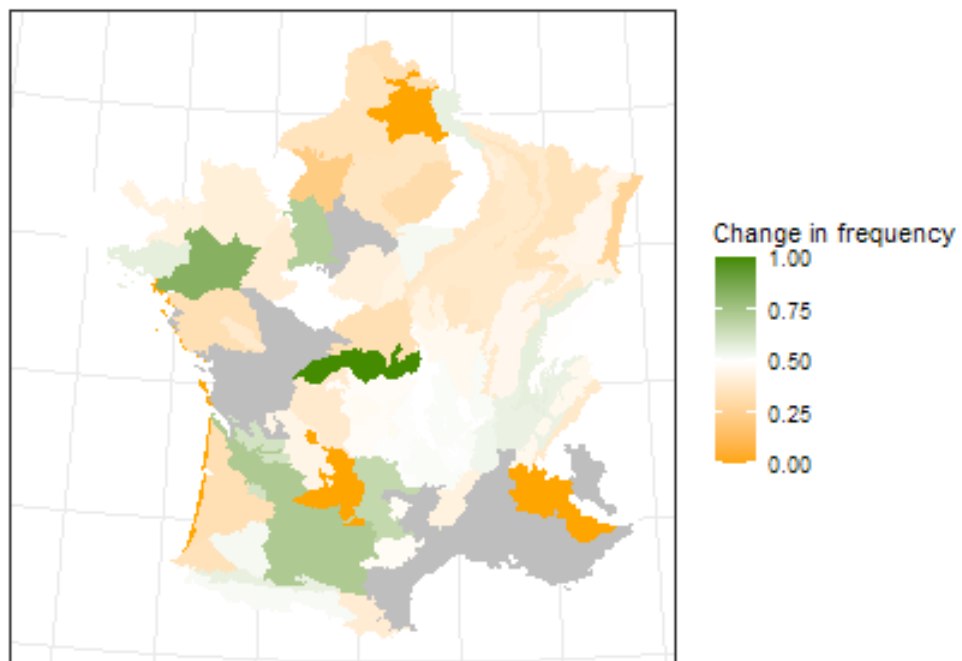
Luzula pilosa

Topt = 4.94 Ntot = 1971



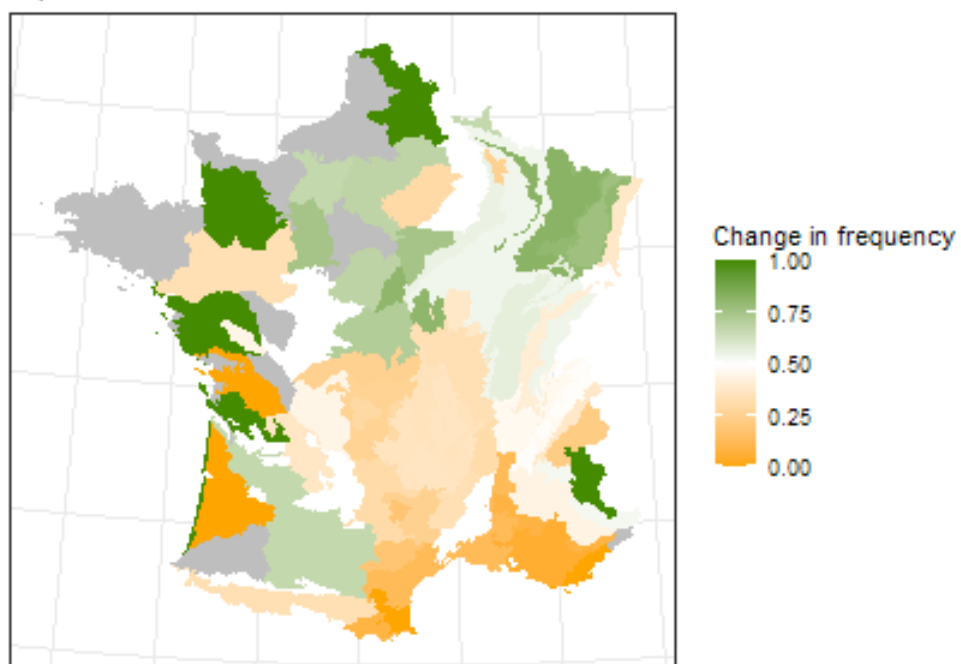
Athyrium filix-femina

Topt = 6.15 Ntot = 2979



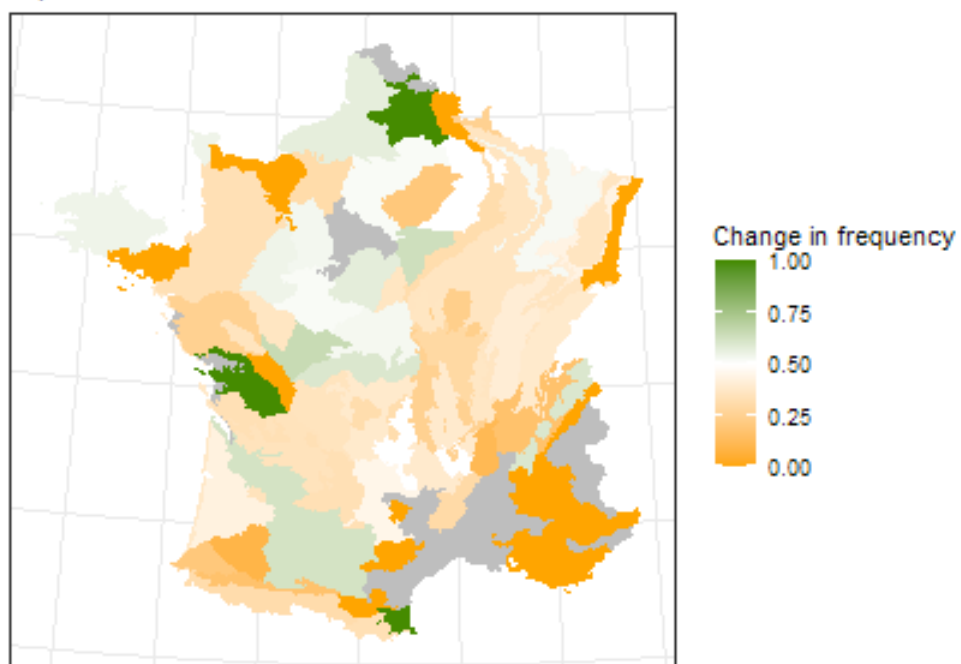
Galium mollugo

Topt = 7.37 Ntot = 1473



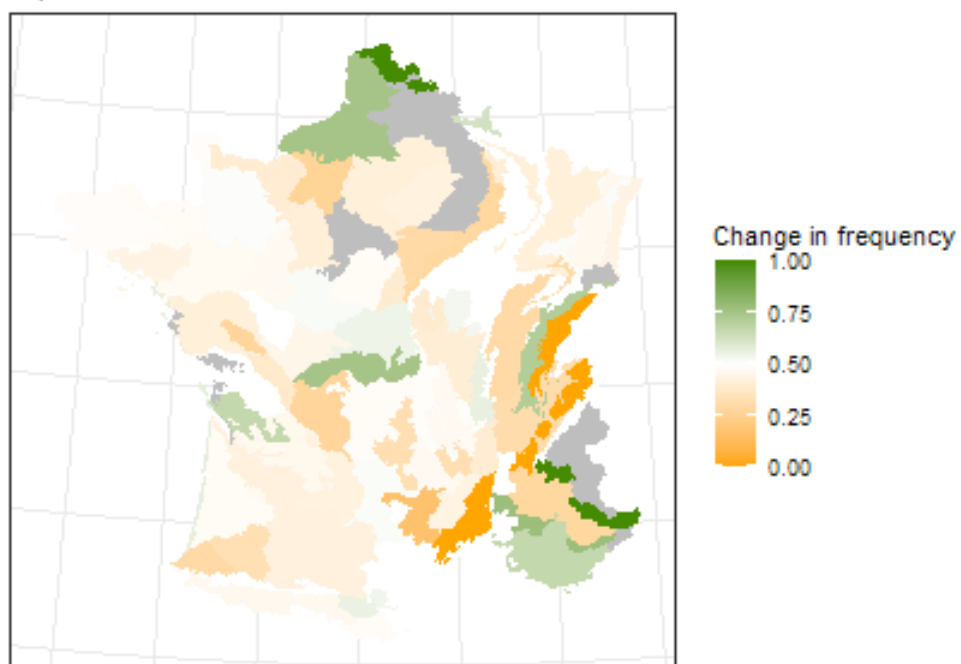
Holcus lanatus

Topt = 9.85 Ntot = 1542



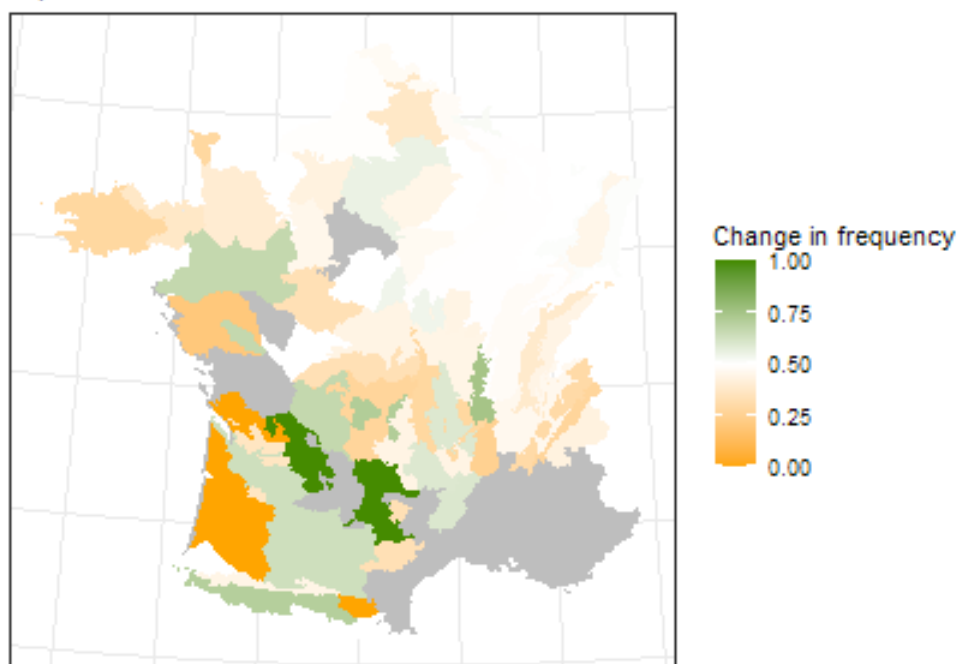
Calluna vulgaris

Topt = 6.32 Ntot = 3766



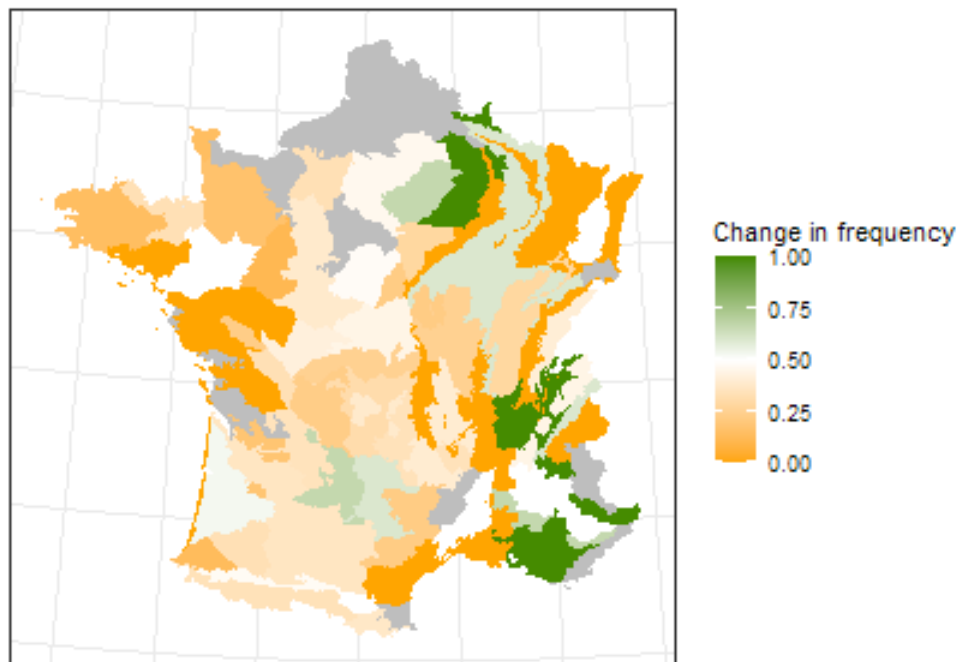
Deschampsia cespitosa

Topt = 5.45 Ntot = 3783



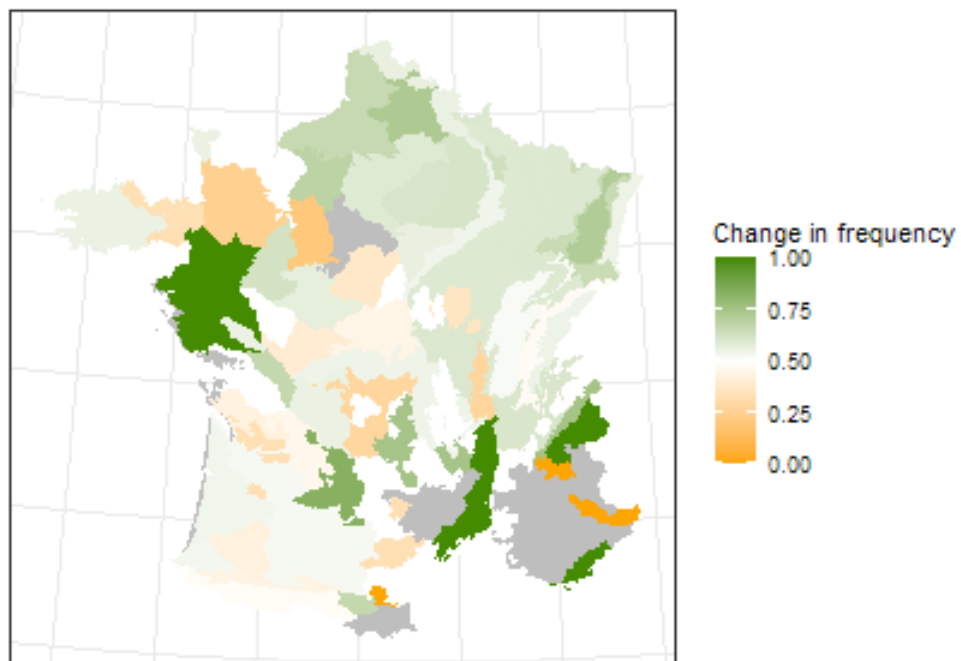
Potentilla erecta

Topt = 6.95 Ntot = 951



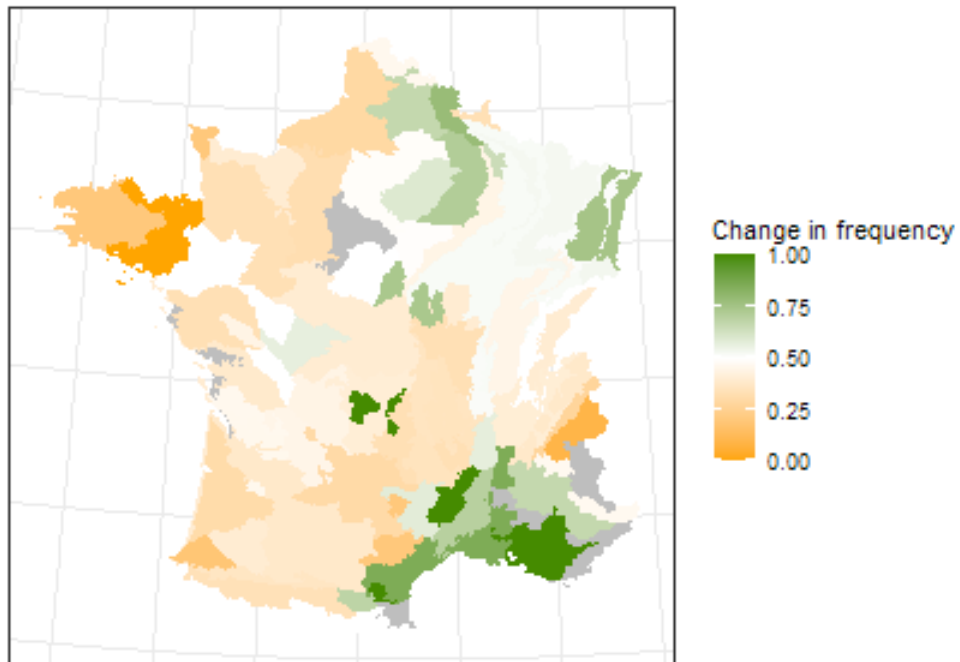
Glechoma hederacea

Topt = 6.7 Ntot = 1813



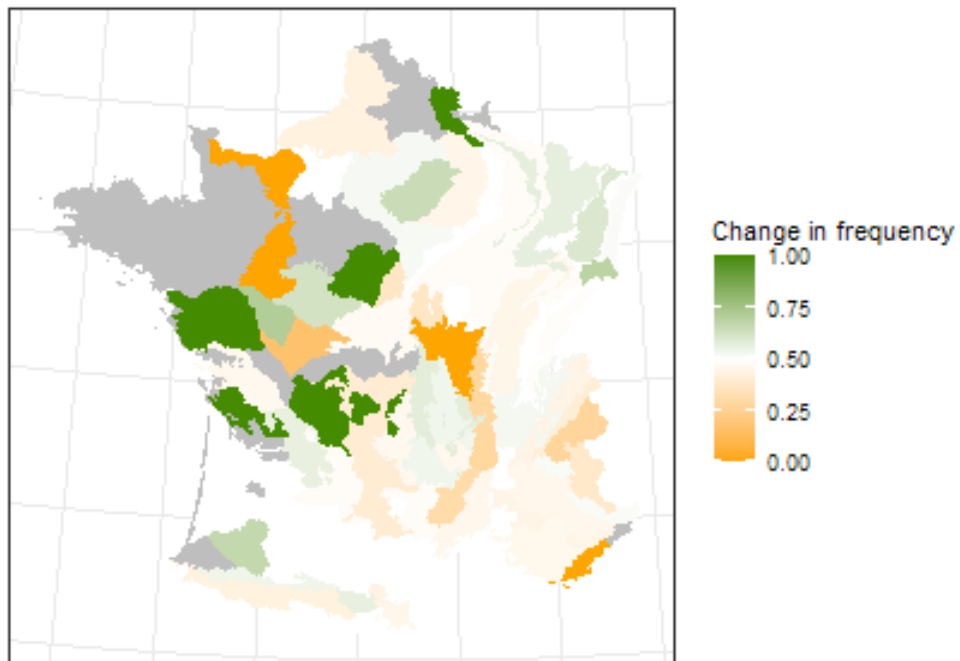
Rosa arvensis

Topt = 10.38 Ntot = 6308



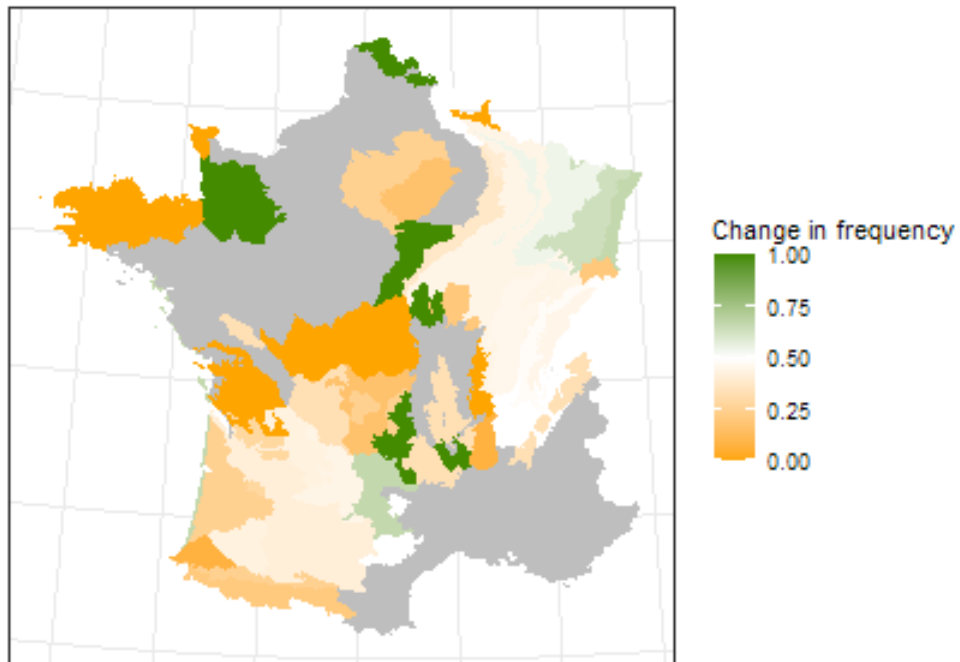
Lonicera xylosteum

Topt = 5.87 Ntot = 4586



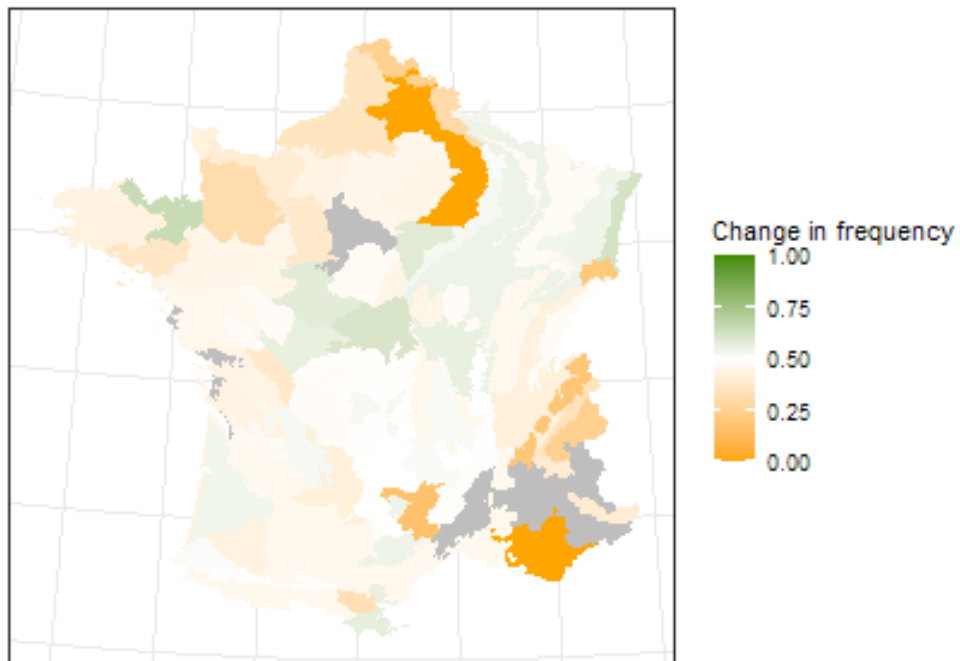
Cardamine pratensis

Topt = 4.68 Ntot = 656



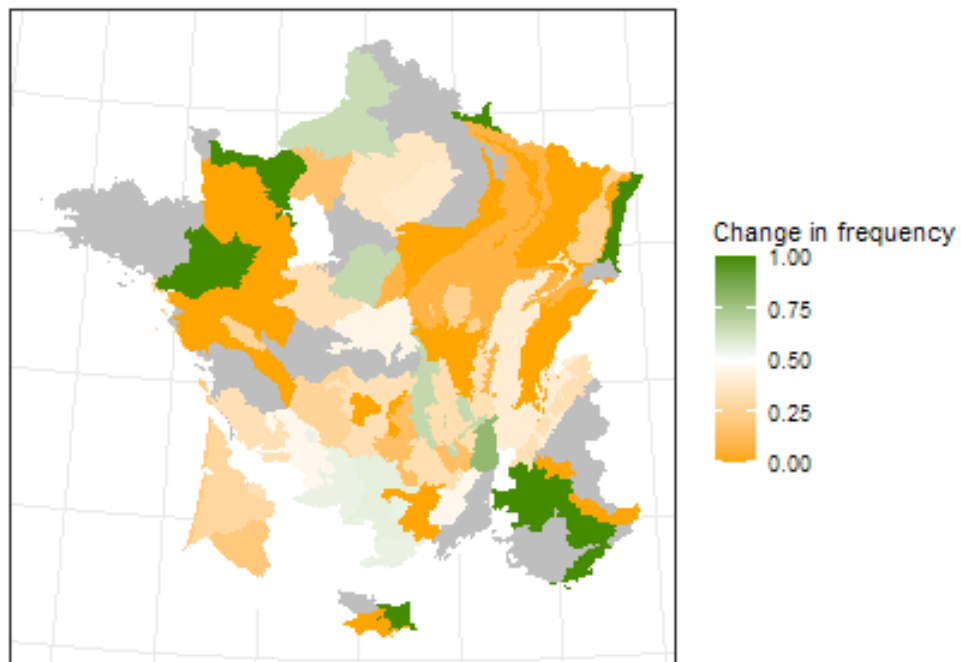
Teucrium scorodonia

Topt = 10.4 Ntot = 6533



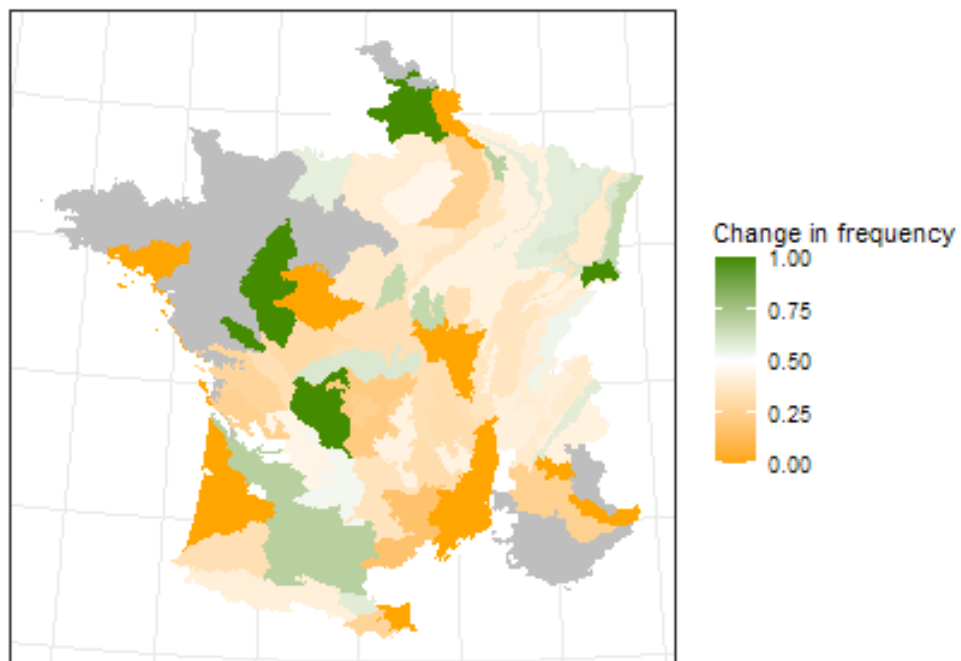
Luzula forsteri

Topt = 12.35 Ntot = 517



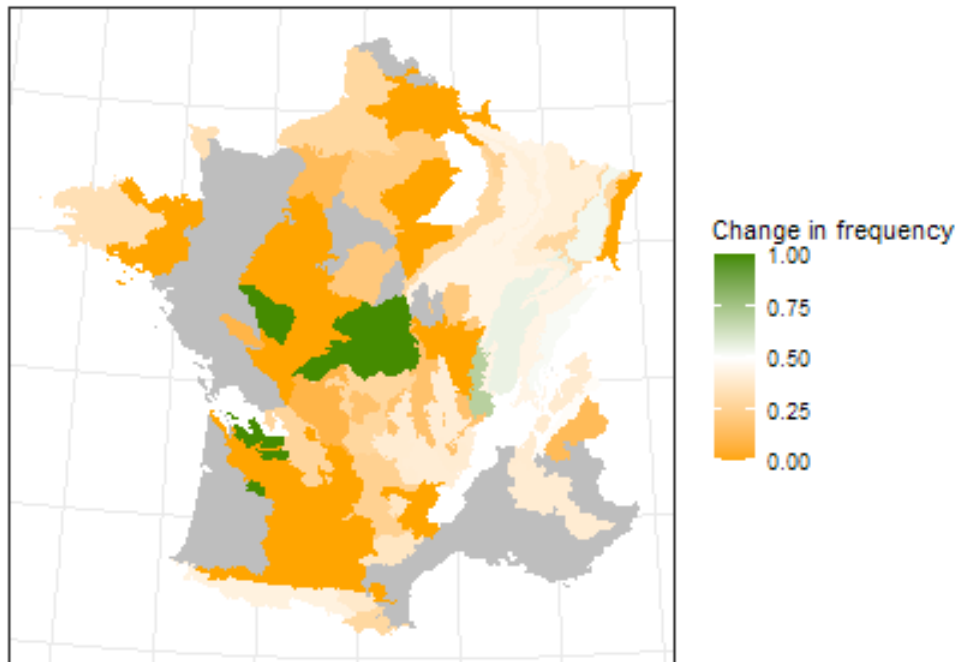
Vicia sepium

Topt = 6.55 Ntot = 2089



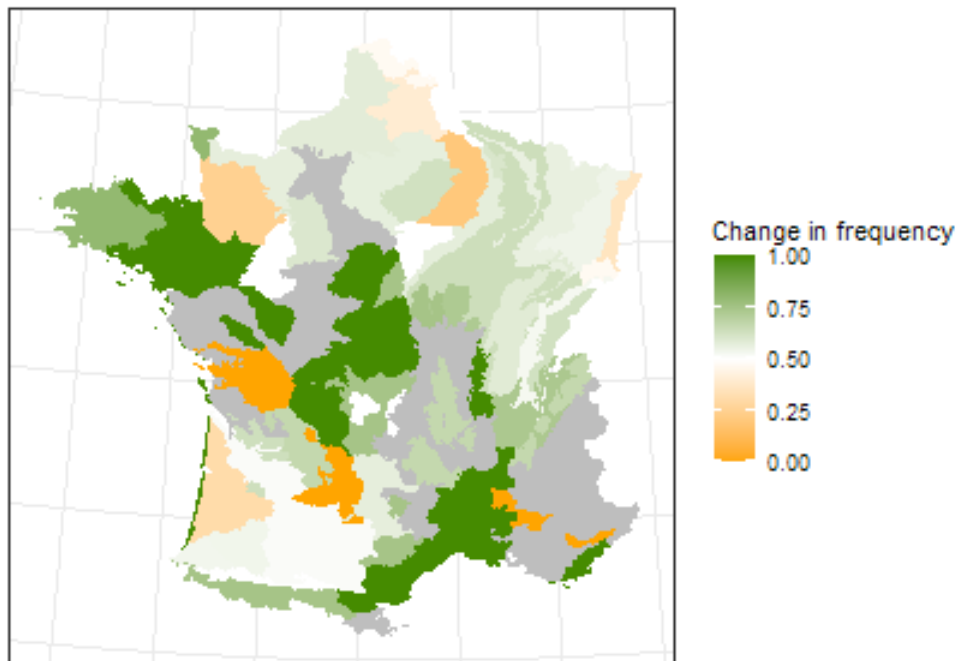
Epilobium montanum

Topt = 6.91 Ntot = 1145



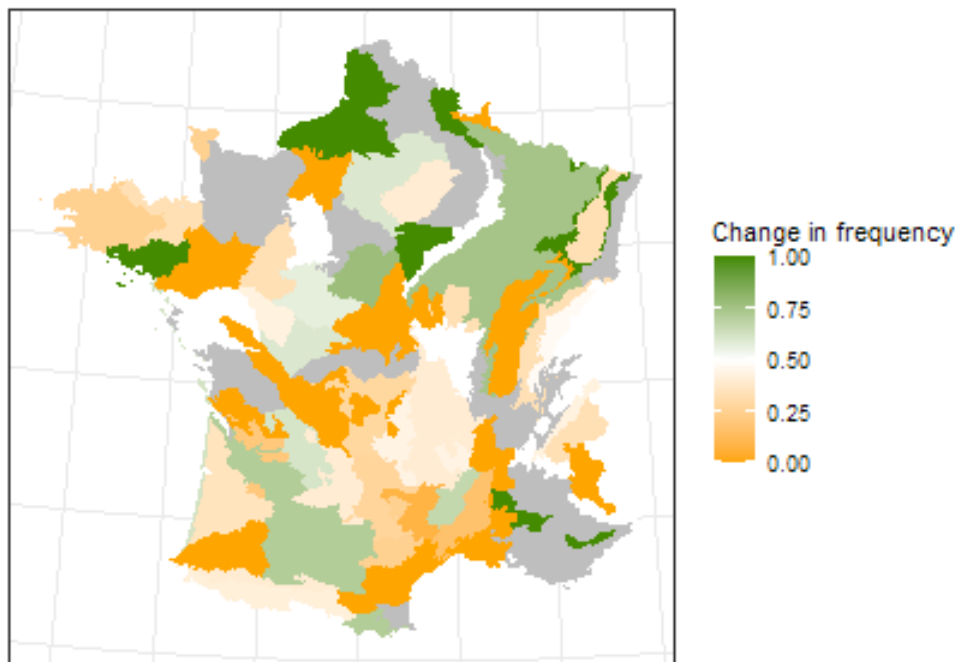
Carex pendula

Topt = 11.2 Ntot = 1232



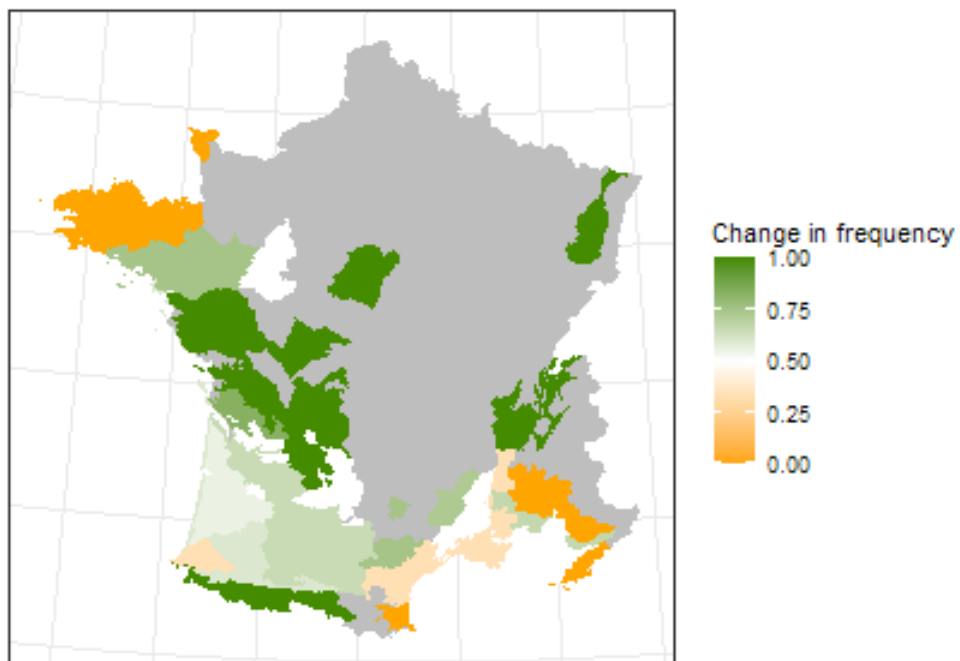
Anthoxanthum odoratum

Topt = 6.02 Ntot = 429



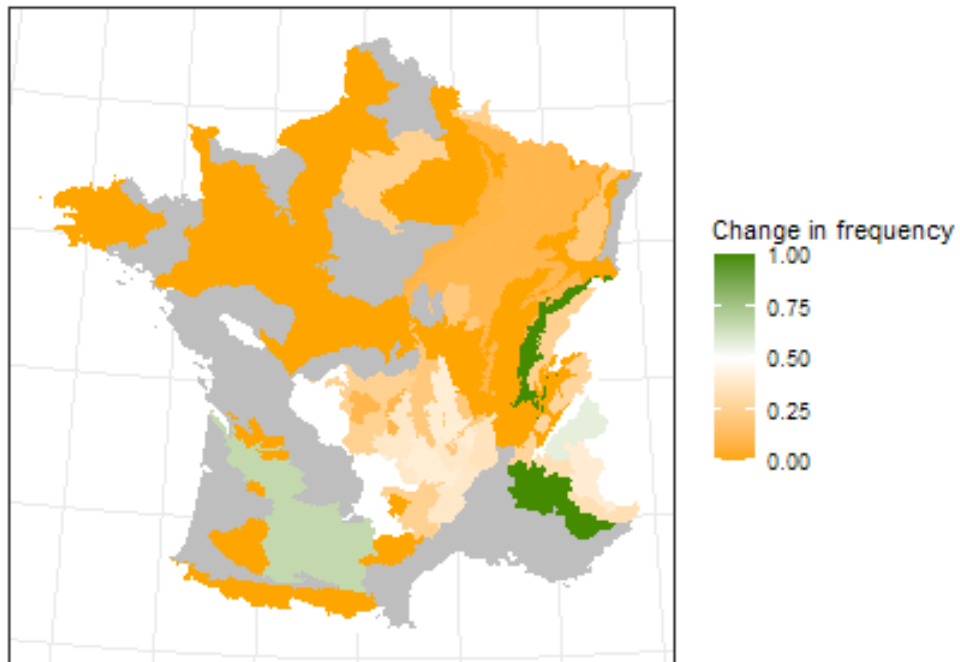
Laurus nobilis

Topt = 15.2 Ntot = 170



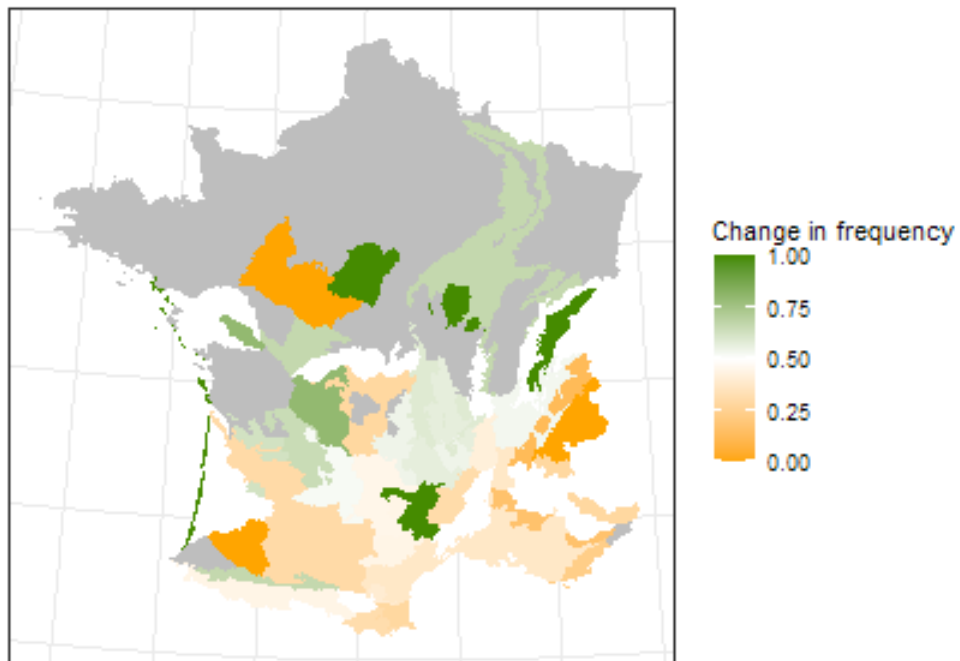
Epilobium angustifolium

Topt = 6.46 Ntot = 432



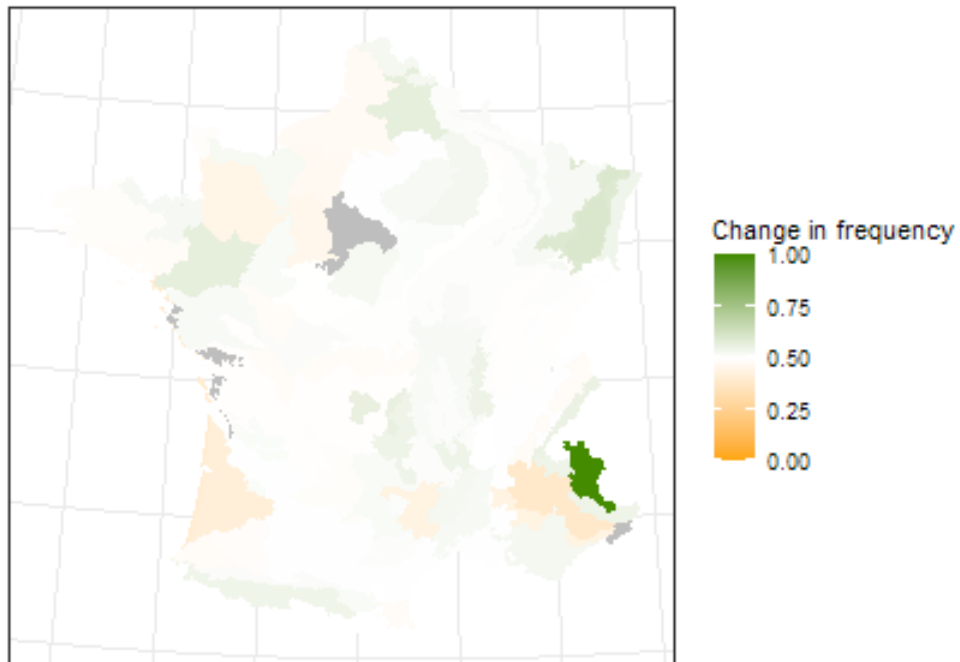
Asplenium adiantum-nigrum

Topt = 9.76 Ntot = 556



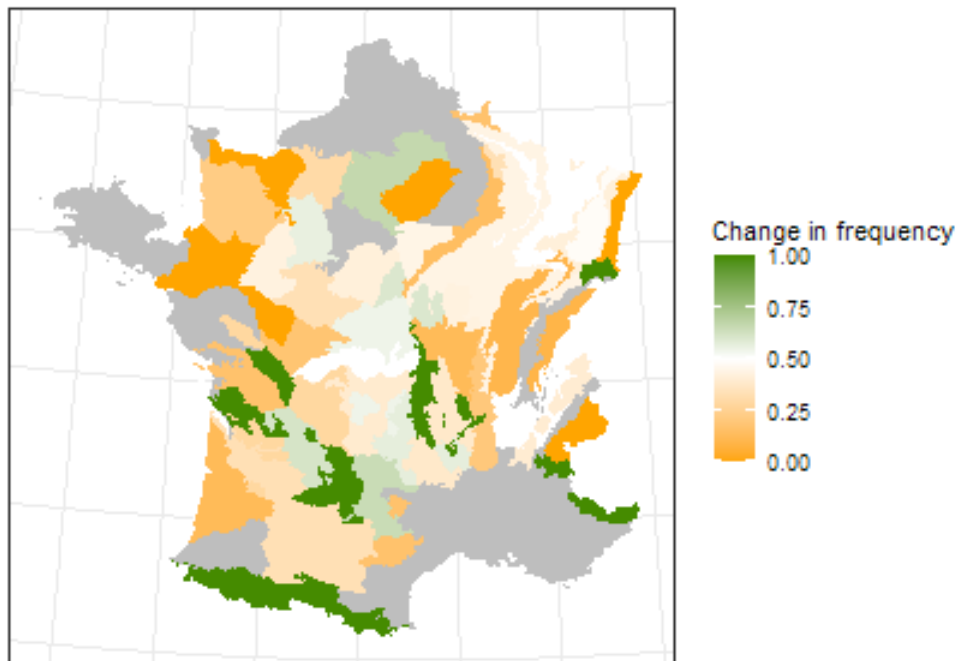
Hedera helix

Topt = 10.93 Ntot = 18101



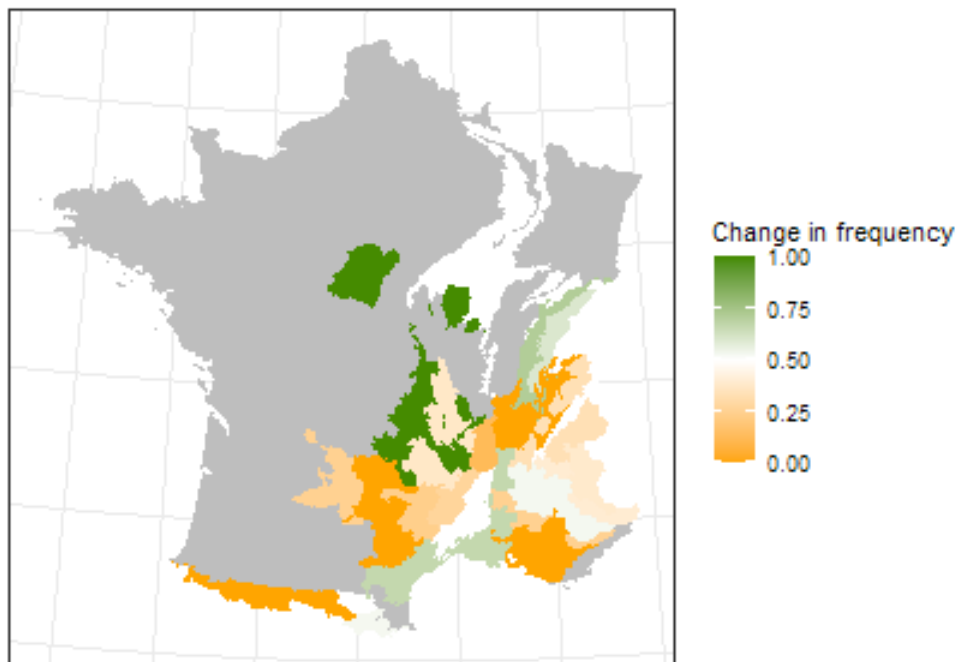
Melampyrum pratense

Topt = 5.65 Ntot = 526



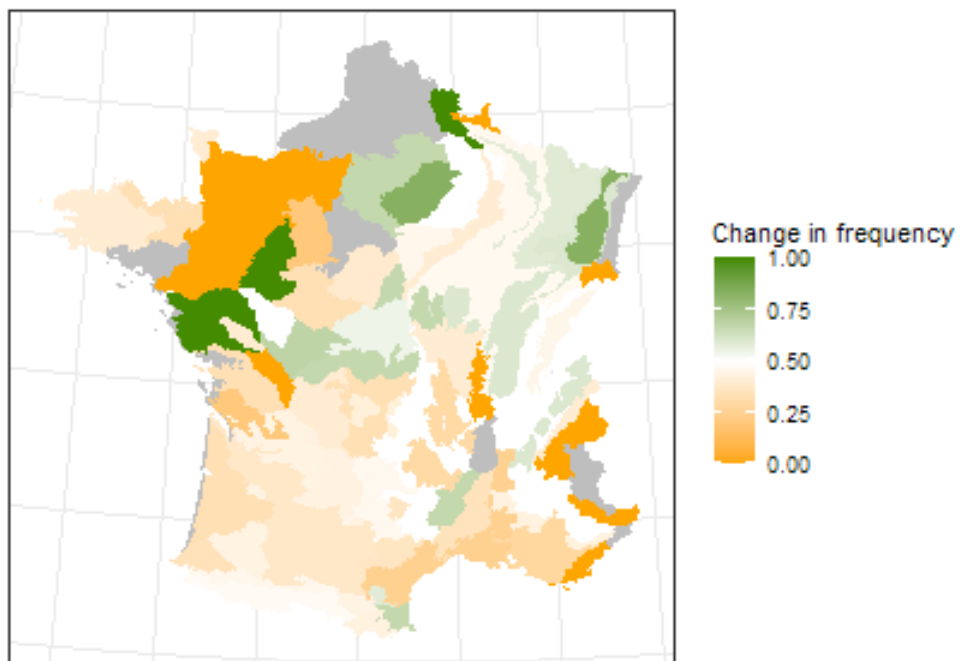
Thymus serpyllum

Topt = 5.17 Ntot = 196



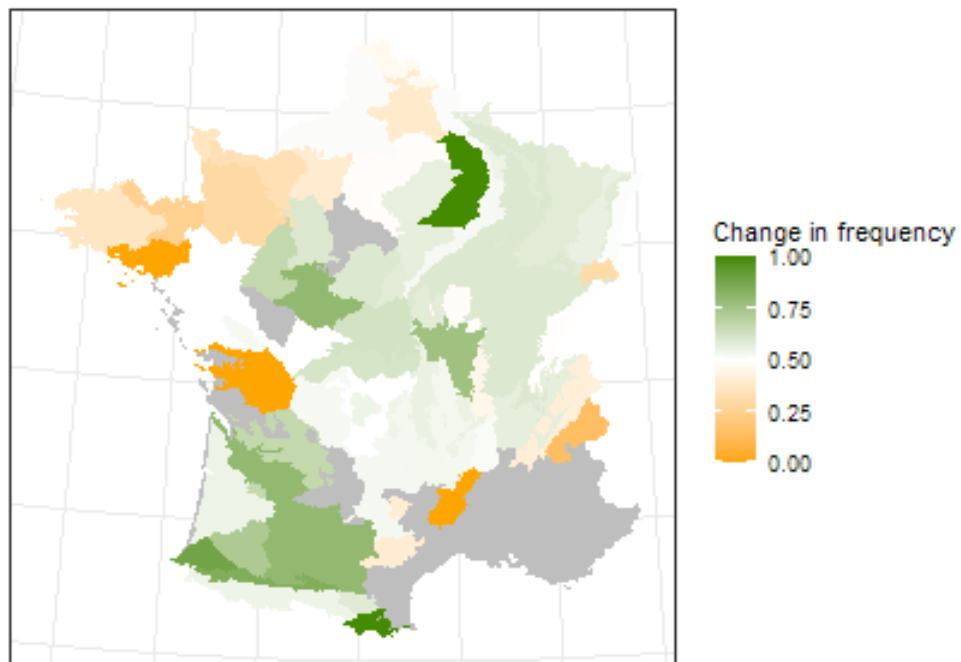
Betonica officinalis

Topt = 7.89 Ntot = 1116



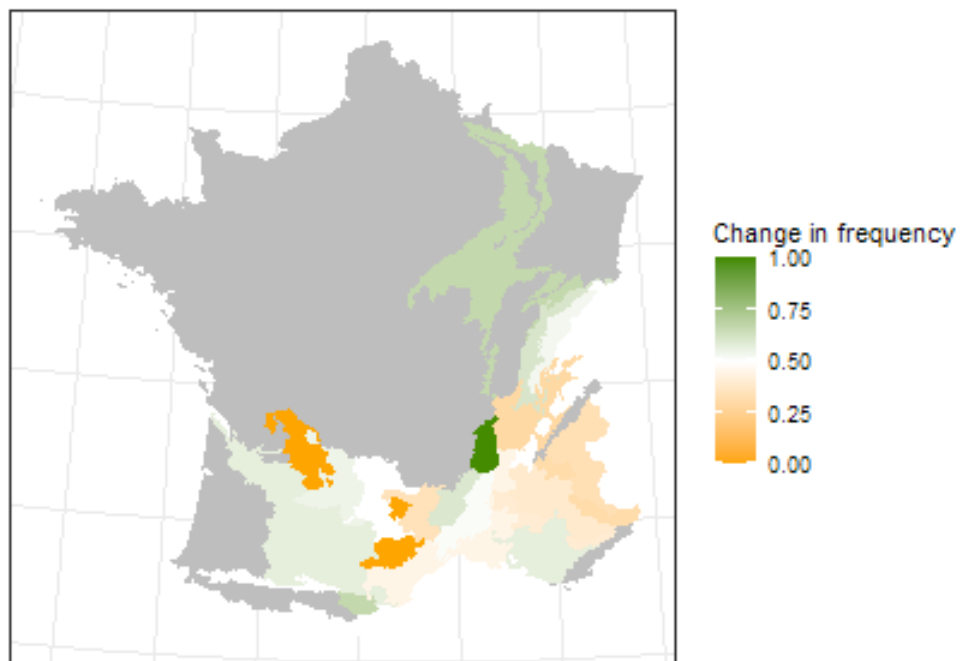
Dryopteris carthusiana

Topt = 5.85 Ntot = 3772



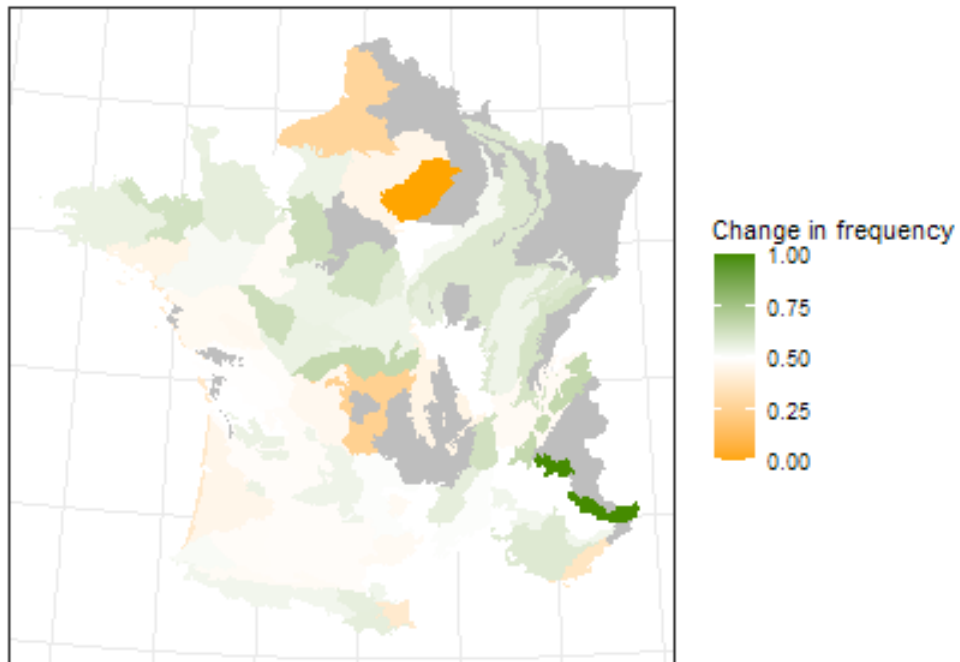
Hippocrepis emerus

Topt = 12.63 Ntot = 477



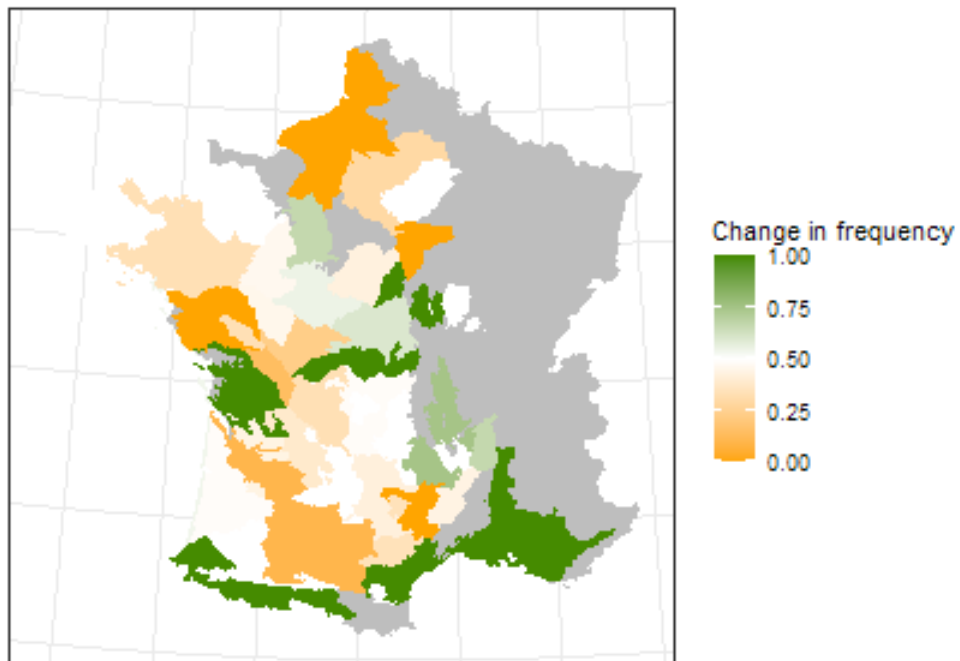
Ruscus aculeatus

Topt = 13.45 Ntot = 3265



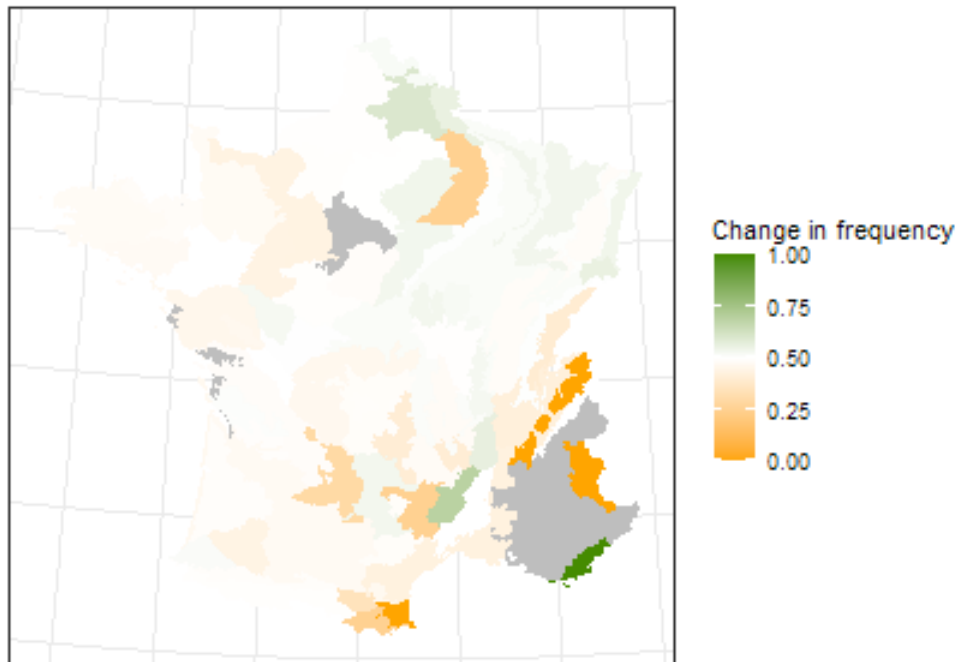
Erica cinerea

Topt = 10.19 Ntot = 1716



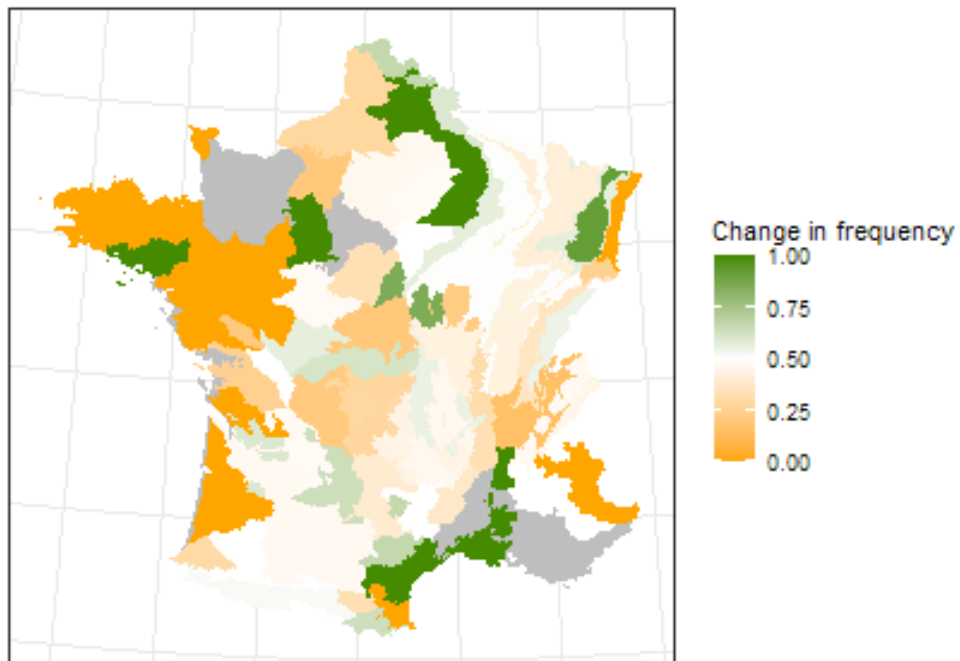
Lonicera periclymenum

Topt = 9.95 Ntot = 11072



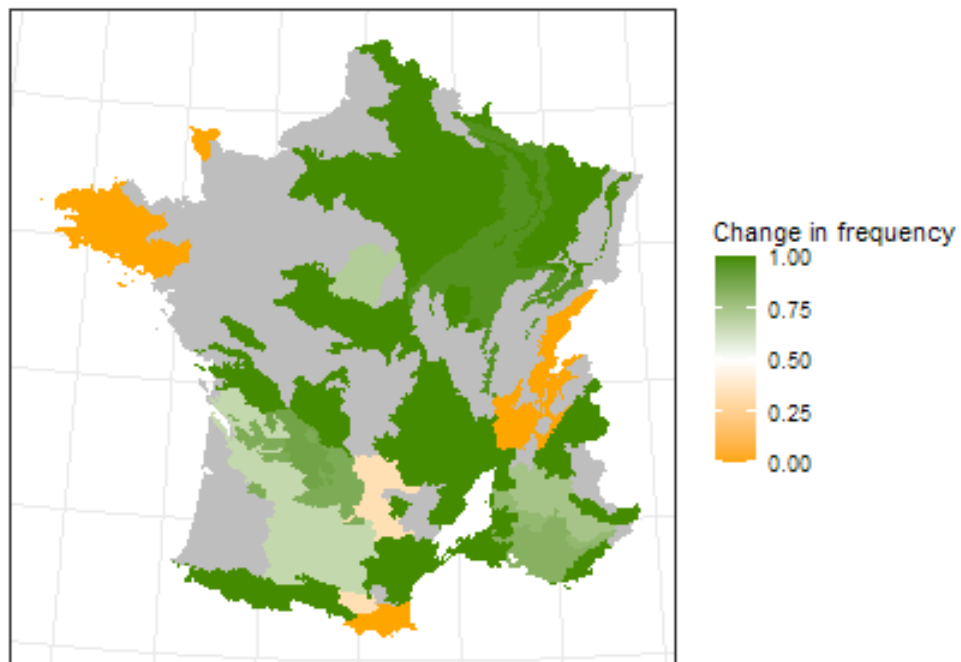
Veronica chamaedrys

Topt = 7.29 Ntot = 1215



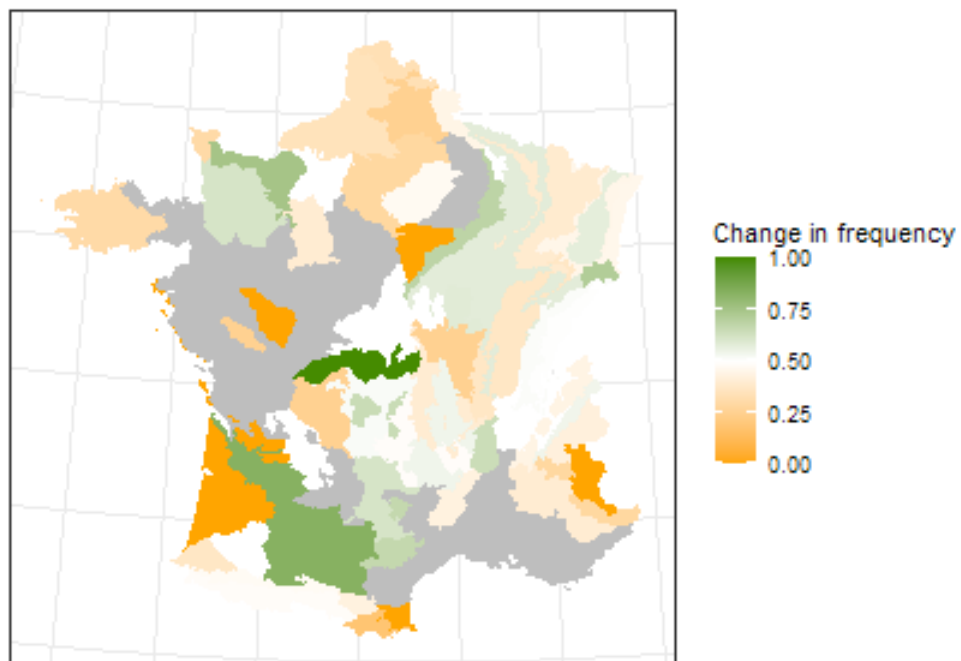
Daucus carota

Topt = 10.3 Ntot = 202



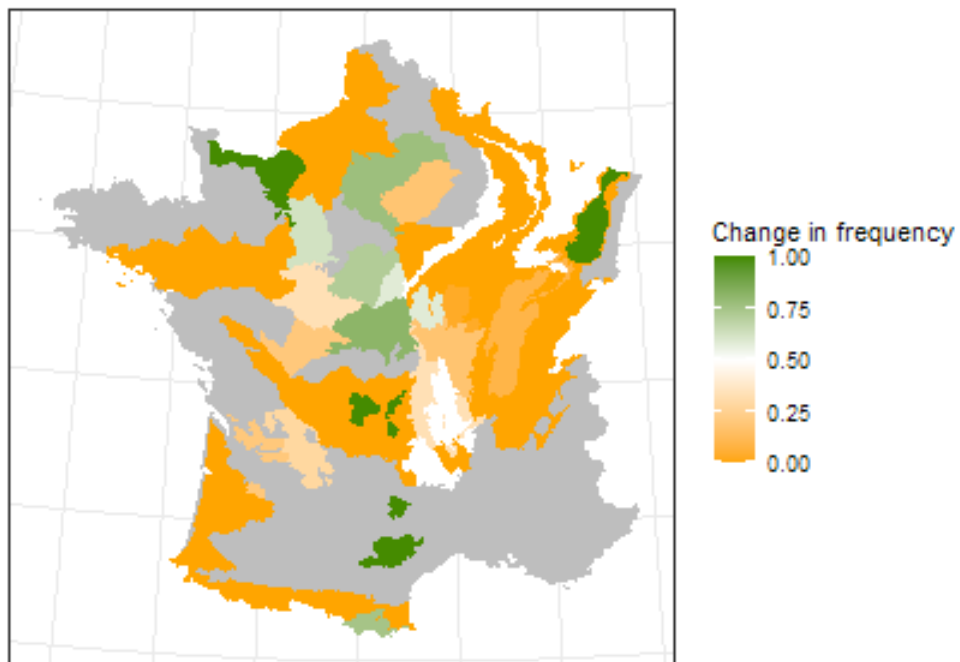
Oxalis acetosella

Topt = 6.08 Ntot = 2254



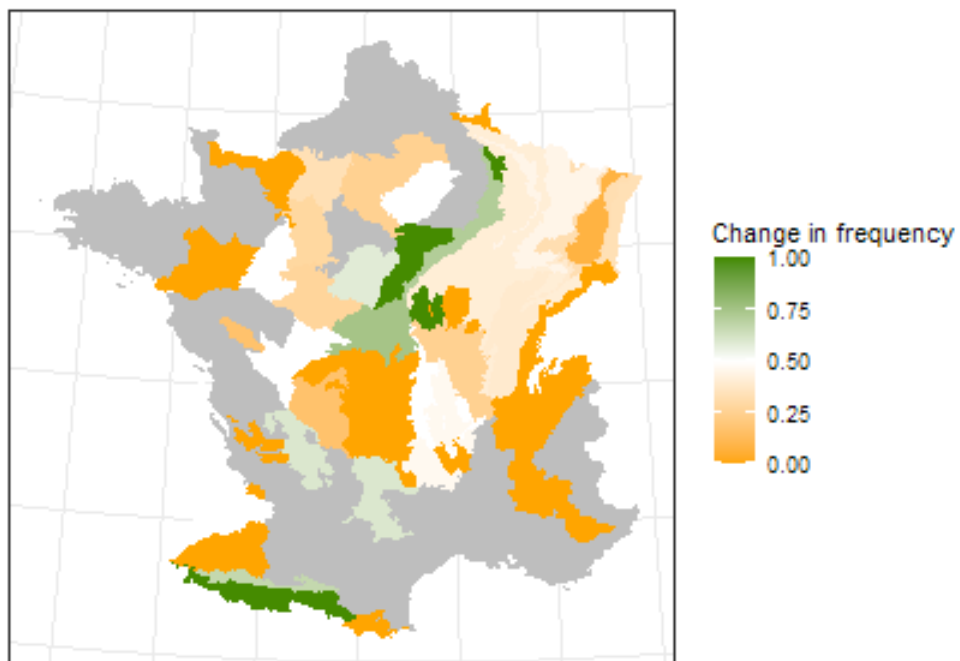
Agrostis canina

Topt = 6.16 Ntot = 341



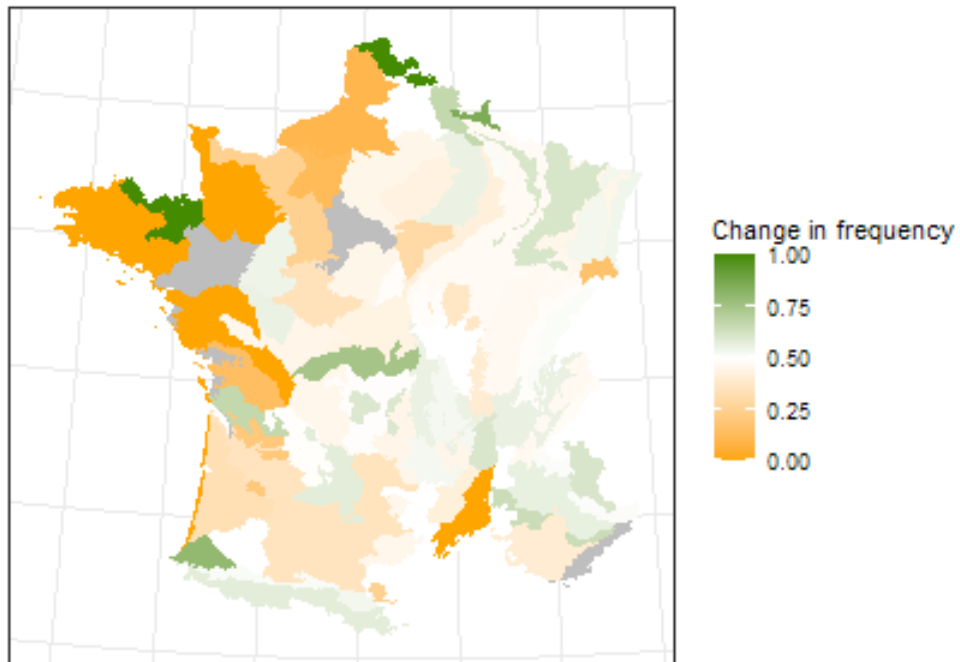
Luzula multiflora

Topt = 5.75 Ntot = 321



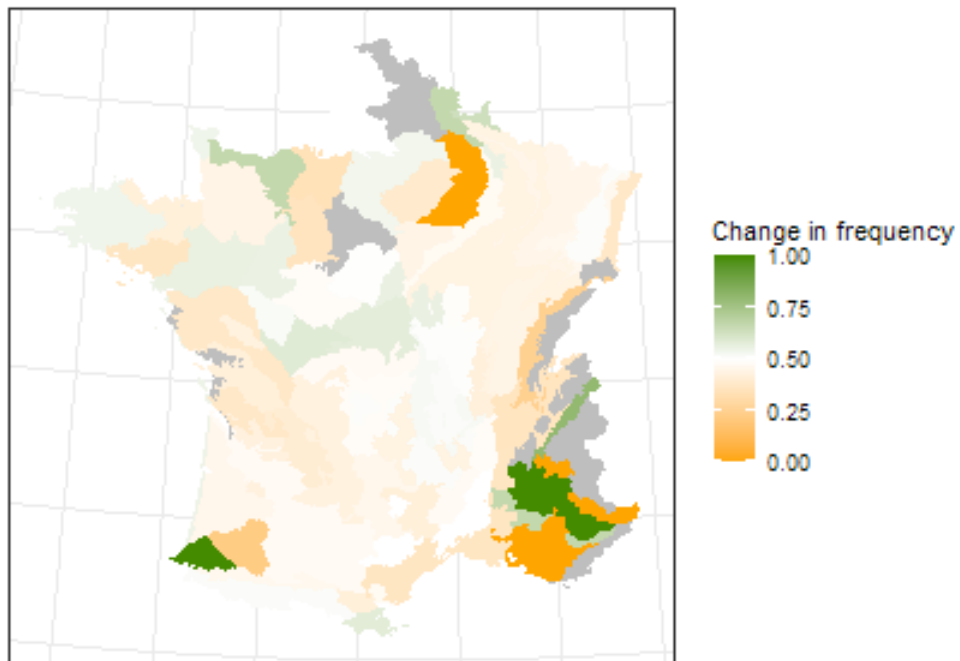
Fragaria vesca

Topt = 6.71 Ntot = 4985



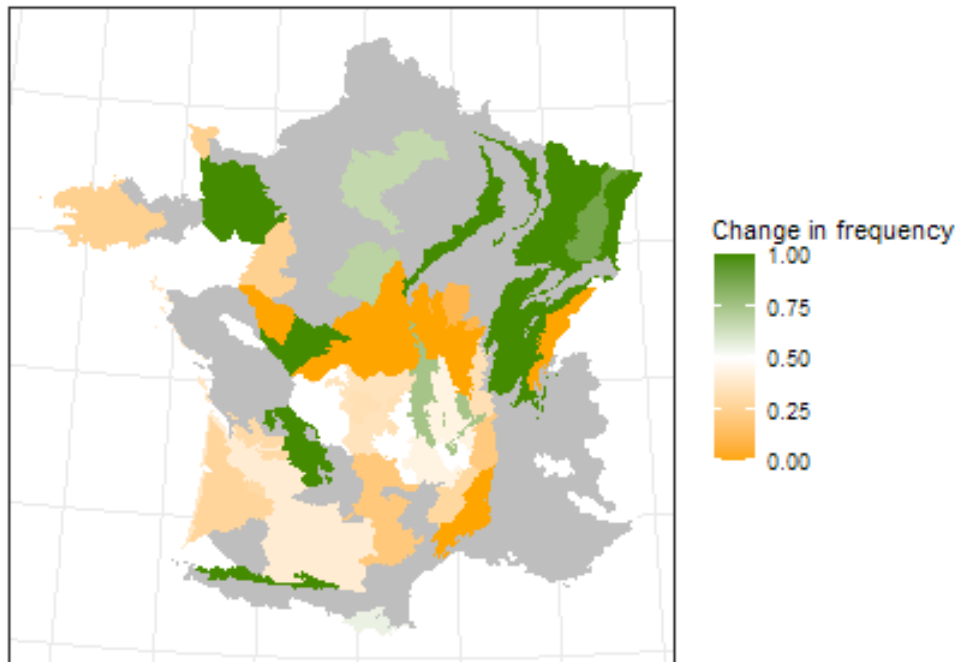
Cytisus scoparius

Topt = 9.88 Ntot = 5042



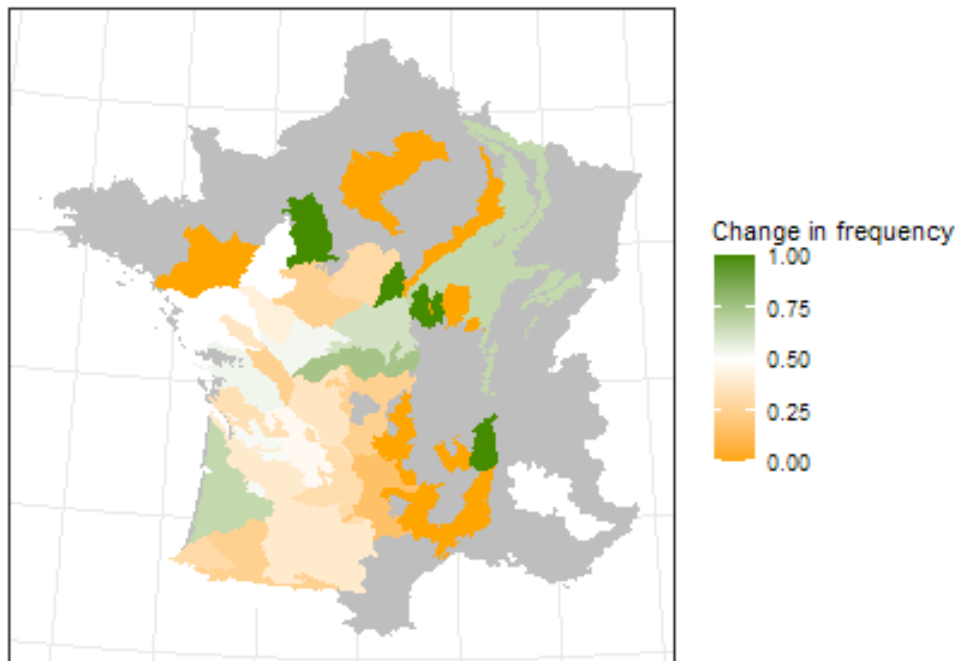
Rumex acetosella

Topt = 6.75 Ntot = 452



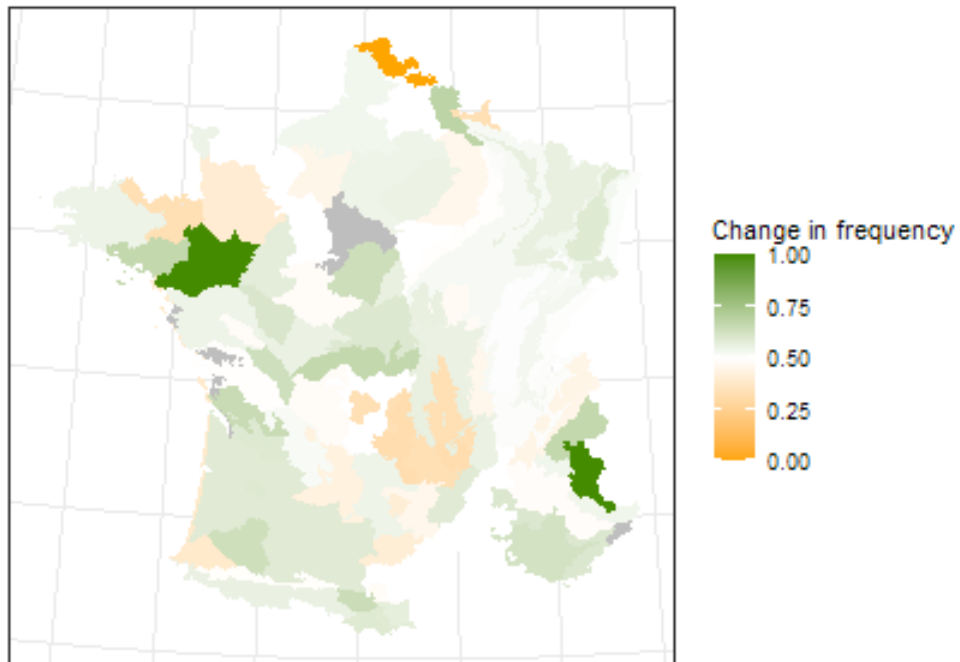
Pulmonaria longifolia

Topt = 11.03 Ntot = 458



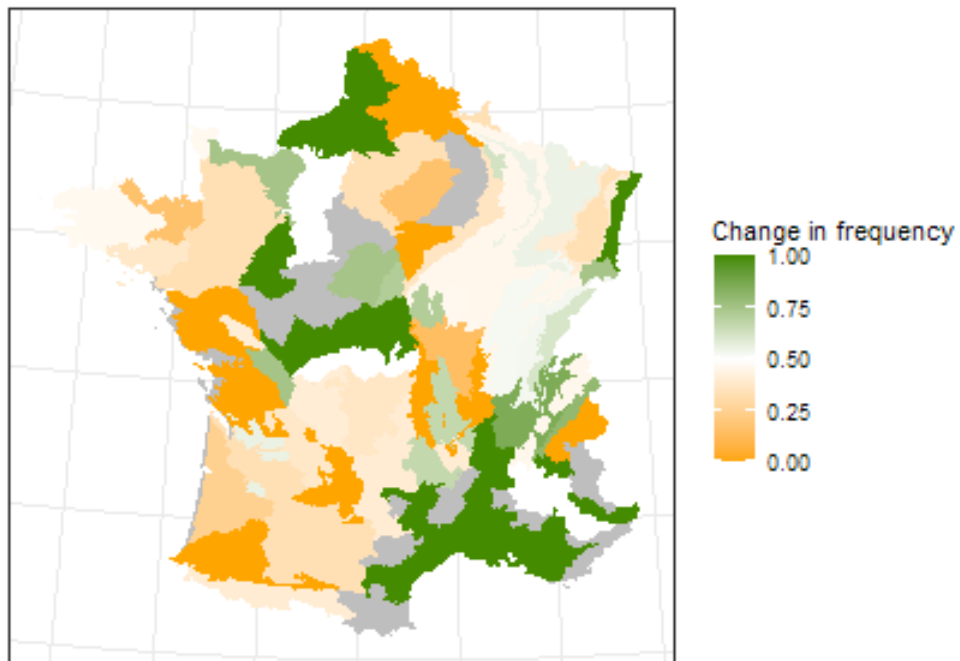
Brachypodium sylvaticum

Topt = 9.47 Ntot = 7617



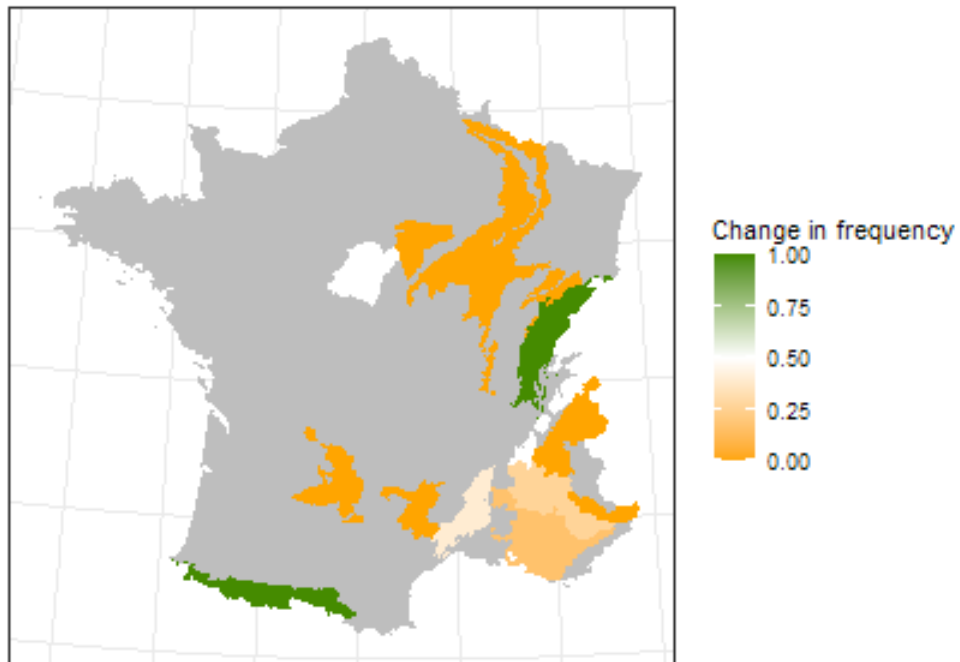
Ranunculus repens

Topt = 6.84 Ntot = 791



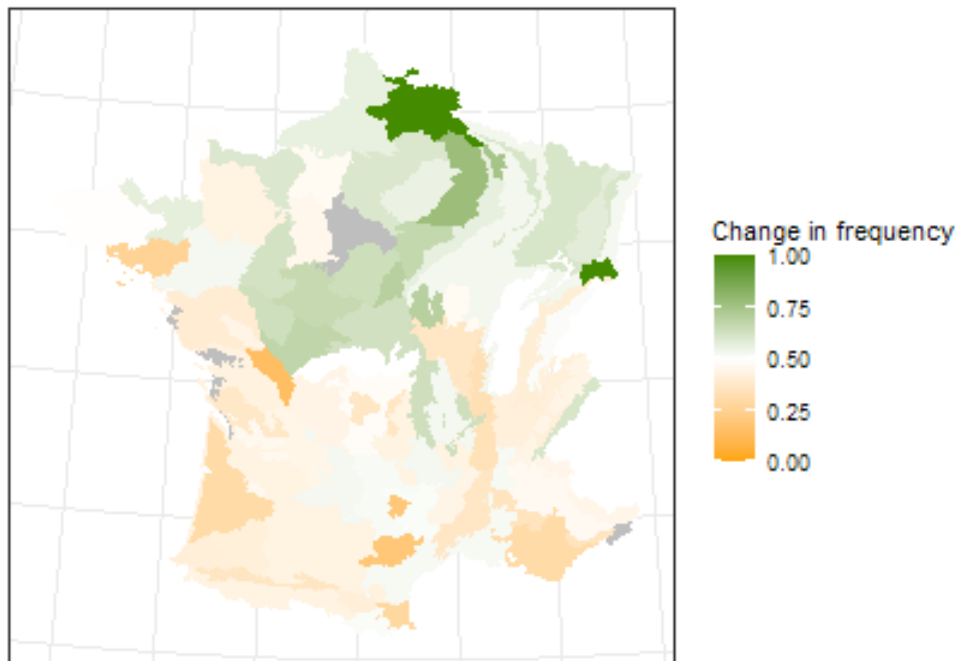
Arabis hirsuta

Topt = 7.1 Ntot = 85



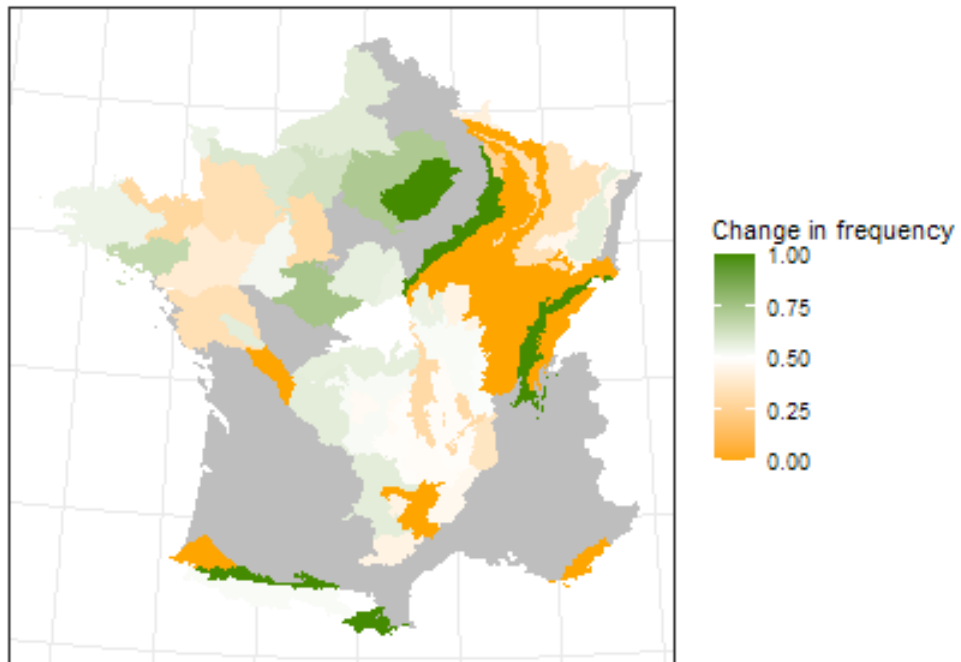
Dactylis glomerata

Topt = 8.56 Ntot = 3508



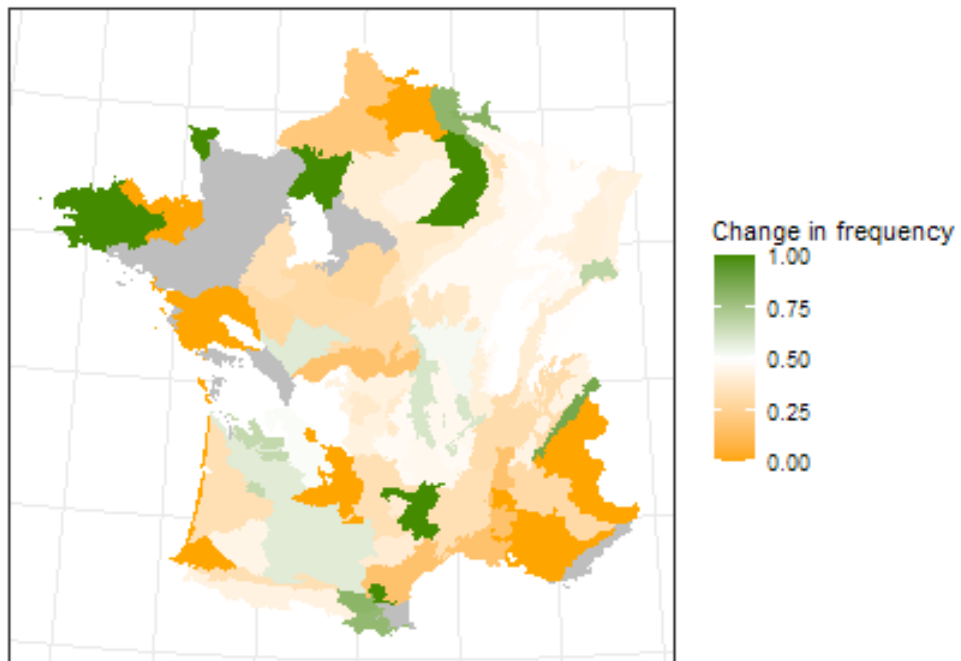
Digitalis purpurea

Topt = 11.04 Ntot = 1780



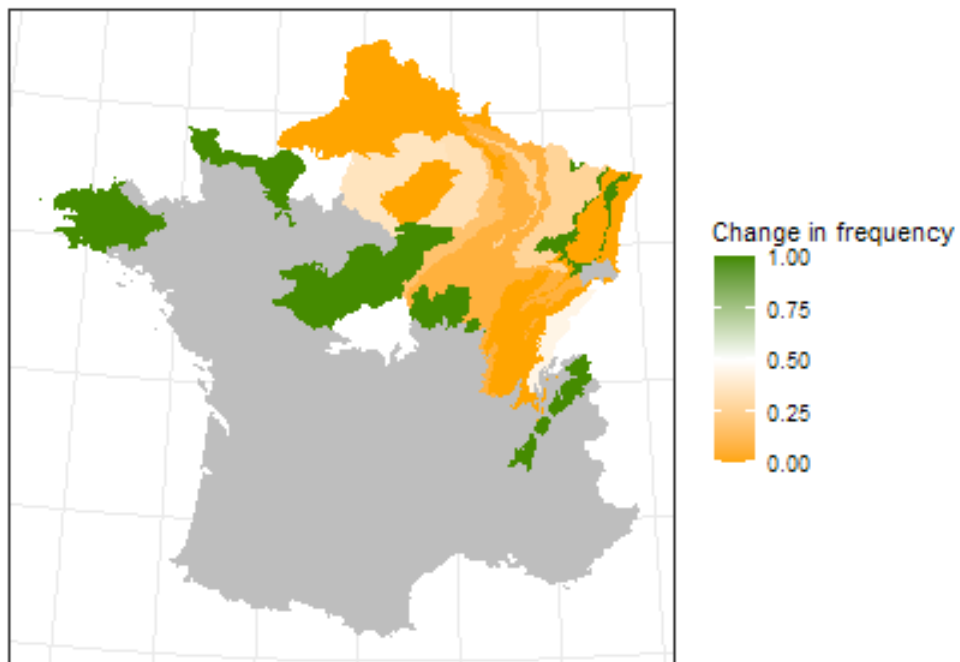
Viola reichenbachiana

Topt = 9.49 Ntot = 3498



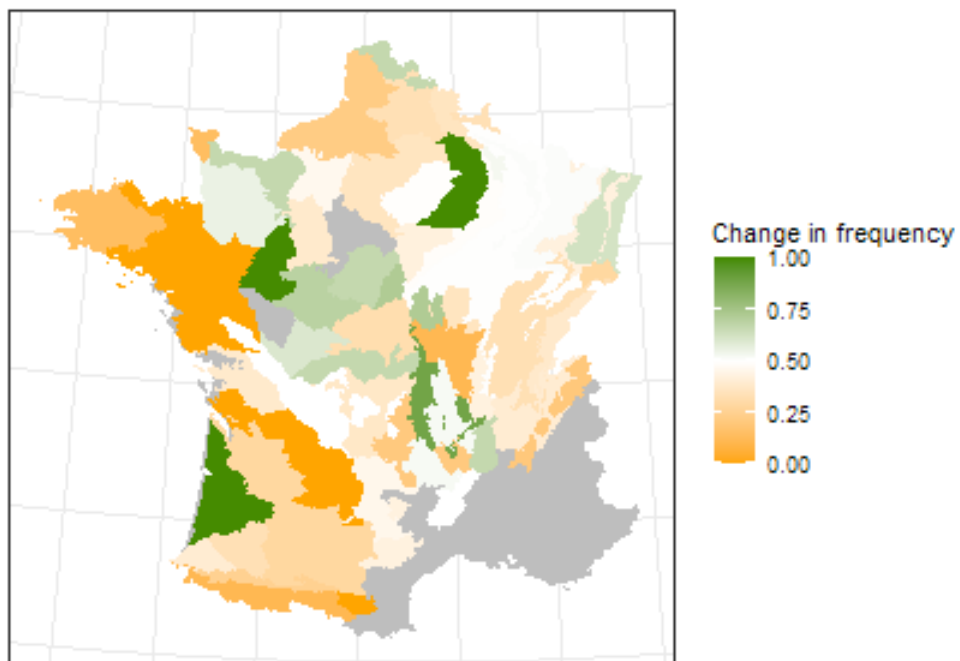
Cirsium oleraceum

T_{opt} = 6.05 N_{tot} = 211



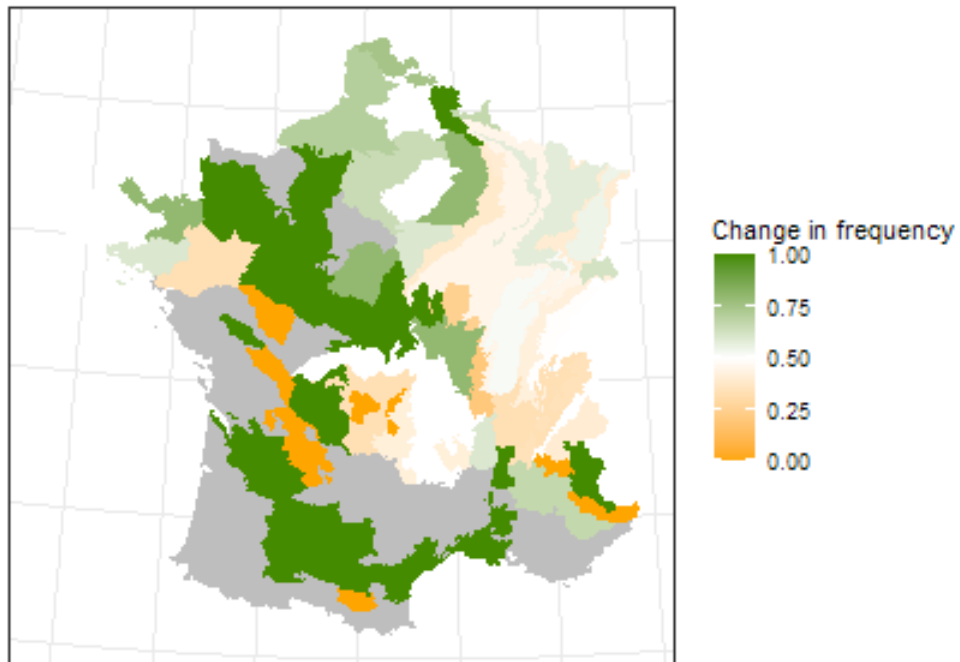
Anemone nemorosa

T_{opt} = 7.55 N_{tot} = 2486



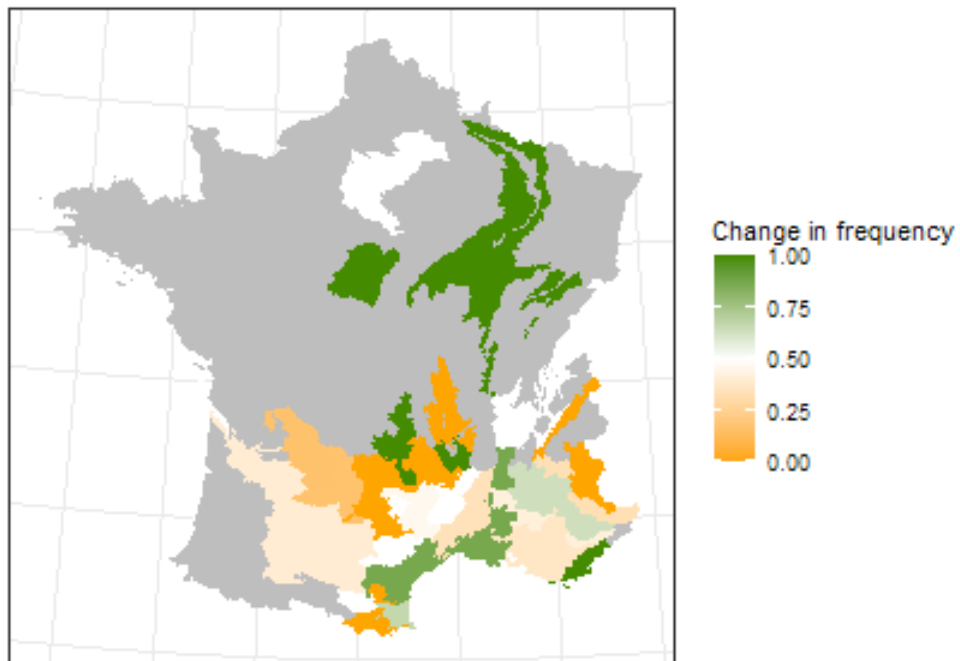
Heracleum sphondylium

Topt = 5.74 Ntot = 647



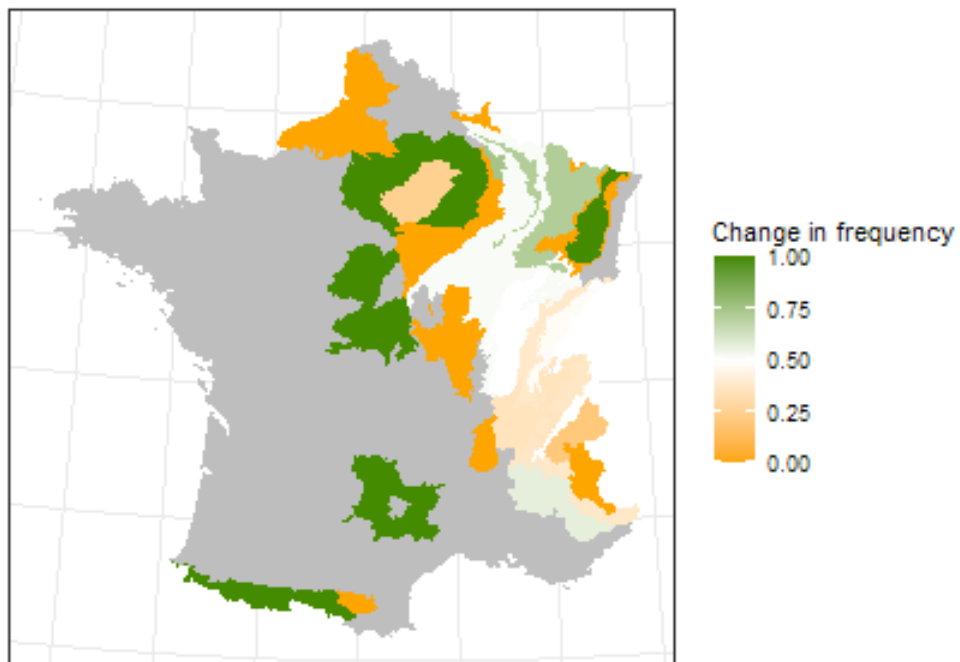
Eryngium campestre

Topt = 11.8 Ntot = 315



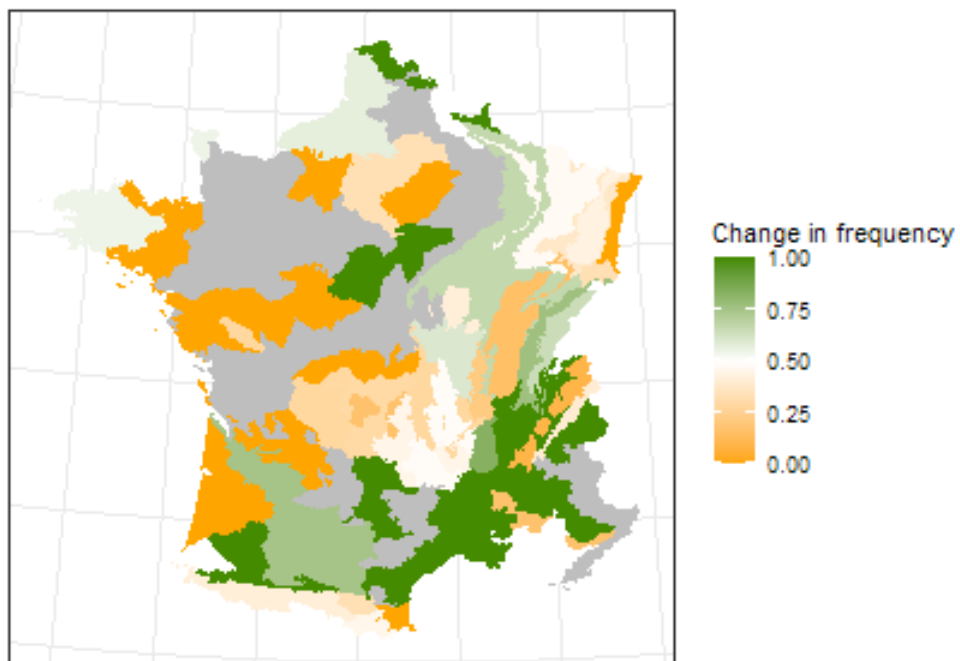
Carex digitata

Topt = 5.31 Ntot = 1446



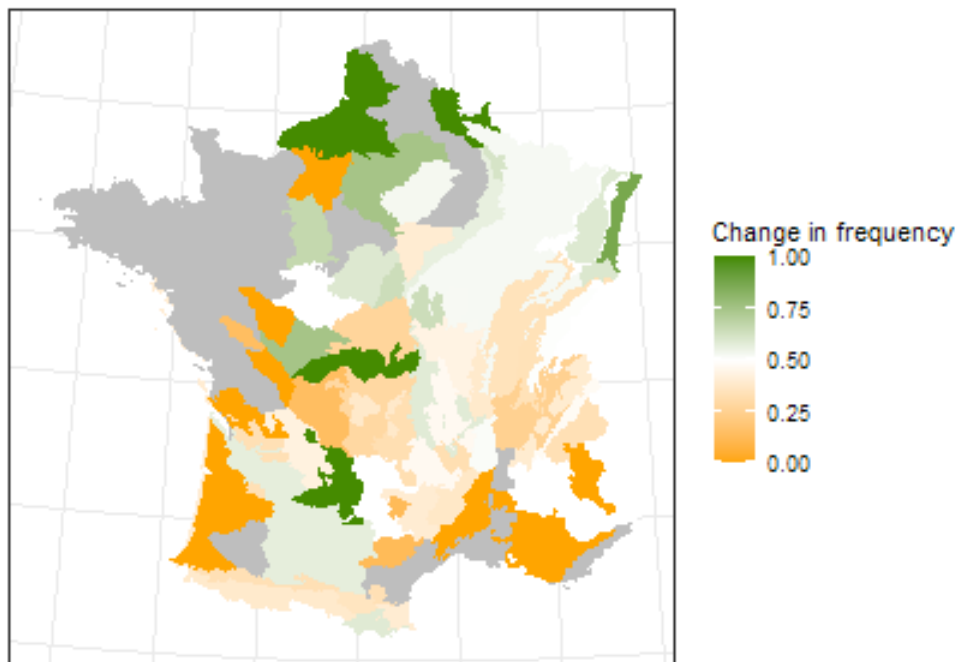
Silene dioica

Topt = 6.5 Ntot = 533



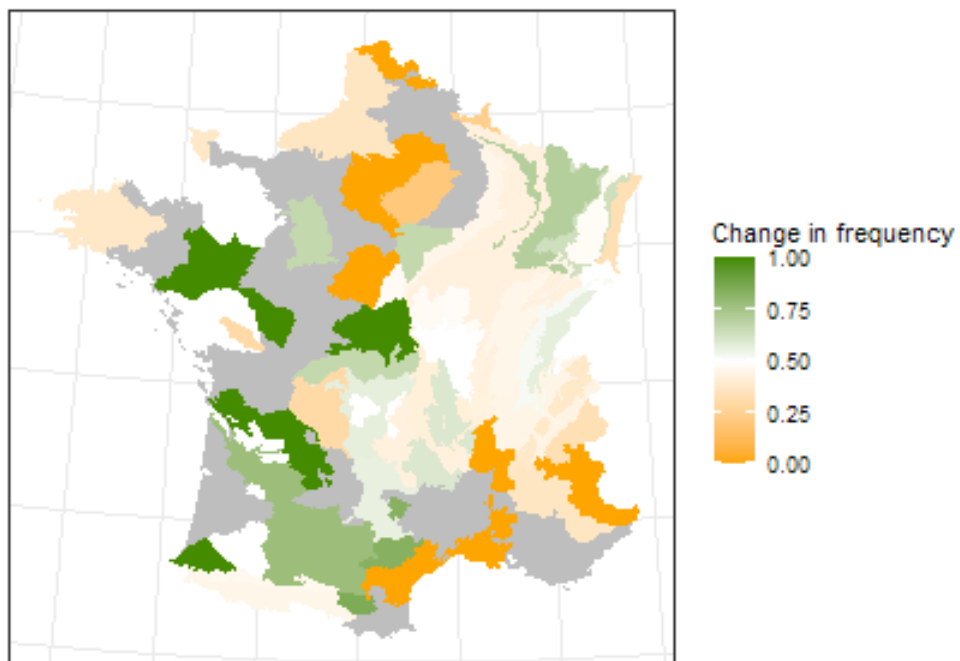
Veronica officinalis

Topt = 7.12 Ntot = 1321



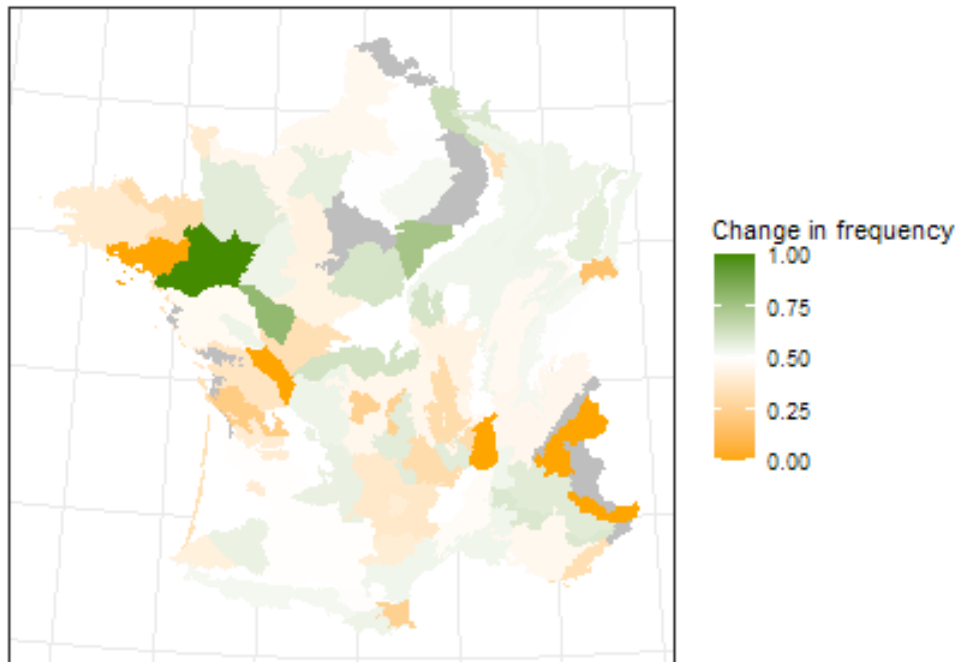
Luzula sylvatica

Topt = 9.72 Ntot = 1227



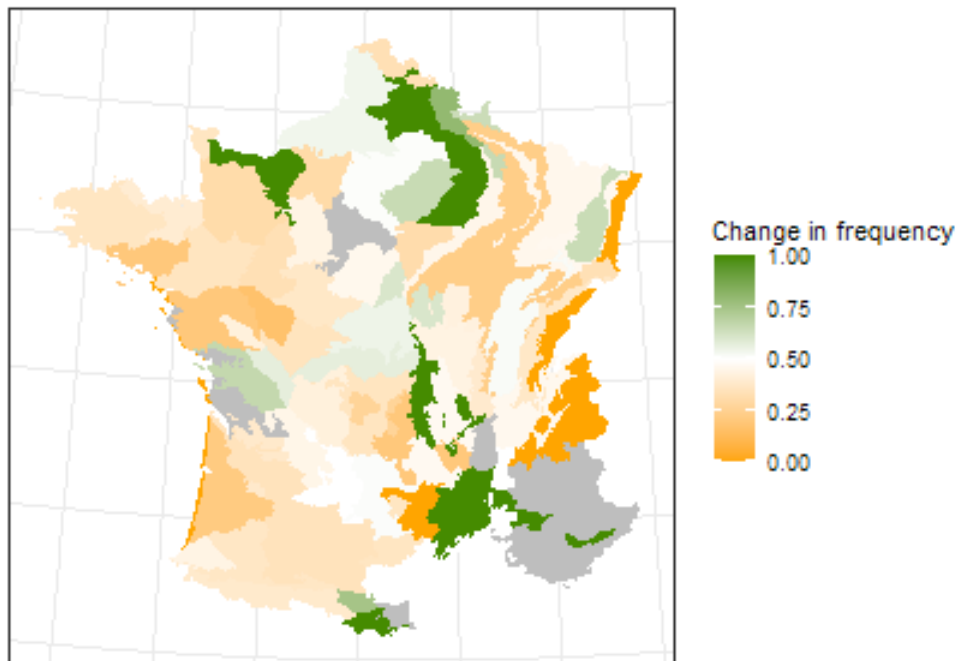
Euphorbia amygdaloides

Topt = 10.82 Ntot = 3574



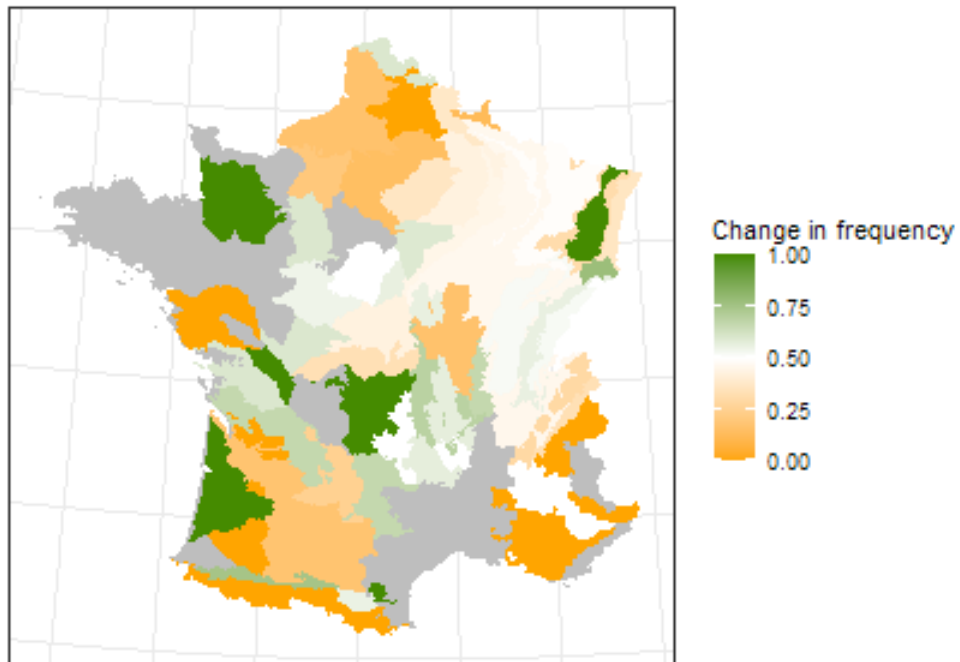
Hypericum pulchrum

Topt = 9.64 Ntot = 1766



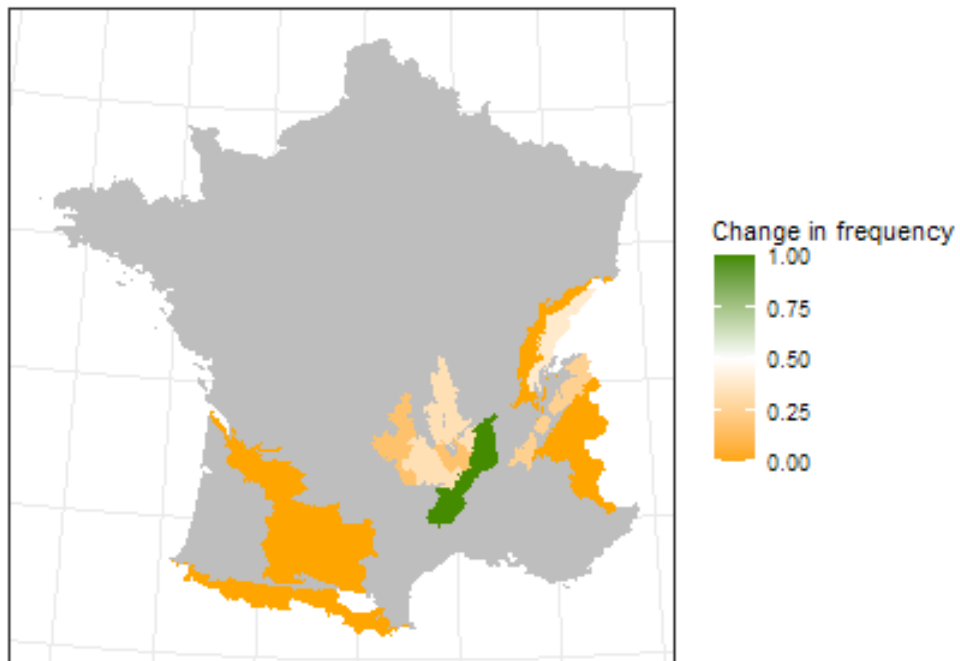
Crataegus laevigata

Topt = 9.31 Ntot = 3032



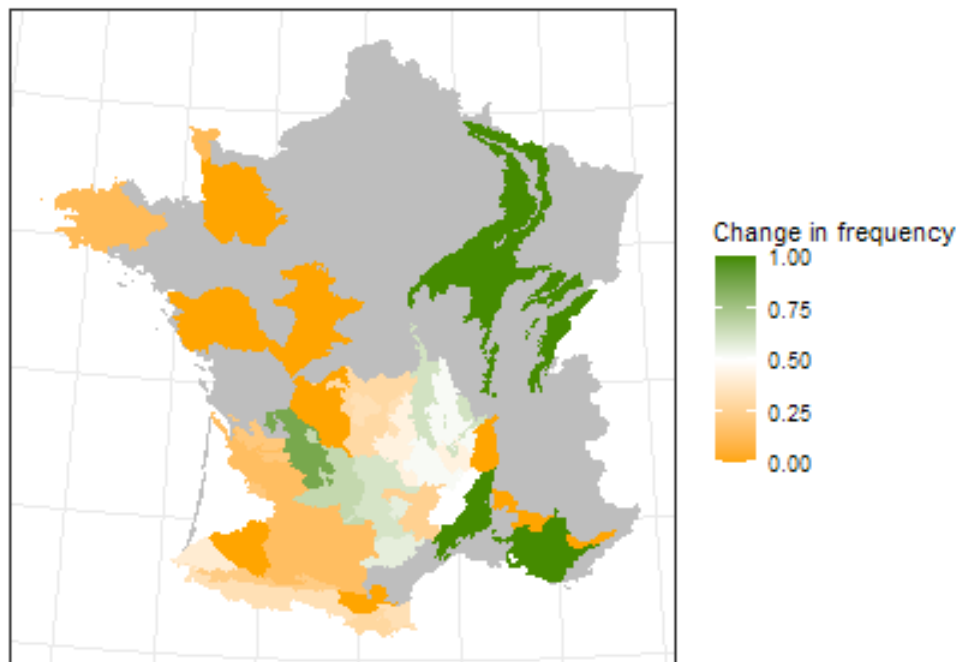
Alchemilla acutiloba

Topt = 5.1 Ntot = 167



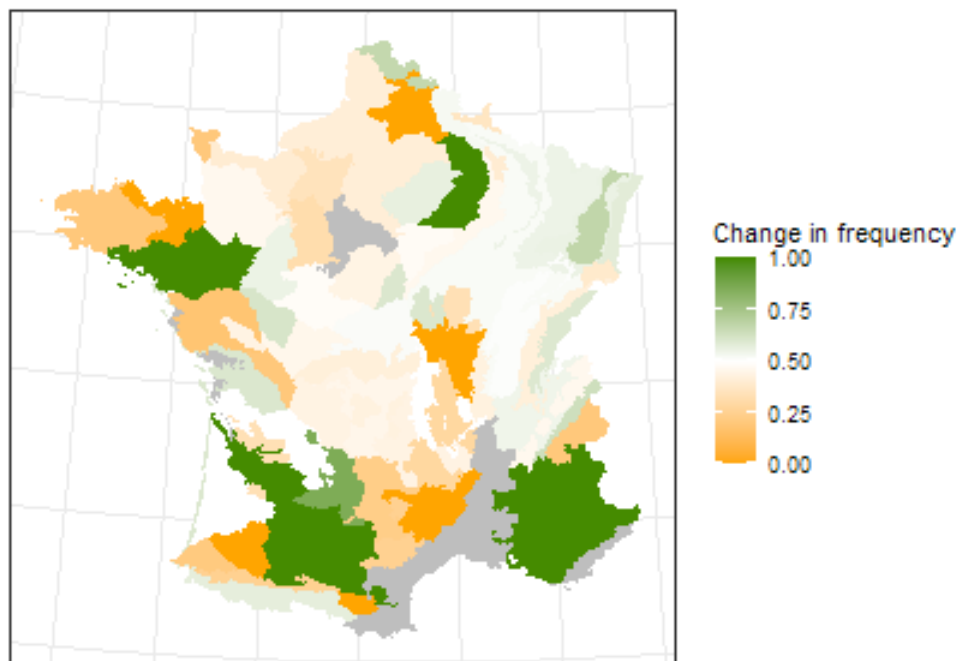
Conopodium majus

Topt = 10.26 Ntot = 396



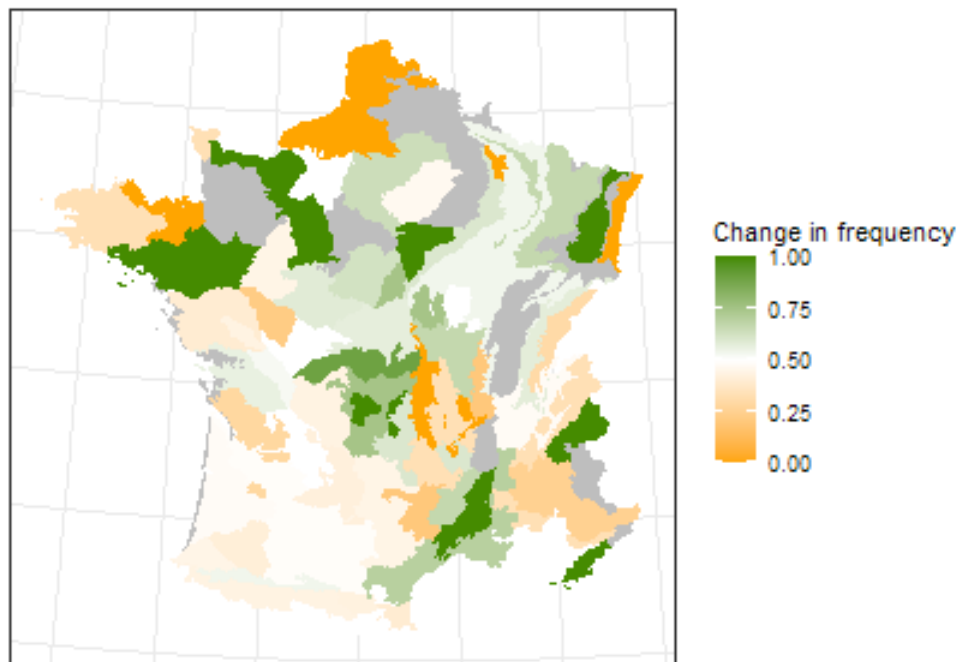
Polygonatum multiflorum

Topt = 8.04 Ntot = 1942



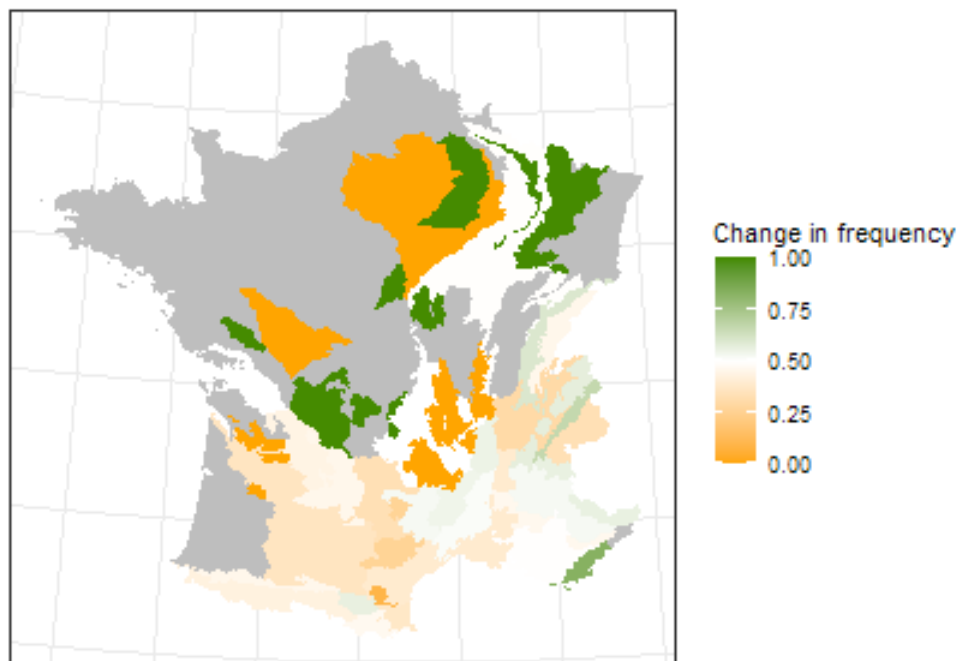
Dioscorea communis

Topt = 12.54 Ntot = 1290



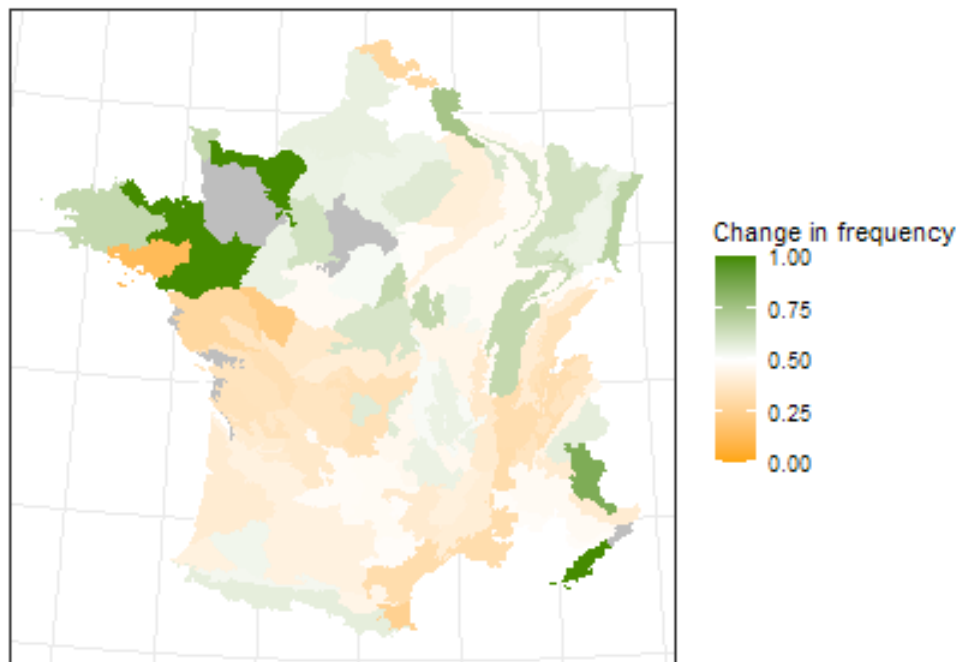
Teucrium chamaedrys

Topt = 11.56 Ntot = 1487



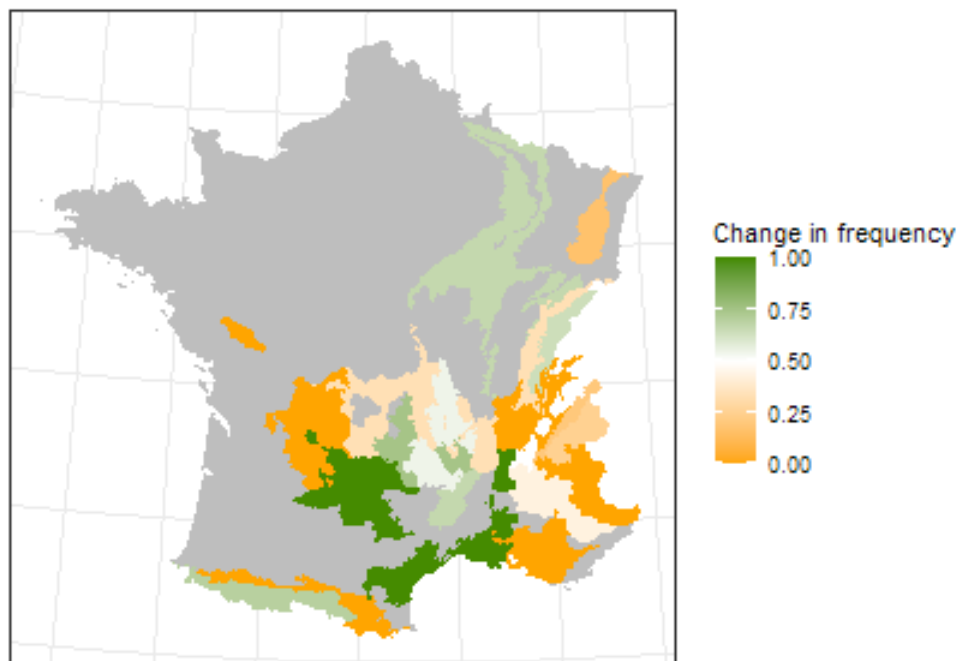
Rosa canina

Topt = 8.99 Ntot = 4211



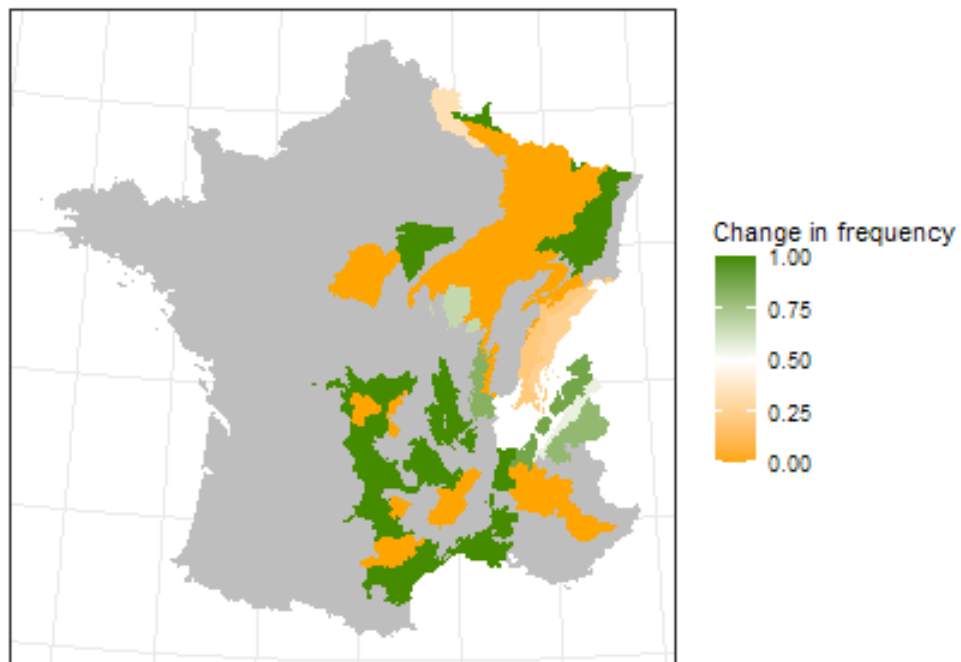
Campanula rotundifolia

Topt = 4.97 Ntot = 174



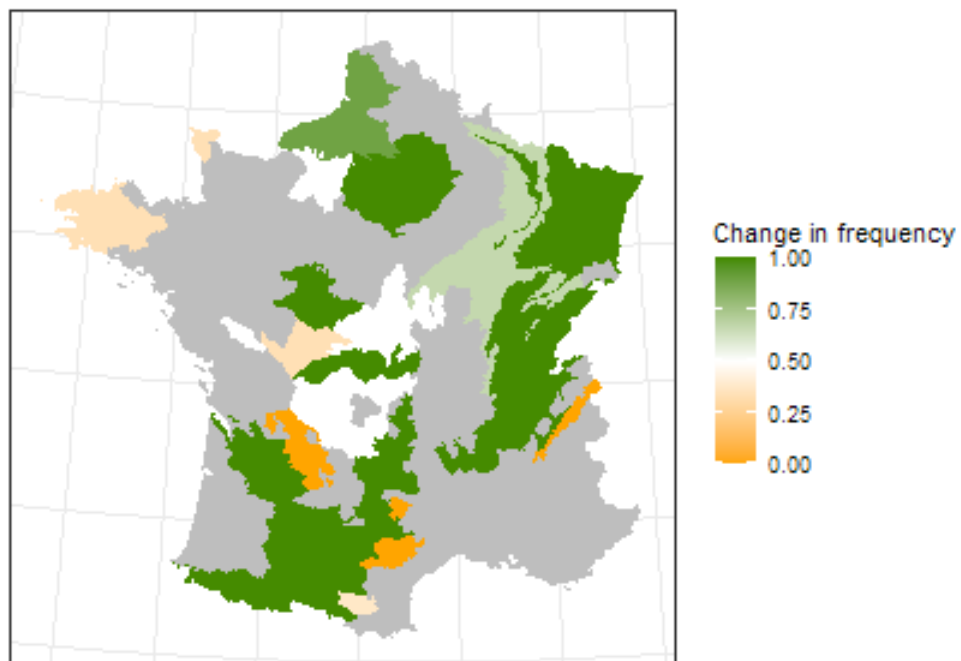
Senecio hercynicus

Topt = 4.25 Ntot = 110



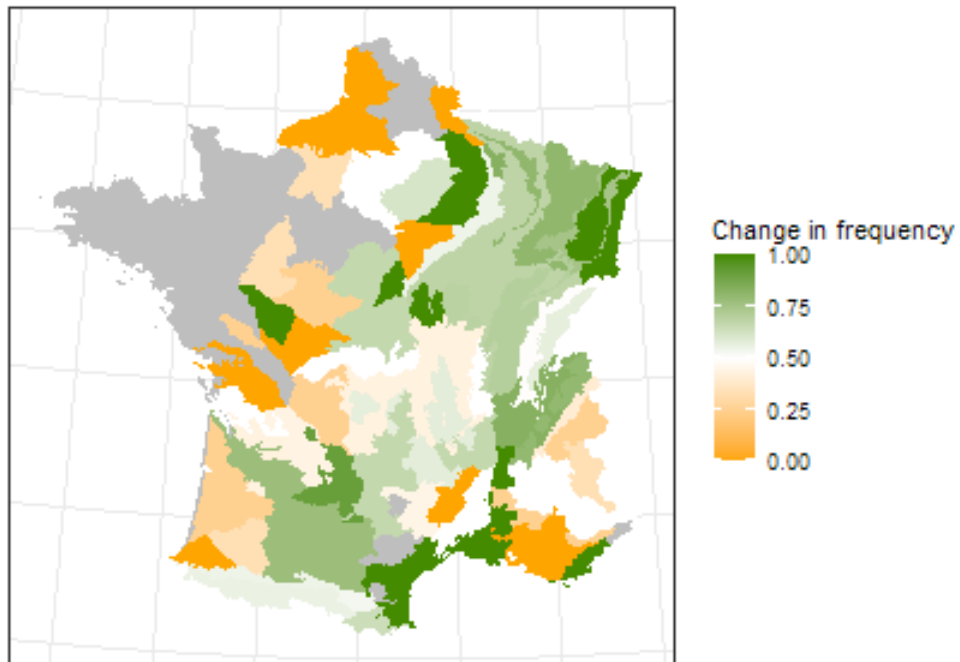
Anemone sylvestris

Topt = 5.82 Ntot = 111



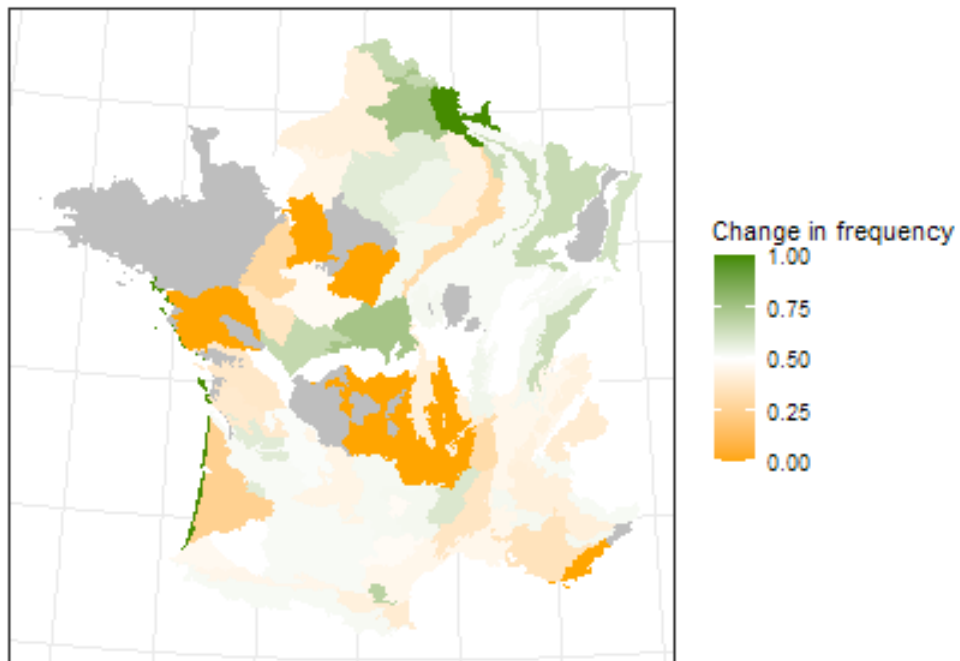
Prunella vulgaris

Topt = 7.29 Ntot = 719



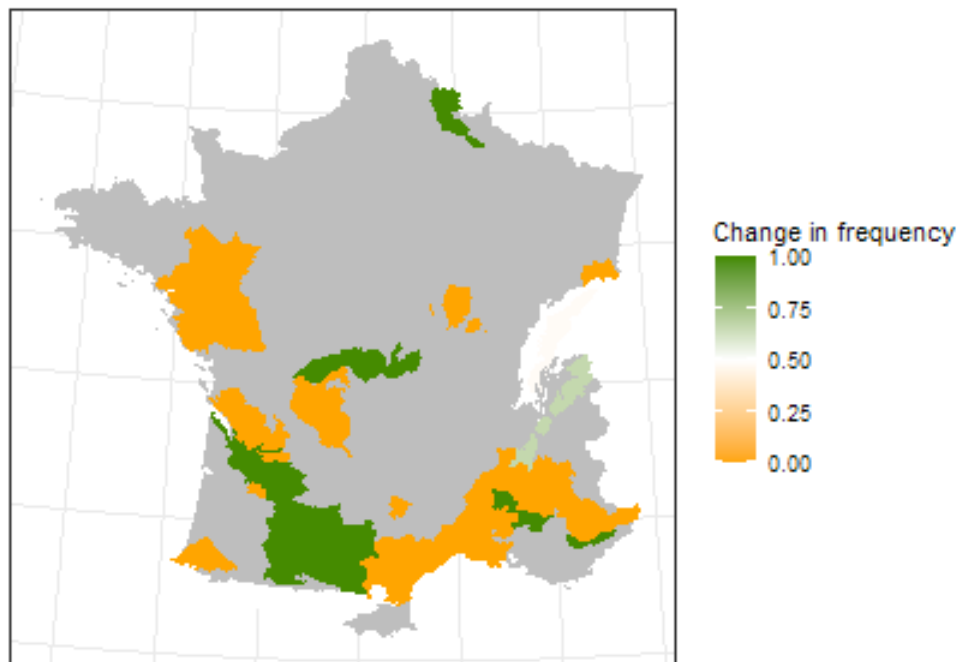
Clematis vitalba

Topt = 11.3 Ntot = 3069



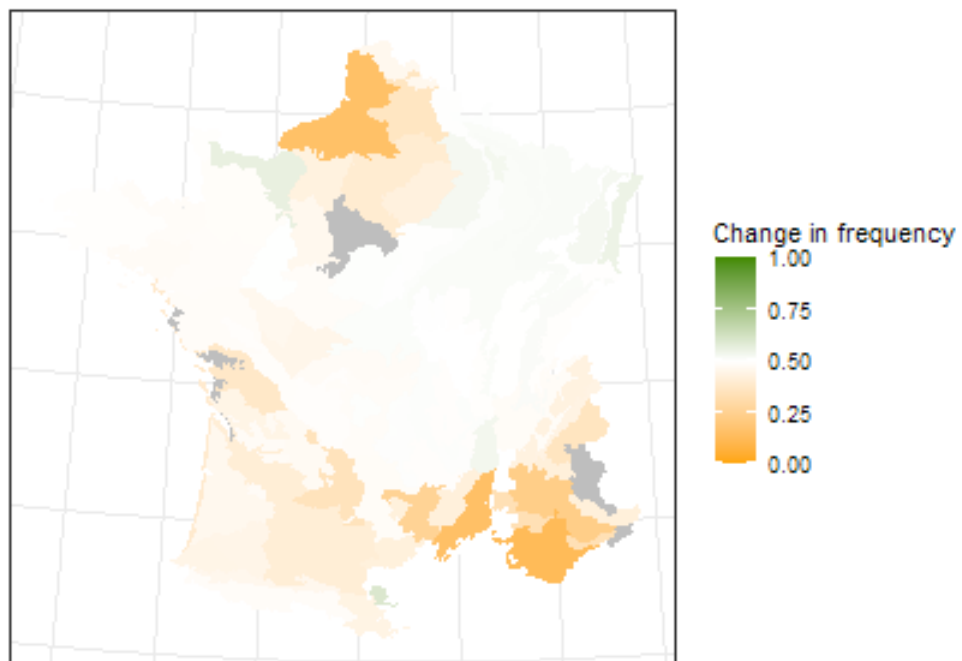
Ranunculus acris

Topt = 5.61 Ntot = 61



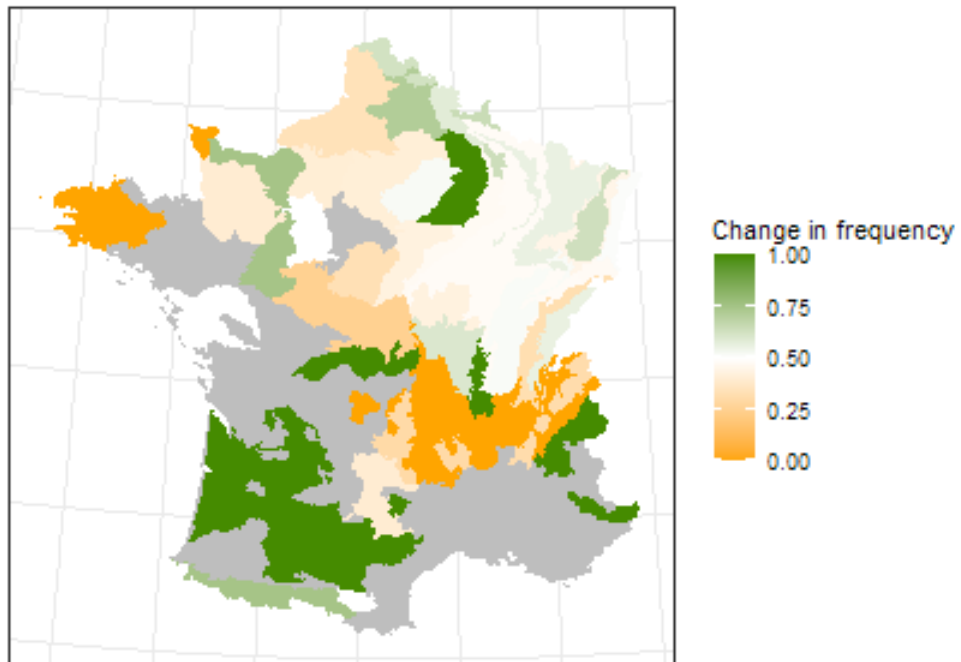
Rubus fruticosus

Topt = 8.77 Ntot = 20501



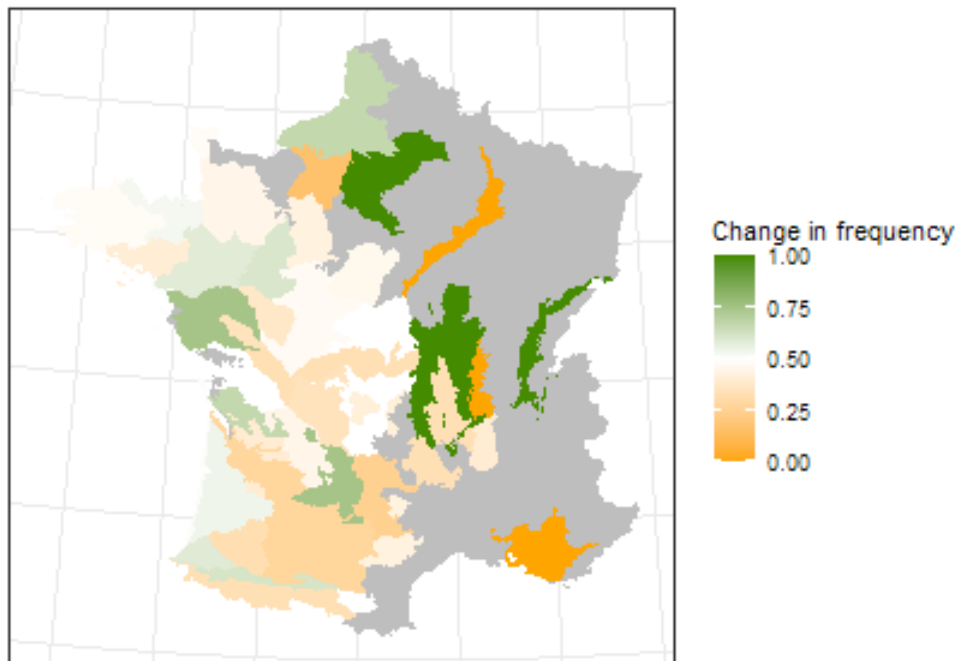
Milium effusum

Topt = 5.63 Ntot = 1969



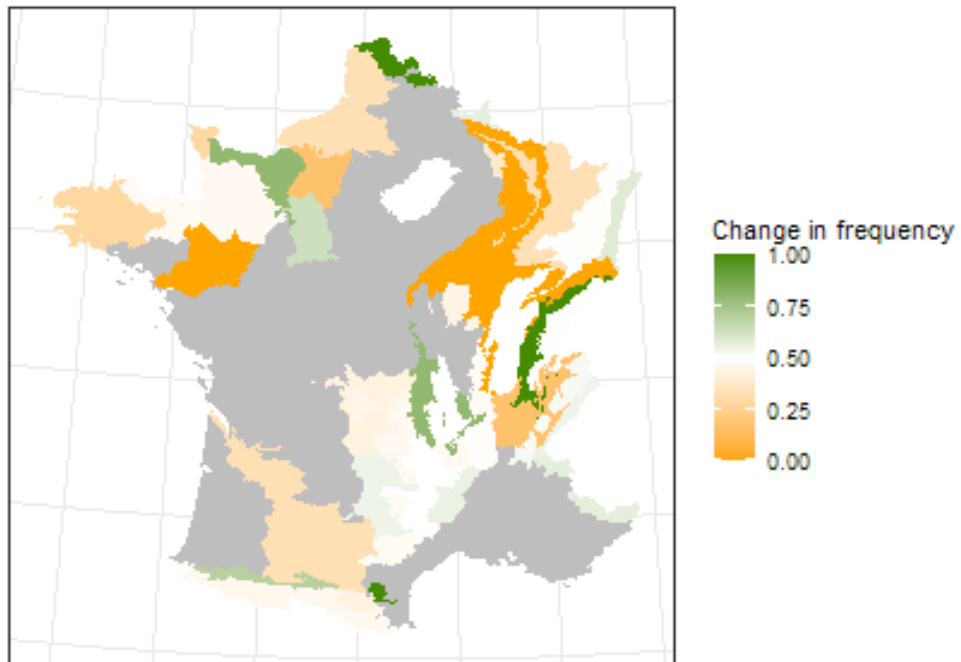
Ulex europaeus

Topt = 10.14 Ntot = 2185



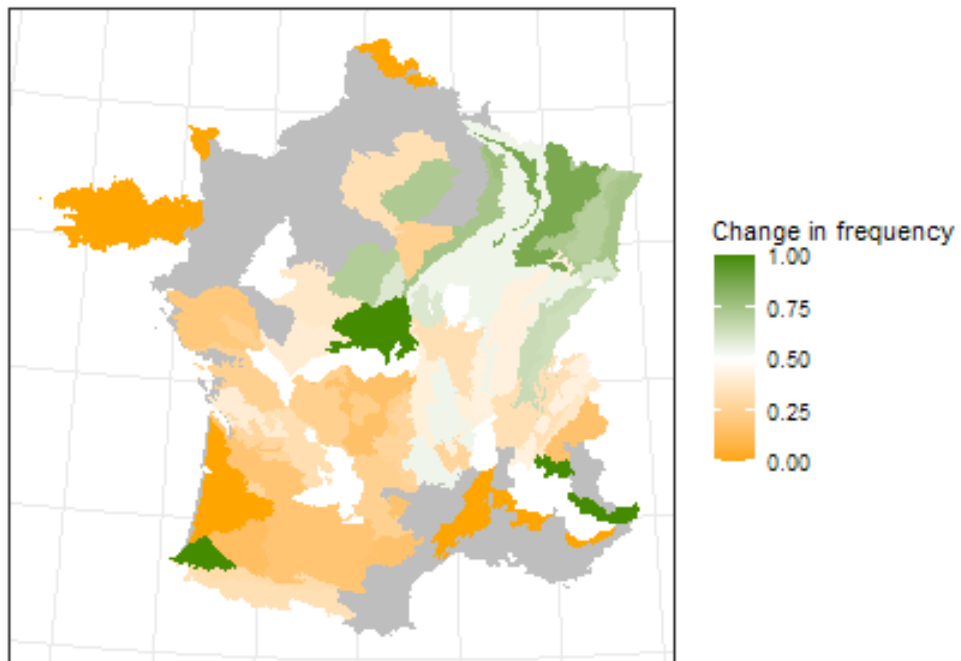
Vaccinium myrtillus

Topt = 5.07 Ntot = 2356



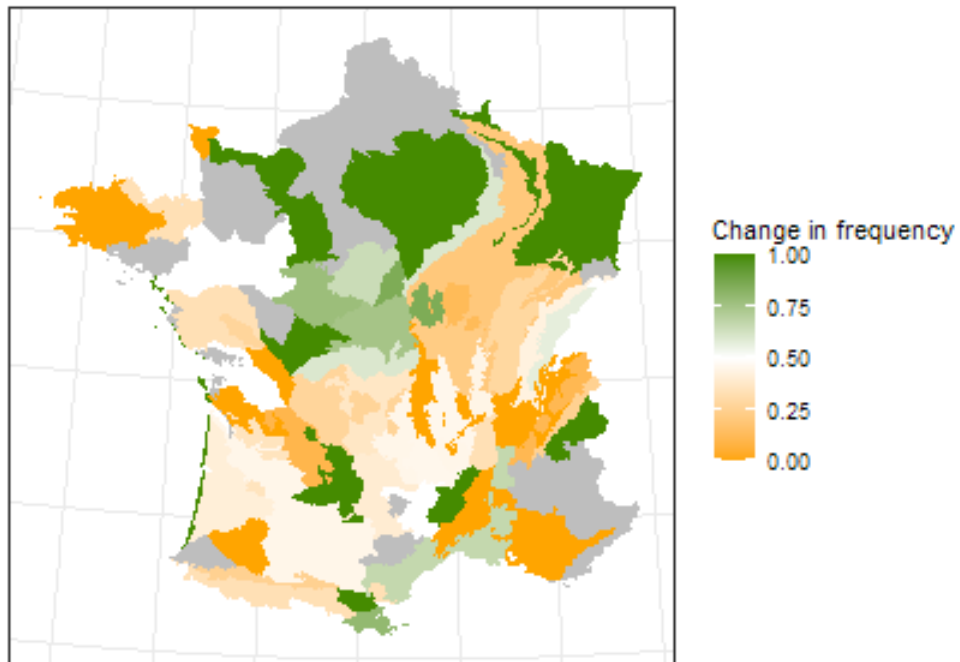
Viola riviniana

Topt = 8.26 Ntot = 903



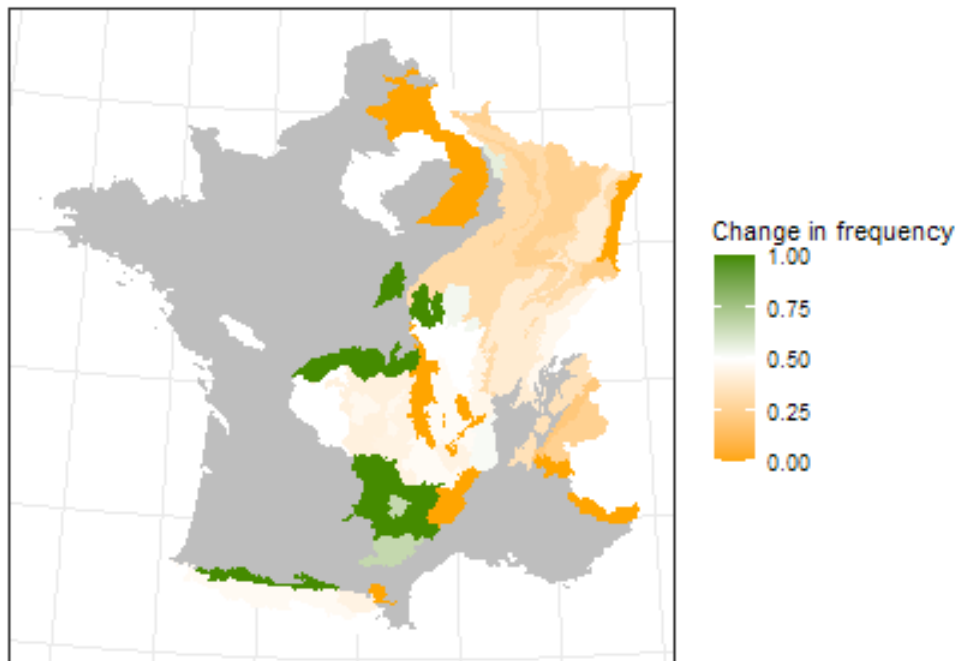
Rumex acetosa

Topt = 6.87 Ntot = 470



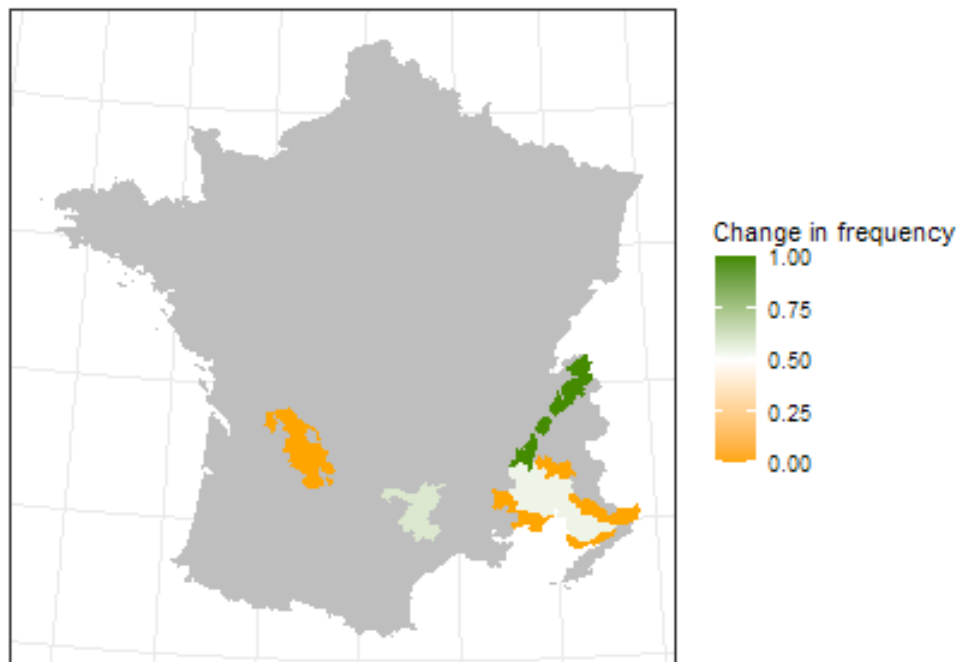
Sambucus racemosa

Topt = 7.05 Ntot = 1168



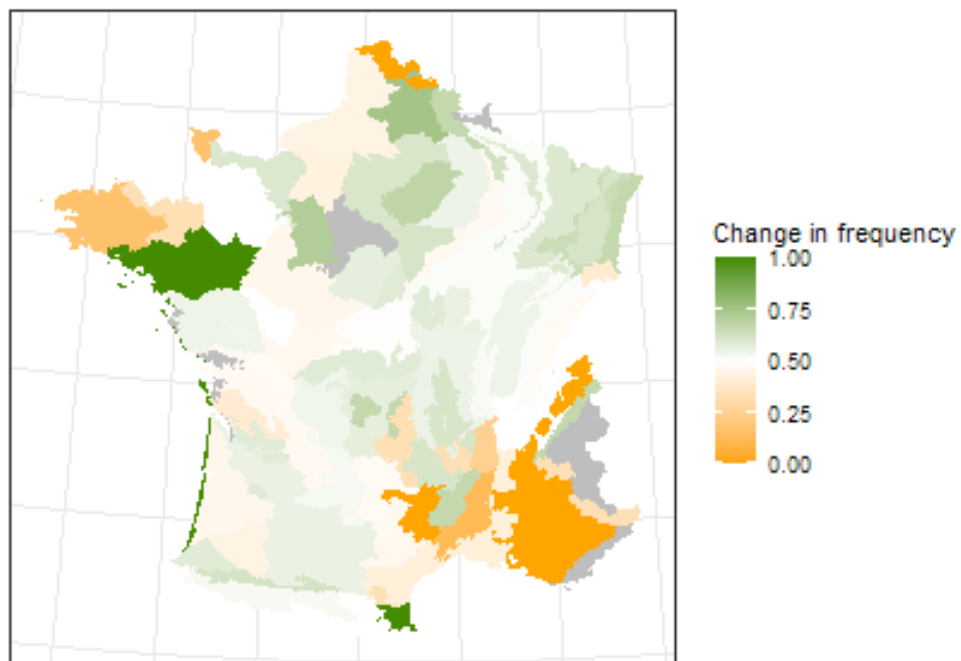
Linum suffruticosum

Topt = 15.8 Ntot = 39



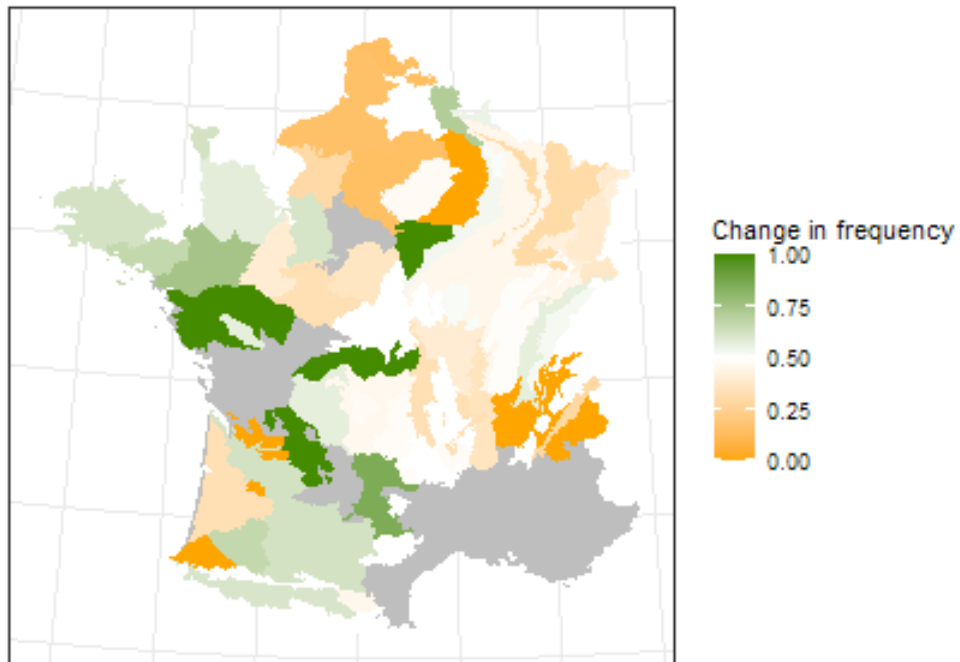
Euonymus europaeus

Topt = 8.75 Ntot = 3251



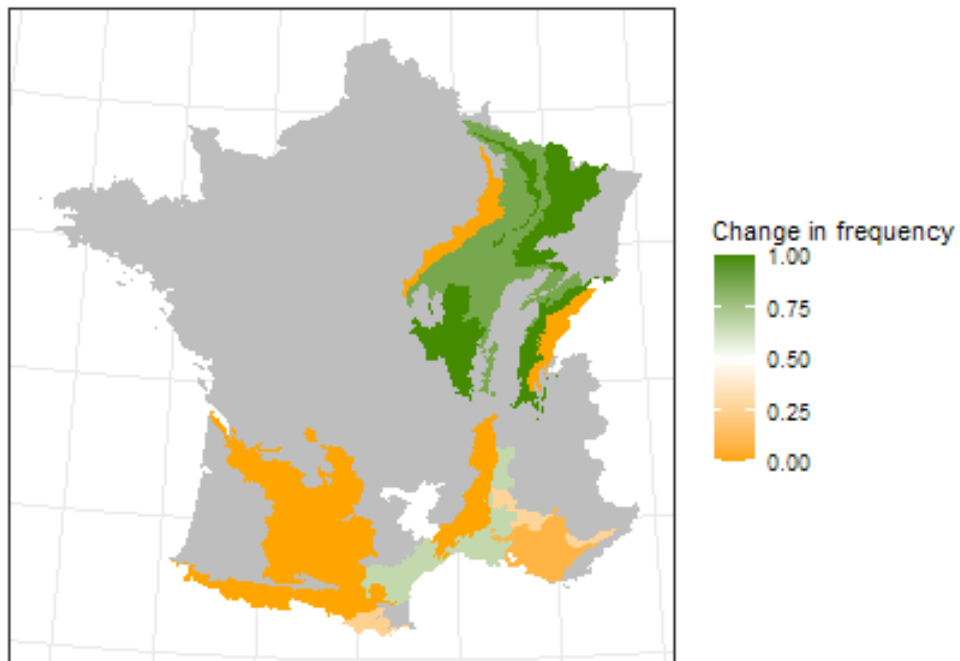
Dryopteris dilatata

Topt = 8.99 Ntot = 1800



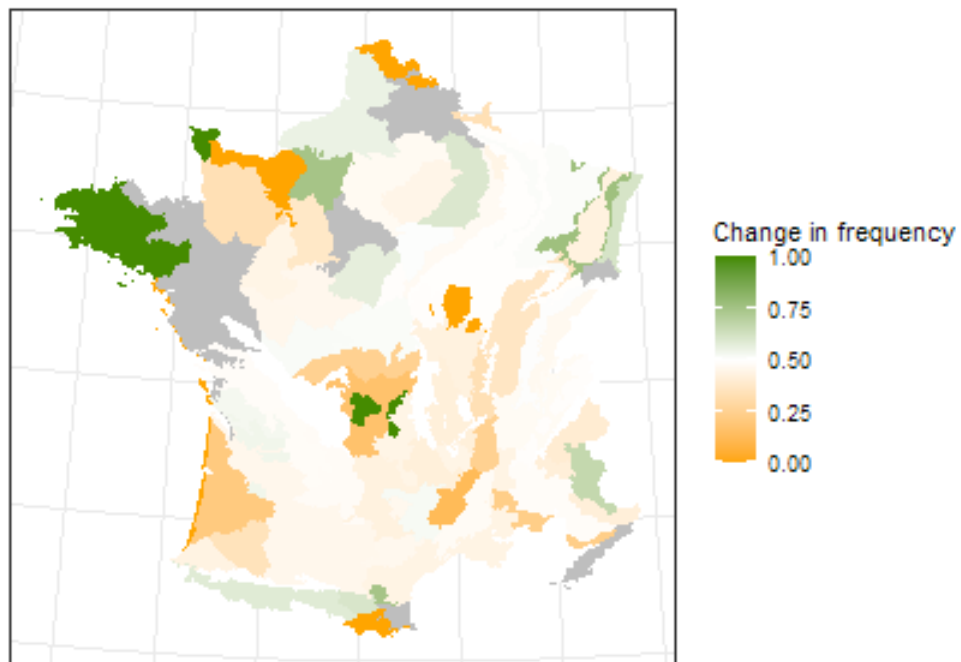
Phleum pratense

Topt = 7.49 Ntot = 63



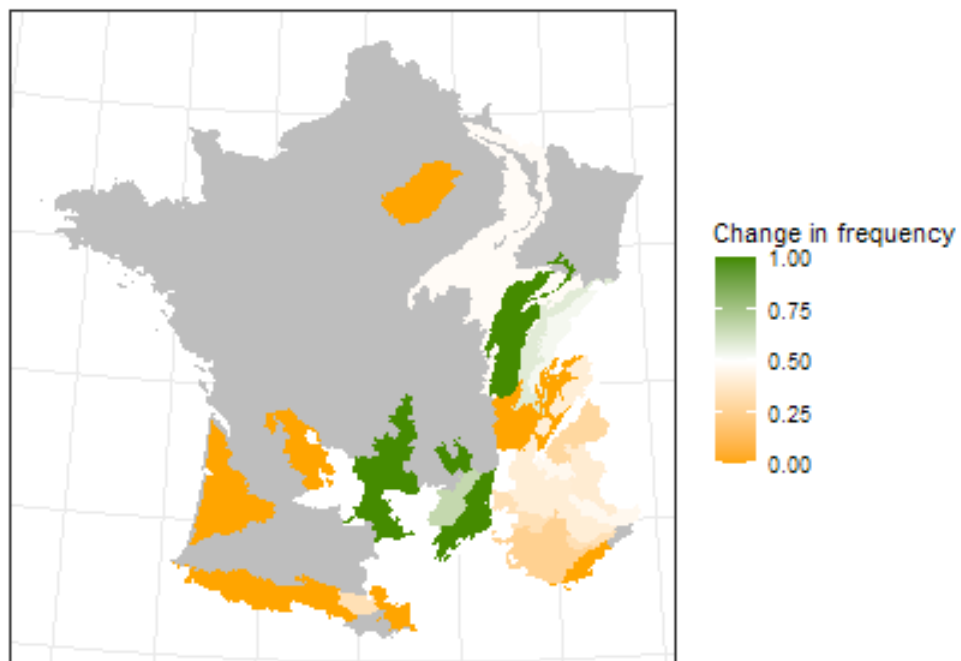
Carex flacca

Topt = 10.25 Ntot = 5917



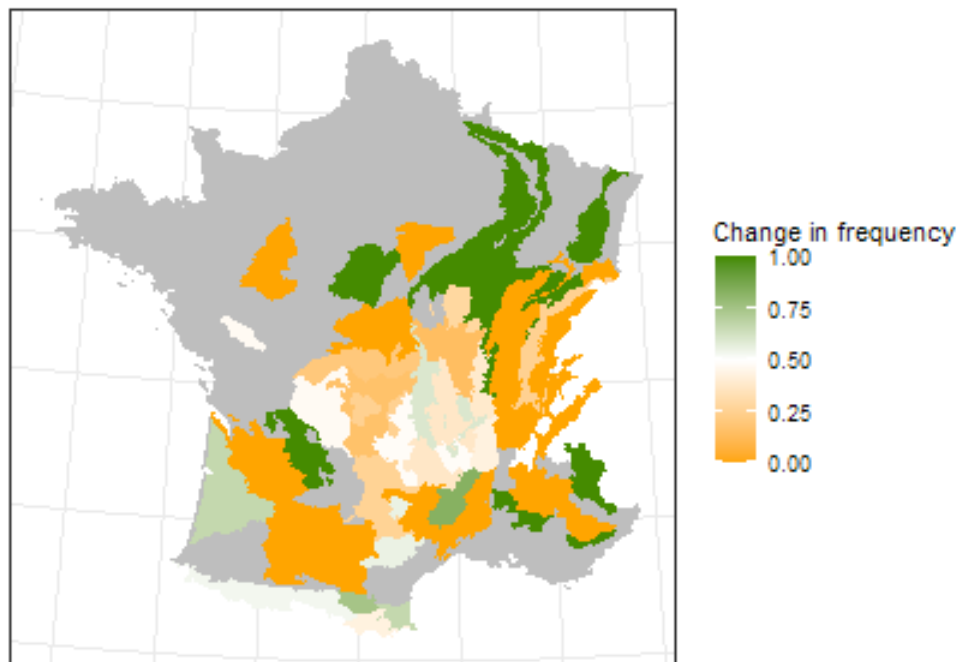
Sesleria caerulea

Topt = 7.4 Ntot = 305



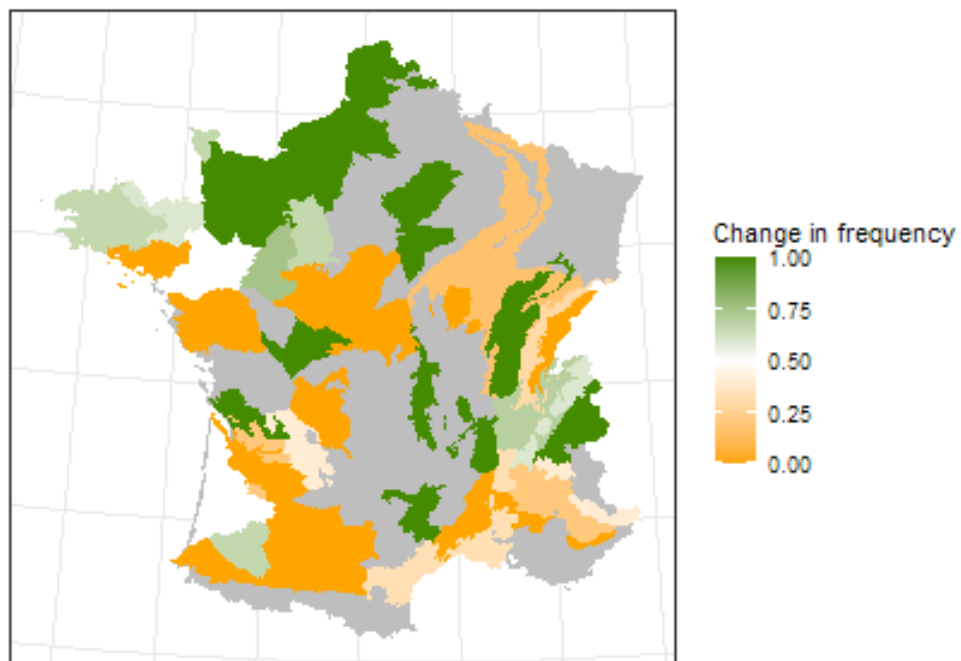
Linaria repens

Topt = 9.97 Ntot = 364



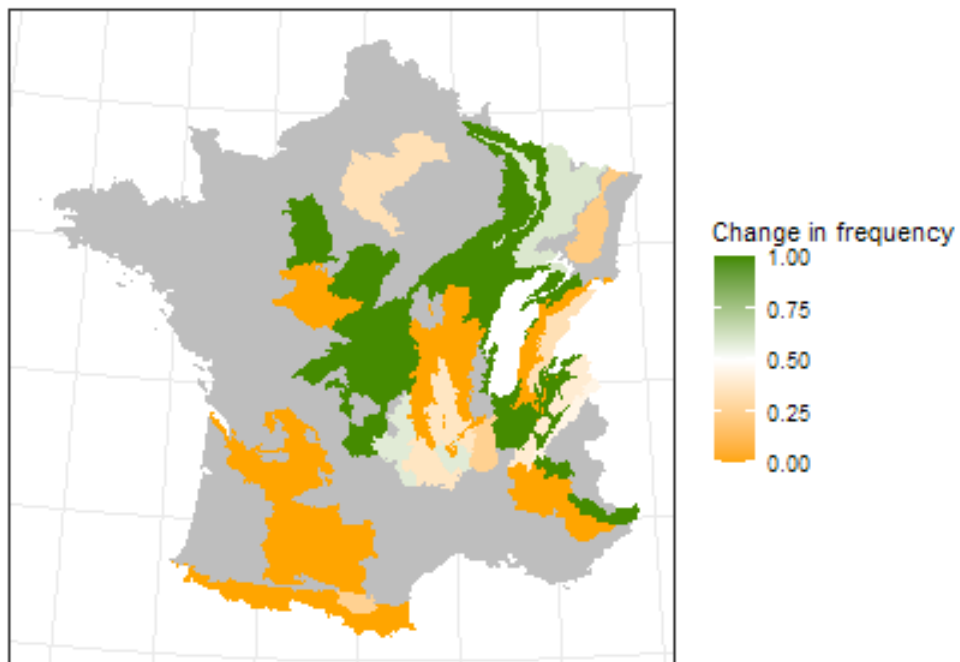
Primula vulgaris

Topt = 10.56 Ntot = 151



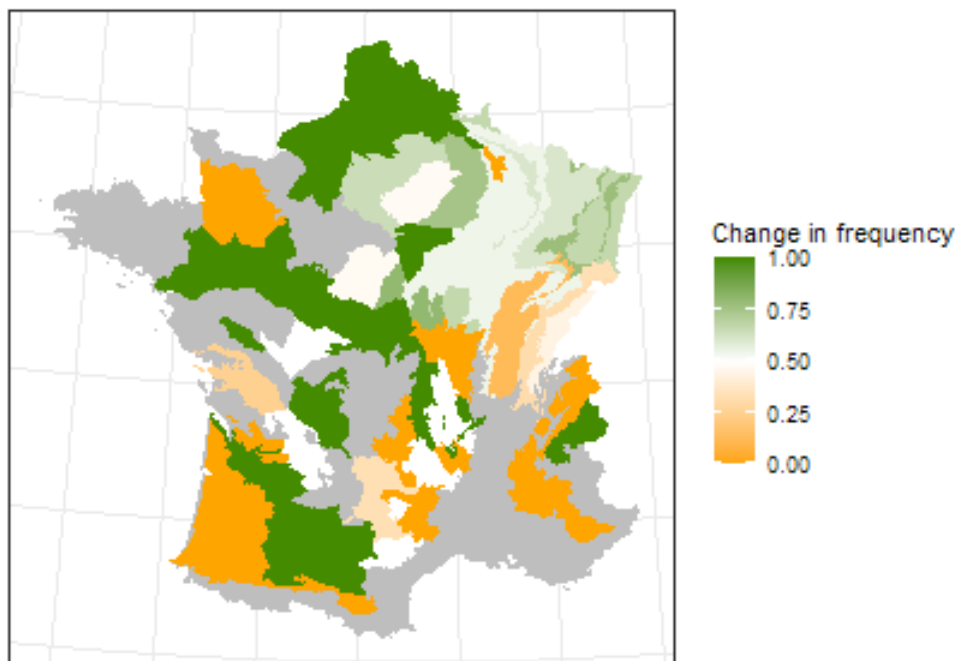
Stellaria nemorum

Topt = 5.52 Ntot = 123



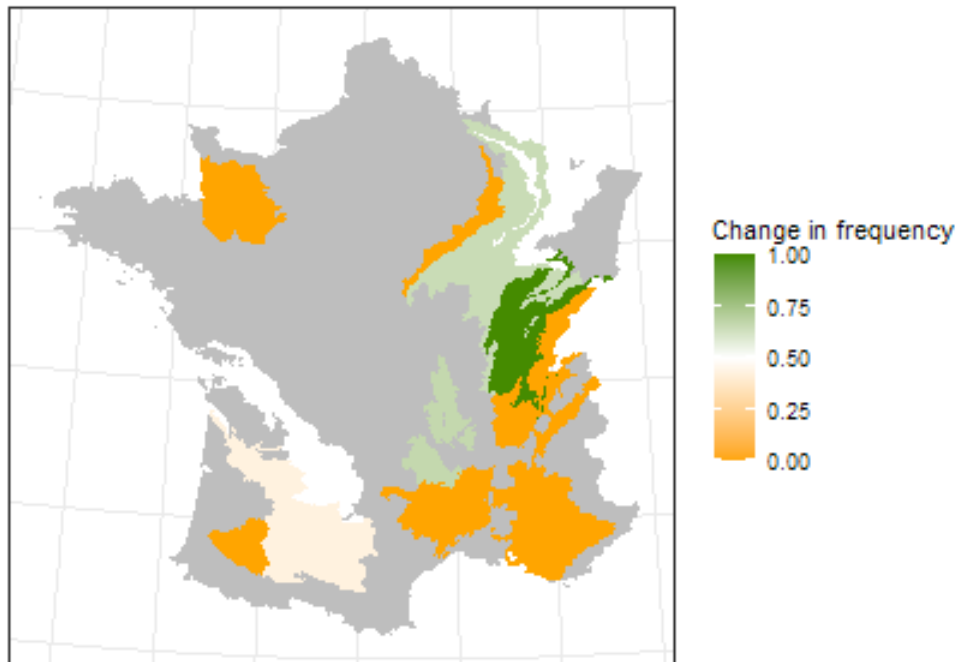
Ranunculus auricomus

Topt = 6.06 Ntot = 557



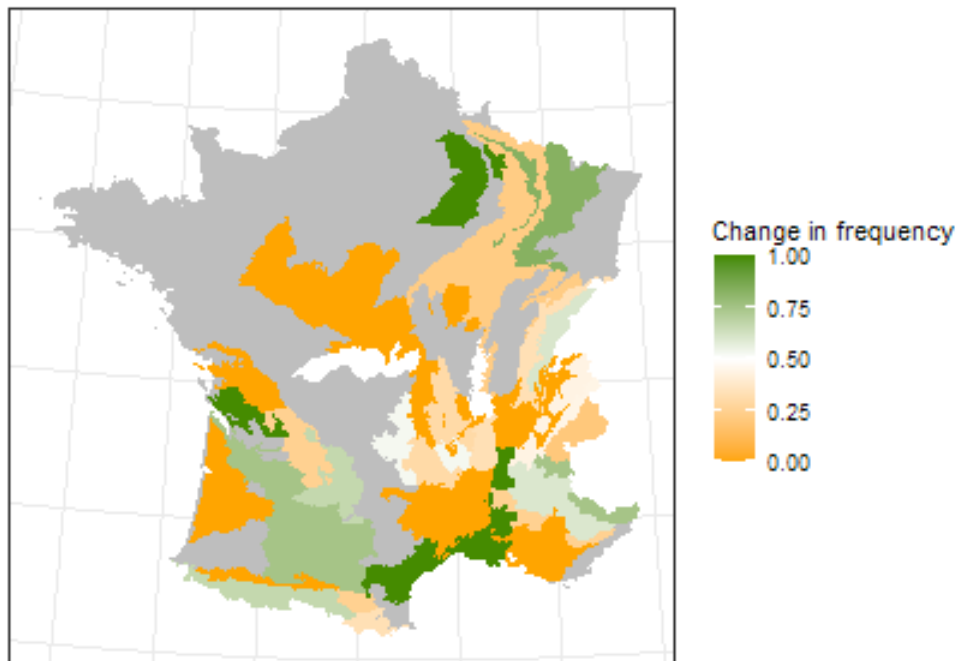
Lathyrus sylvestris

Topt = 12.21 Ntot = 61



Lathyrus pratensis

Topt = 6.07 Ntot = 202



Primula veris

Topt = 7.48 Ntot = 432

