

**Tab. S1** - AUC values of each model fit.

Species Id	Species	Number of points	AUC 2 <sup>nd</sup> fit	AUC 1 <sup>st</sup> fit
1	<i>Abies cilicica</i>	576	0.97	0.97
2	<i>Acer tauricum</i>	214	0.983	0.983
3	<i>Acer hermoneum</i>	250	0.928	0.923
4	<i>Acer obtusifolium</i>	293	0.944	0.942
5	<i>Amygdalus orientalis</i>	92	0.977	0.971
6	<i>Arbutus andrachne</i>	535	0.922	0.92
7	<i>Cedrus libani</i>	595	0.966	0.967
8	<i>Ceratonia siliqua</i>	787	0.914	0.912
9	<i>Cercis siliquastrum</i>	348	0.936	0.934
10	<i>Crateagus azarolus</i>	249	0.872	0.858
11	<i>Cupressus sempervirens</i>	322	0.934	0.931
12	<i>Fraxinus ornus</i>	138	0.978	0.975
13	<i>Juniperus drupacea</i>	1061	0.973	0.972
14	<i>Juniperus excelsa</i>	1443	0.880	0.879
15	<i>Laurus nobilis</i>	131	0.957	0.952
16	<i>Malus trilobata</i>	55	0.964	0.962
17	<i>Pinus pinea</i>	463	0.930	0.917
18	<i>Pyrus syriaca</i>	335	0.868	0.856
19	<i>Quercus cedrorum</i>	105	0.994	0.994
20	<i>Quercus cerris</i>	200	0.974	0.973
21	<i>Quercus calliprinos</i>	1914	0.792	0.788
22	<i>Quercus infectoria</i>	2092	0.805	0.805
23	<i>Quercus ithaburensis</i>	644	0.967	0.967
24	<i>Quercus kotschiana</i>	126	0.989	0.988
25	<i>Quercus look</i>	116	0.991	0.991
26	<i>Sorbus torminalis</i>	189	0.982	0.981
27	<i>Styrax officinalis</i>	564	0.898	0.892

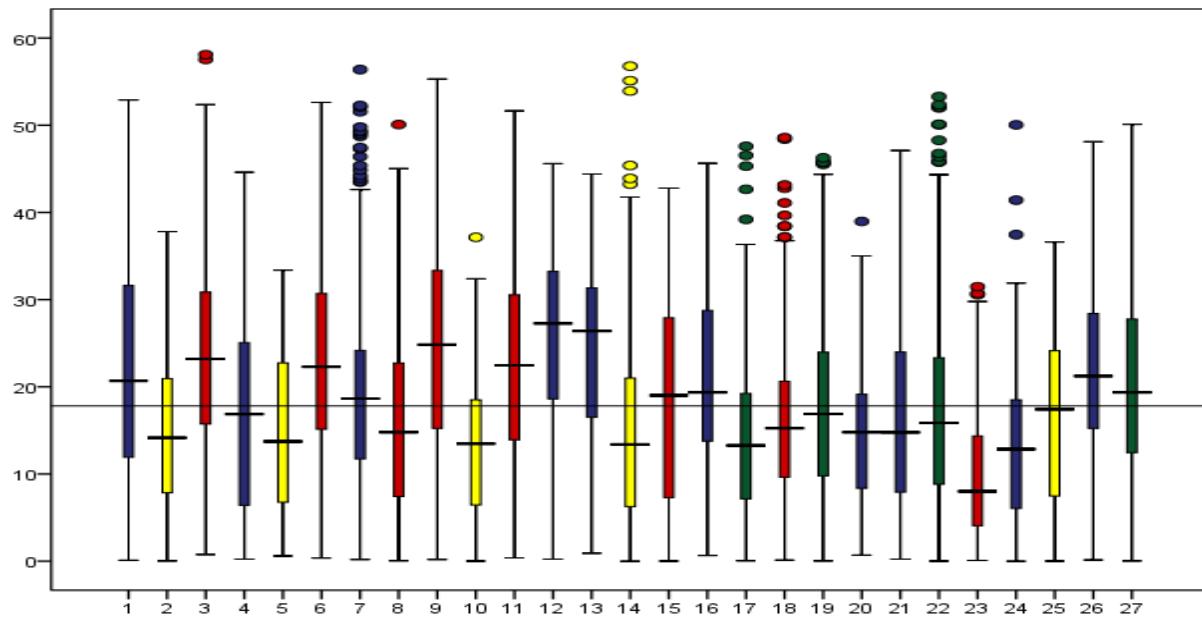
**Tab. S2** - Values used in Jackknives to express training gain if a certain factor is omitted.

Id	Species	Training gain without									
		Aspect	AWC	DEM	DFS	EQ	Tmax	CC	Tmin	P	Slope
1	<i>Abies cilicica</i>	2.55	2.55	2.55	2.55	2.55	2.55	2.46	2.55	2.55	2.55
2	<i>Acer tauricum</i>	2.84	2.75	2.84	2.85	2.86	2.84	2.83	2.85	2.84	2.86
3	<i>Acer hermoneum</i>	1.41	1.42	1.39	1.40	1.46	1.45	1.45	1.40	1.46	1.42
4	<i>Acer obtusifolium</i>	1.69	1.71	1.59	1.71	1.72	1.72	1.71	1.70	1.72	1.59
5	<i>Prunus argenta</i>	2.56	2.63	2.50	2.61	2.68	2.59	2.63	2.53	2.65	2.56
6	<i>Arbutus andrachne</i>	1.38	1.42	1.43	1.40	1.44	1.44	1.41	1.44	1.44	1.36
7	<i>Cedrus libani</i>	2.33	2.32	2.33	2.33	2.34	2.32	2.31	2.32	2.34	2.33
8	<i>Ceratonia siliqua</i>	1.42	1.41	1.42	1.41	1.42	1.42	1.41	1.40	1.42	1.40
9	<i>Cercis siliquastrum</i>	1.53	1.60	1.61	1.61	1.62	1.62	1.61	1.62	1.61	1.53
10	<i>Crateagus azarolus</i>	0.79	0.79	0.78	0.77	0.81	0.79	0.76	0.80	0.81	0.78
11	<i>Cupressus sempervirens</i>	1.50	1.51	1.51	1.49	1.53	1.52	1.51	1.52	1.48	1.38
12	<i>Fraxinus ornus</i>	2.55	2.49	2.61	2.58	2.61	2.61	2.58	2.59	2.61	2.49
13	<i>Juniperus drupacea</i>	2.41	2.37	2.41	2.40	2.43	2.43	2.36	2.43	2.43	2.43
14	<i>Juniperus excelsa</i>	1.04	1.05	1.05	1.02	1.04	1.04	1.03	1.02	1.04	1.05
15	<i>Laurus nobilis</i>	1.74	1.67	1.50	1.78	1.76	1.74	1.75	1.77	1.78	1.65
16	<i>Malus trilobata</i>	2.01	2.01	2.03	2.02	2.03	2.03	1.94	1.94	2.03	1.95
17	<i>Pinus pinea</i>	1.47	1.27	1.48	1.44	1.47	1.48	1.43	1.47	1.48	1.48
18	<i>Pyrus syriaca</i>	0.75	0.78	0.76	0.75	0.80	0.79	0.79	0.79	0.77	0.78
19	<i>Quercus cedrorum</i>	3.90	3.78	3.96	3.95	3.93	3.93	3.95	3.95	3.96	3.93
20	<i>Quercus cerris</i>	2.45	2.45	2.44	2.46	2.47	2.48	2.33	2.43	2.48	2.46
21	<i>Quercus calliprinos</i>	0.53	0.52	0.52	0.51	0.52	0.52	0.52	0.52	0.52	0.49
22	<i>Quercus infectoria</i>	0.61	0.61	0.61	0.61	0.61	0.61	0.60	0.61	0.61	0.61
23	<i>Quercus ithaburensis</i>	2.49	2.49	2.48	2.45	2.49	2.49	2.43	2.49	2.49	2.49
24	<i>Quercus kotschyana</i>	3.13	3.13	3.14	3.13	3.09	3.08	3.03	3.13	3.13	3.09
25	<i>Quercus look</i>	3.29	3.15	3.30	3.23	3.30	3.31	3.30	3.24	3.29	3.29
26	<i>Sorbus torminalis</i>	2.75	2.68	2.76	2.77	2.78	2.74	2.72	2.76	2.77	2.76
27	<i>Styrax officinalis</i>	1.05	1.09	1.07	1.09	1.09	1.10	1.06	1.08	1.08	1.06

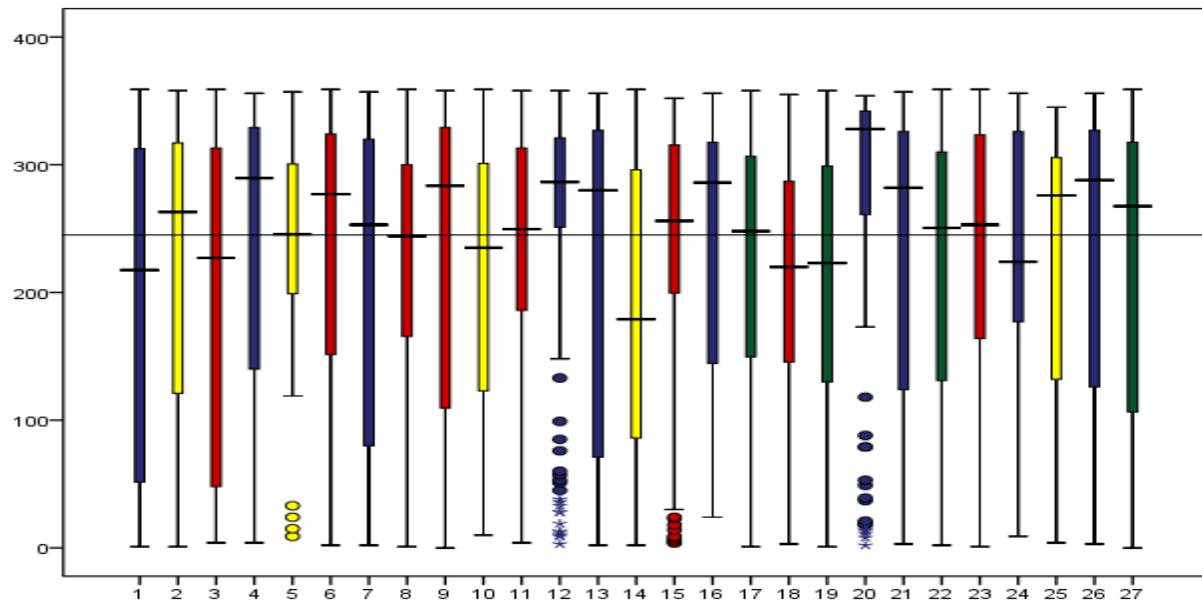
**Tab. S3** - Values used in jackknives to express training gain if a certain factor is used in isolation.

Id	Species	Training gain with only									
		Aspect	AWC	DEM	DFS	EQ	Tmax	CC	Tmin	P	Slope
1	<i>Abies cilicica</i>	0.11	0.40	1.26	1.41	1.19	1.52	1.37	1.24	1.09	0.43
2	<i>Acer tauricum</i>	0.20	0.65	1.46	1.28	1.37	1.66	0.91	1.12	1.31	0.35
3	<i>Acer hermoneum</i>	0.05	0.15	1.01	0.50	0.15	0.96	0.07	0.99	0.19	0.15
4	<i>Acer obtusifolium</i>	0.11	0.17	0.58	0.76	0.68	0.35	0.48	0.64	0.56	0.61
5	<i>Prunus argenta</i>	0.13	0.31	0.76	1.63	1.67	0.58	0.67	0.87	1.56	0.15
6	<i>Arbutus andrachne</i>	0.15	0.12	0.39	0.69	0.67	0.30	0.57	0.56	0.64	0.54
7	<i>Cedrus libani</i>	0.07	0.40	1.47	1.38	1.11	1.56	0.71	1.41	1.14	0.34
8	<i>Ceratonia siliqua</i>	0.03	0.07	0.85	1.08	0.64	0.59	0.33	1.07	0.54	0.12
9	<i>Cercis siliquastrum</i>	0.23	0.18	0.30	0.67	0.77	0.22	0.54	0.43	0.73	0.64
10	<i>Crateagus azarolus</i>	0.01	0.11	0.30	0.17	0.15	0.33	0.13	0.18	0.14	0.10
11	<i>Cupressus sempervirens</i>	0.06	0.10	0.18	0.65	0.84	0.19	0.55	0.28	0.84	0.54
12	<i>Fraxinus ornus</i>	0.20	0.43	0.56	0.98	1.10	0.89	0.82	0.59	1.05	0.82
13	<i>Juniperus drupacea</i>	0.12	0.48	1.22	1.22	1.40	1.45	0.73	0.80	1.27	0.43
14	<i>Juniperus excelsa</i>	0.02	0.08	0.71	0.44	0.10	0.72	0.14	0.72	0.10	0.07
15	<i>Laurus nobilis</i>	0.07	0.05	0.52	0.70	0.47	0.25	0.29	0.68	0.32	0.22
16	<i>Malus trilobata</i>	0.05	0.02	0.62	0.80	0.53	0.78	0.76	0.53	0.56	0.41
17	<i>Pinus pinea</i>	0.03	0.70	0.27	0.34	0.62	0.25	0.28	0.35	0.67	0.19
18	<i>Pyrus syriaca</i>	0.03	0.08	0.23	0.14	0.24	0.27	0.04	0.12	0.31	0.13
19	<i>Quercus cedrorum</i>	0.43	1.16	2.22	1.97	2.41	2.50	1.17	2.15	1.87	0.16
20	<i>Quercus cerris</i>	0.11	0.10	0.98	0.96	1.09	1.30	0.95	0.70	0.94	0.23
21	<i>Quercus coccifera</i>	0.00	0.05	0.14	0.15	0.22	0.13	0.11	0.14	0.22	0.19
22	<i>Quercus infectoria</i>	0.01	0.05	0.23	0.26	0.30	0.24	0.14	0.23	0.33	0.13
23	<i>Quercus ithaburensis</i>	0.07	0.88	1.31	1.11	1.70	1.22	1.87	1.34	1.47	0.08
24	<i>Quercus kotschyana</i>	0.01	0.08	1.85	1.28	1.66	2.18	0.79	1.85	1.75	0.09
25	<i>Quercus look</i>	0.08	1.09	1.73	1.41	1.40	1.44	0.40	1.49	1.13	0.16
26	<i>Sorbus torminalis</i>	0.15	0.50	1.32	0.96	1.15	1.68	0.77	0.92	1.15	0.46
27	<i>Styrax officinalis</i>	0.08	0.09	0.21	0.34	0.47	0.24	0.41	0.22	0.52	0.38

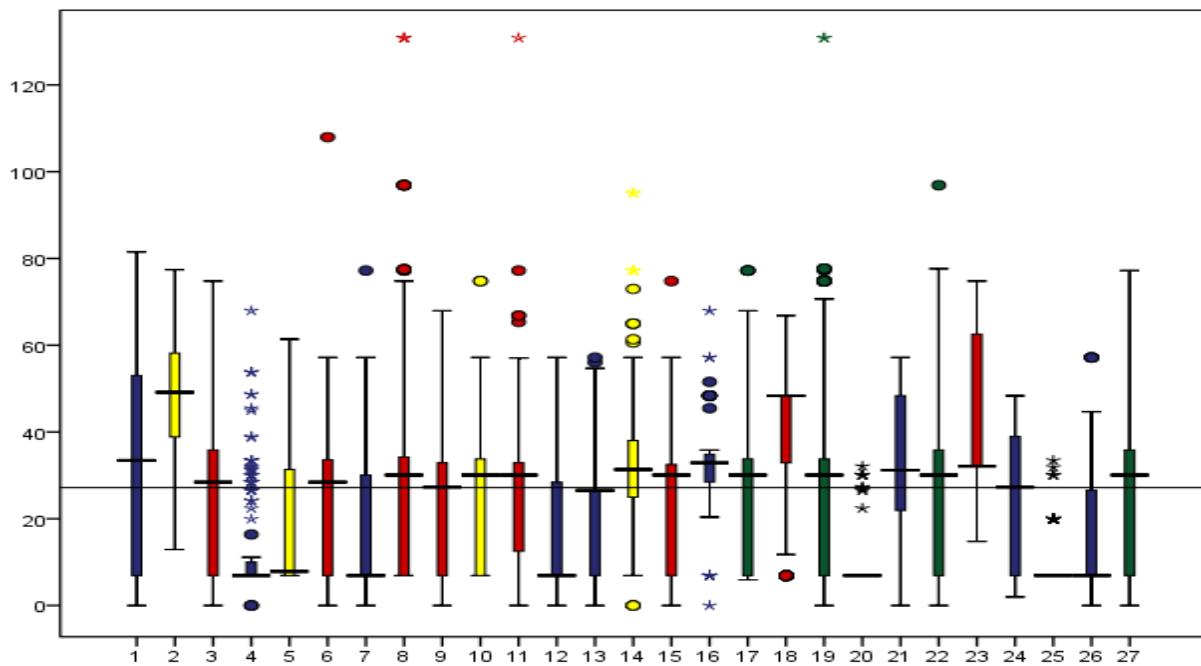
**Fig. S1** - Range of slope (in %) per target species. Numbers 1 to 27 represent the respective taxa as per Tab. 1. Species of groups I, II, III and IV are respectively illustrated in red, blue, yellow and green.



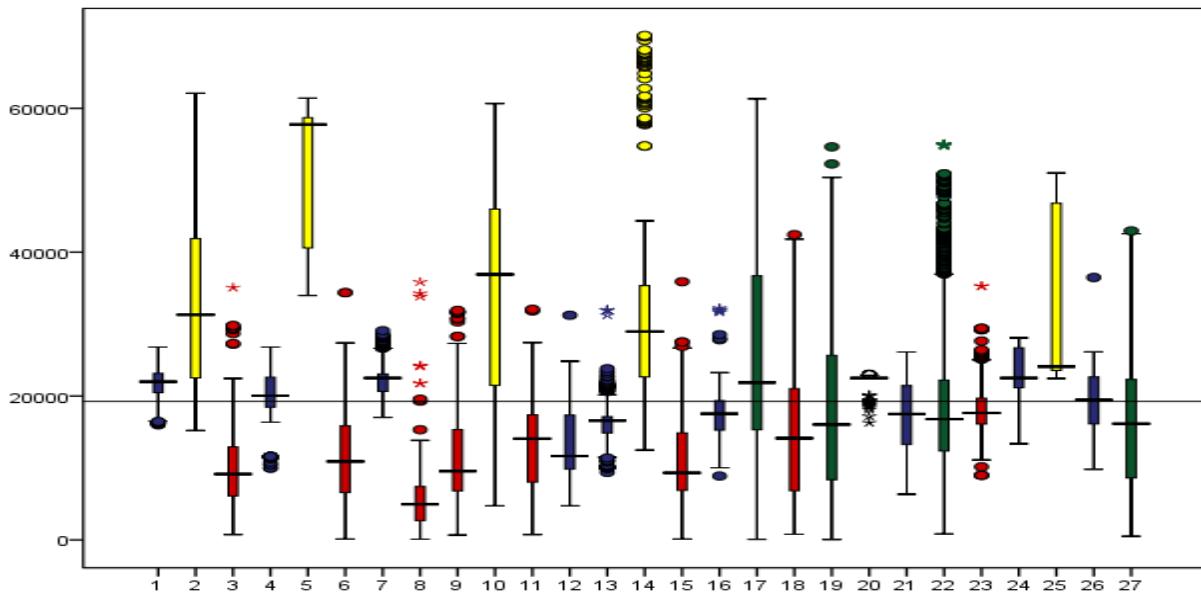
**Fig. S2** - Range of folded aspect (in degrees) per target species. Numbers from 1 to 27 represent the respective taxa as per Table 1. Species of groups I, II, III and IV are respectively illustrated in red, blue, yellow and green.



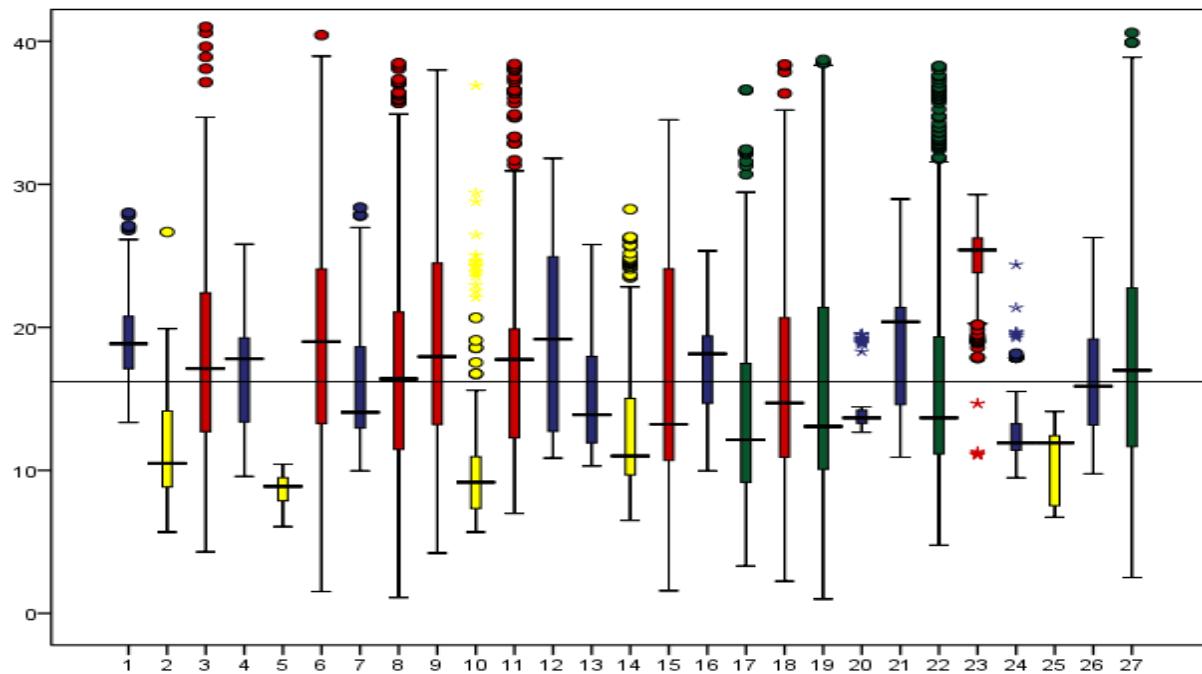
**Fig. S3** - Range of Available Water Content (in mm) per target species. Numbers from 1 to 27 represent the respective taxa as per Table 1. Species of groups I, II, III and IV are respectively illustrated in red, blue, yellow and green.



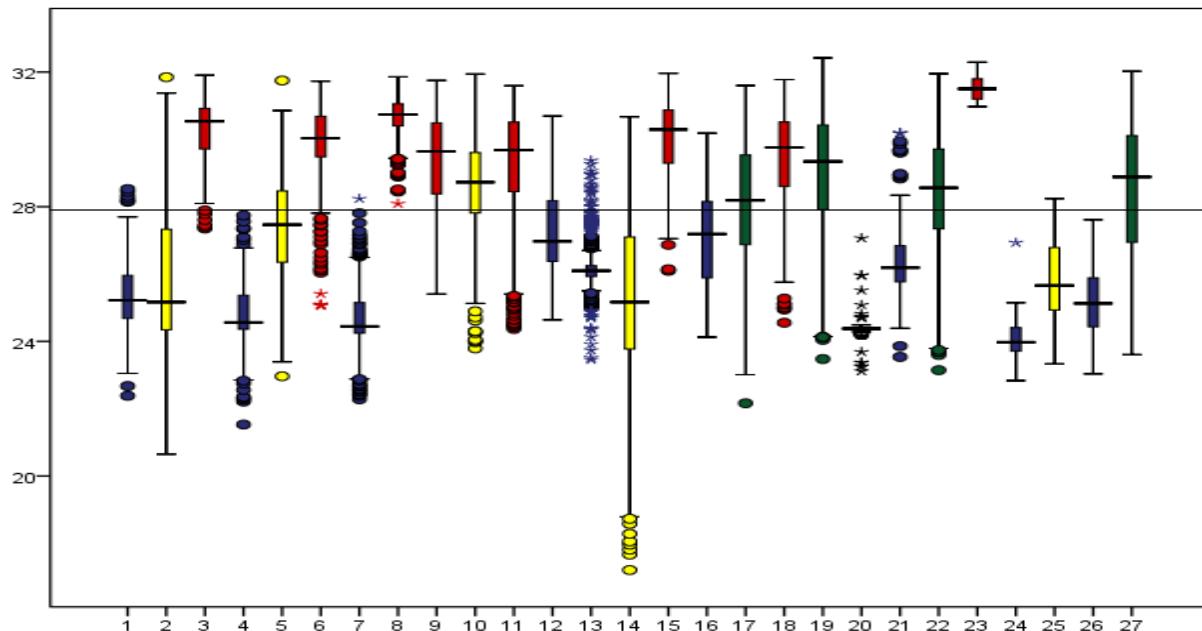
**Fig. S4** - Range of distribution of species according to distance from the sea (m). Numbers 1 to 27 represent the respective taxa as per Table 1. Species of groups I, II, III and IV are respectively illustrated in red, blue, yellow and green.



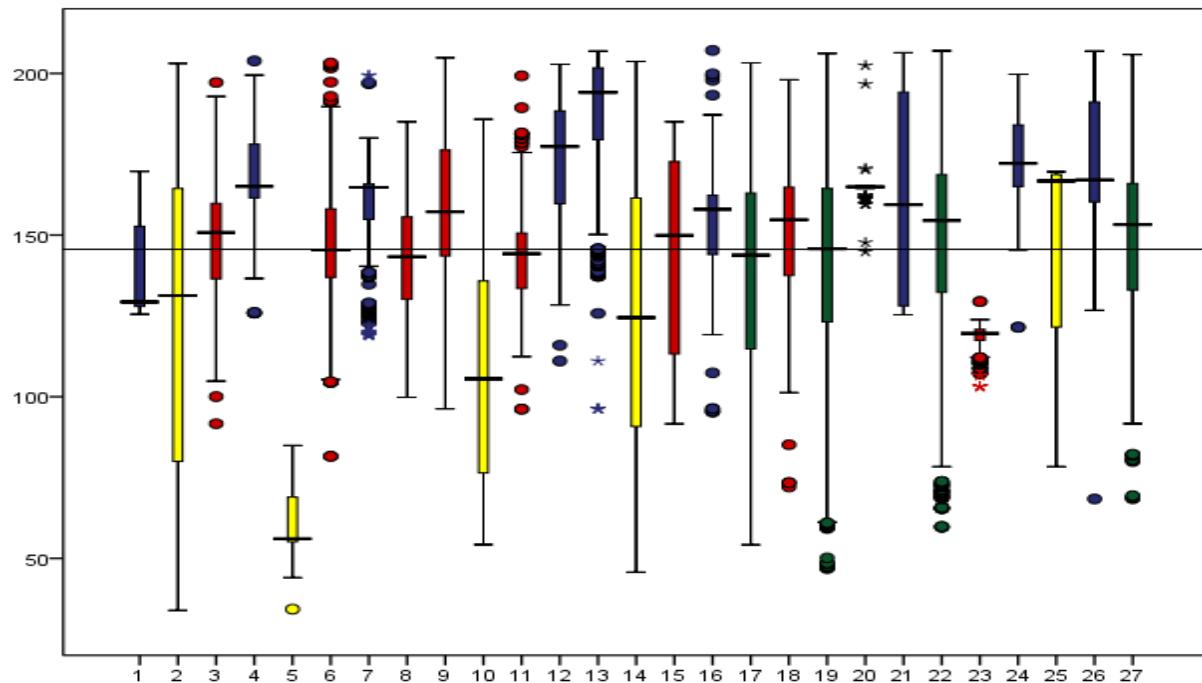
**Fig. S5** - Range of distribution of species according to mean cloud coverage (%) from May through July. Numbers 1 to 27 represent the respective taxa as per Table 1. Species of groups I, II, III and IV are respectively illustrated in red, blue, yellow and green.



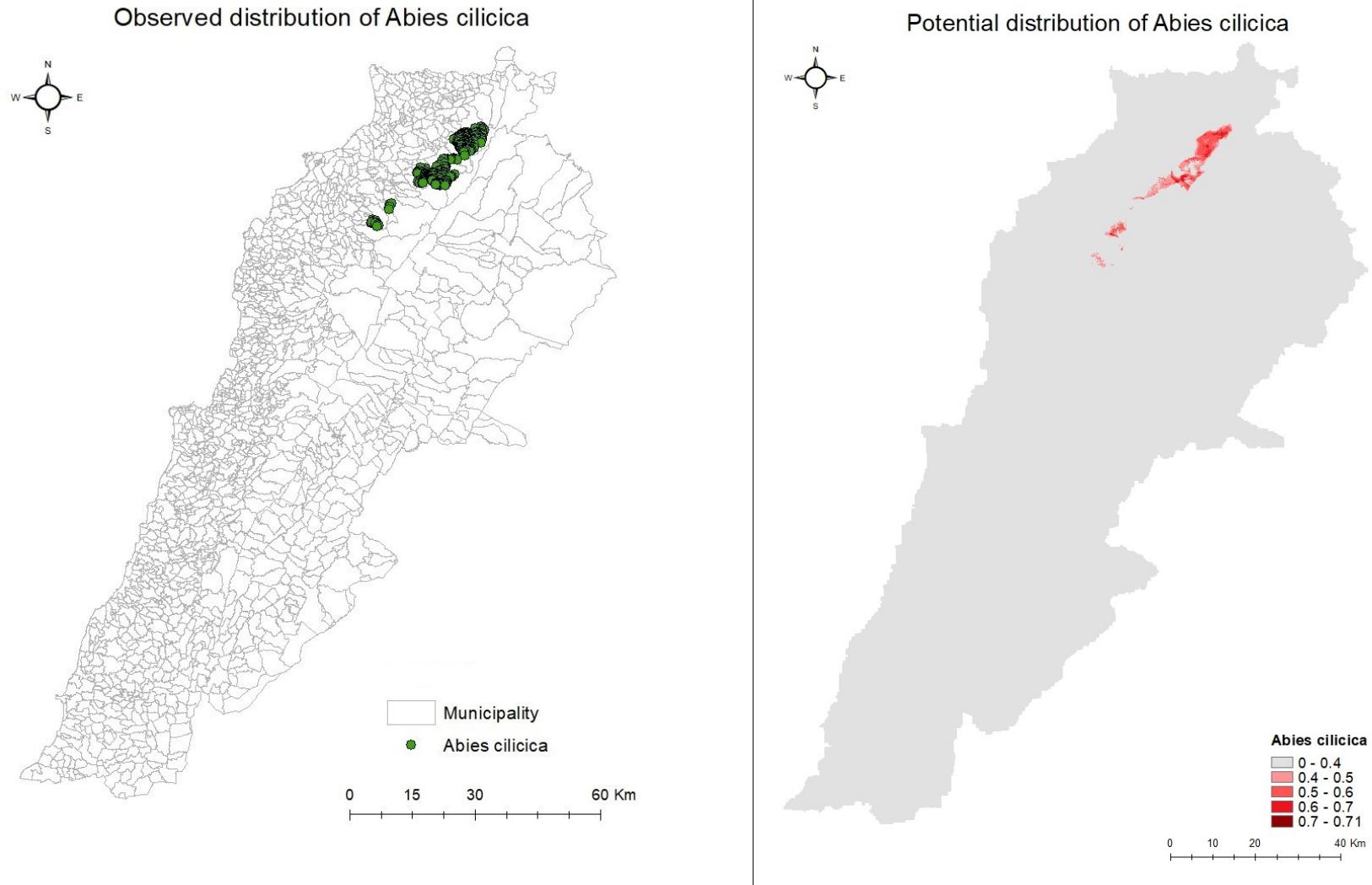
**Fig. S6** - Range of distribution of species according to the mean of maximal temperature of the hottest month (°C). Numbers 1 to 27 represent the respective taxa as per Table 1. Species of groups I, II, III and IV are respectively illustrated in red, blue, yellow and green.



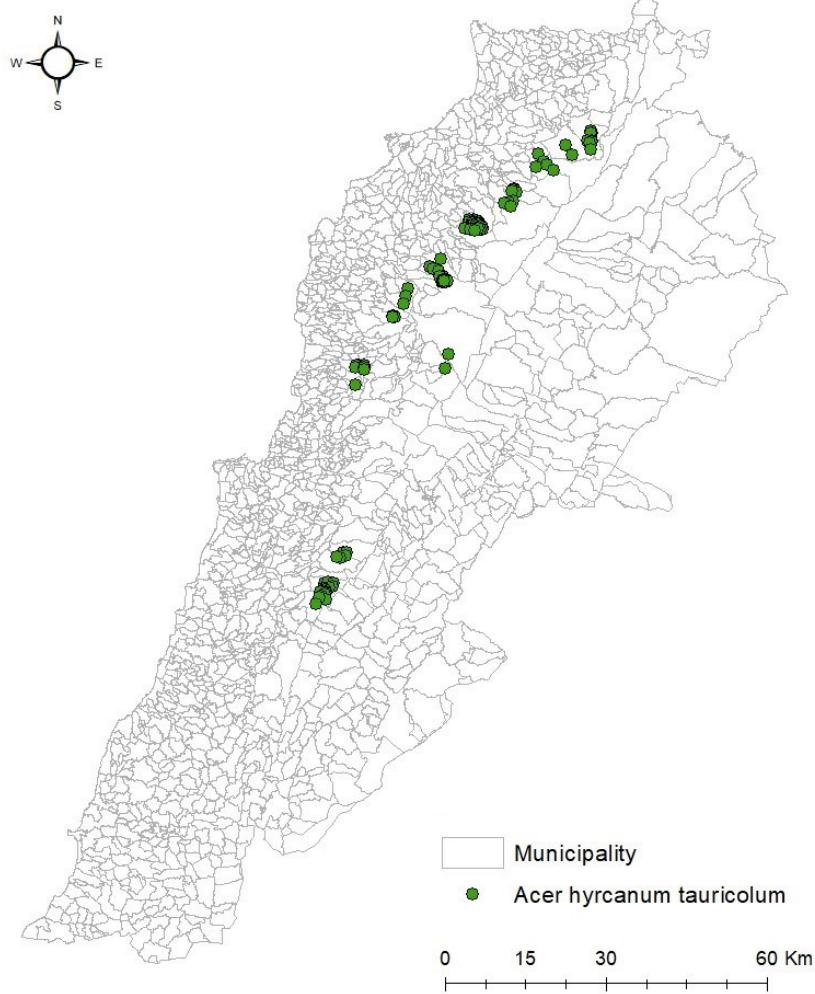
**Fig. S7** - Range of distribution of species according to Emberger Quotient values. Numbers 1 to 27 represent the respective taxa as per Table 1. Species of groups I, II, III and IV are respectively illustrated in red, blue, yellow and green.



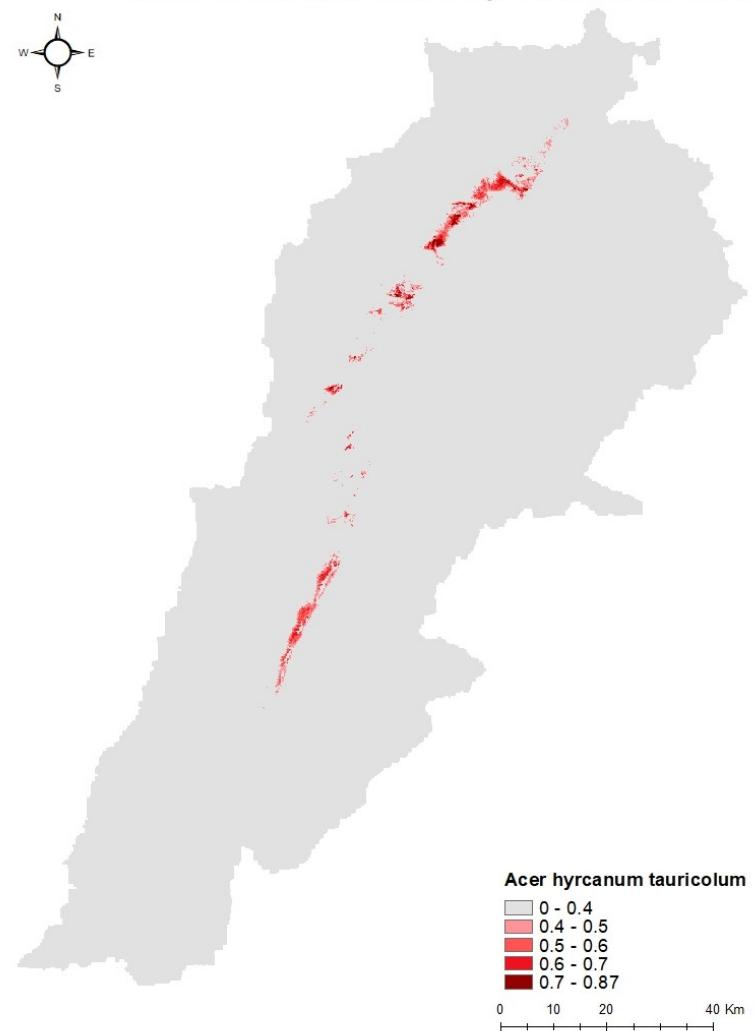
**Fig. S8** - Presence points and suitability maps of the target species. Presence points maps (on the left) and suitability maps (on the right) with LOC50 for the target species.



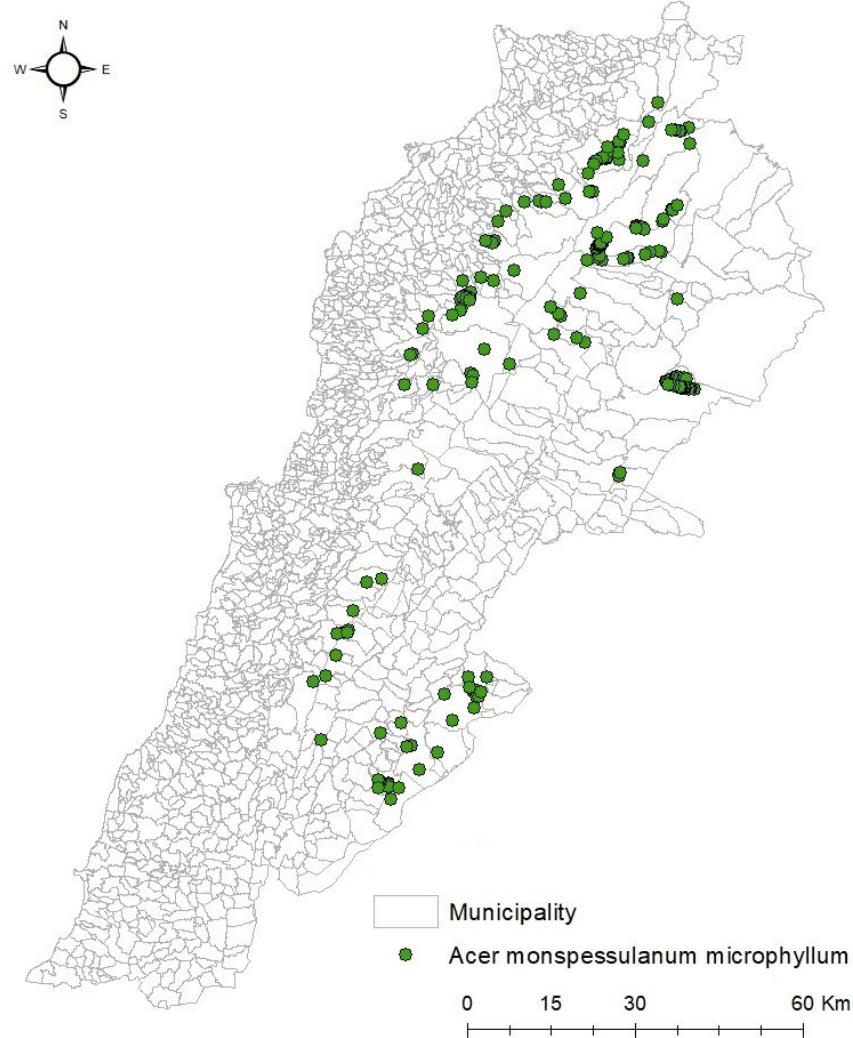
Observed distribution of *Acer hyrcanum tauricolum*



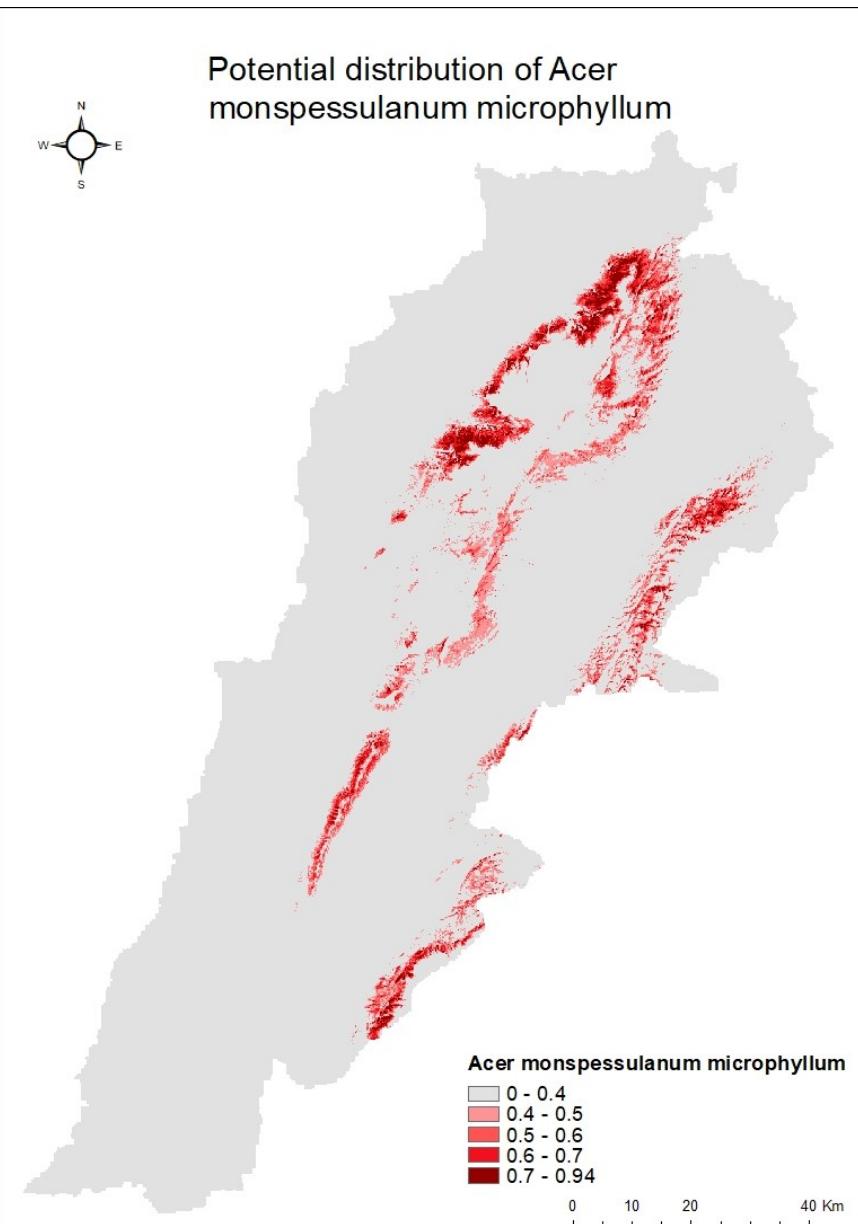
Potential distribution of *Acer hyrcanum tauricolum*



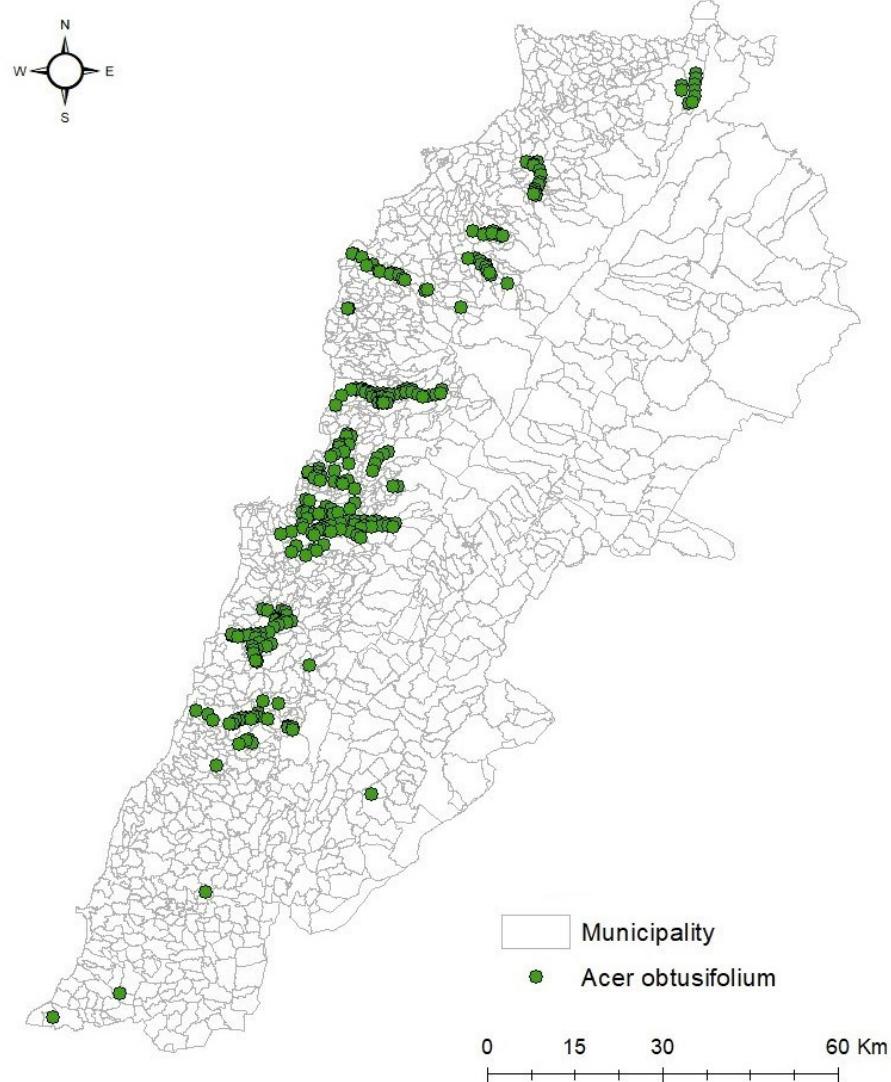
Observed distribution of *Acer monspessulanum* microphyllum



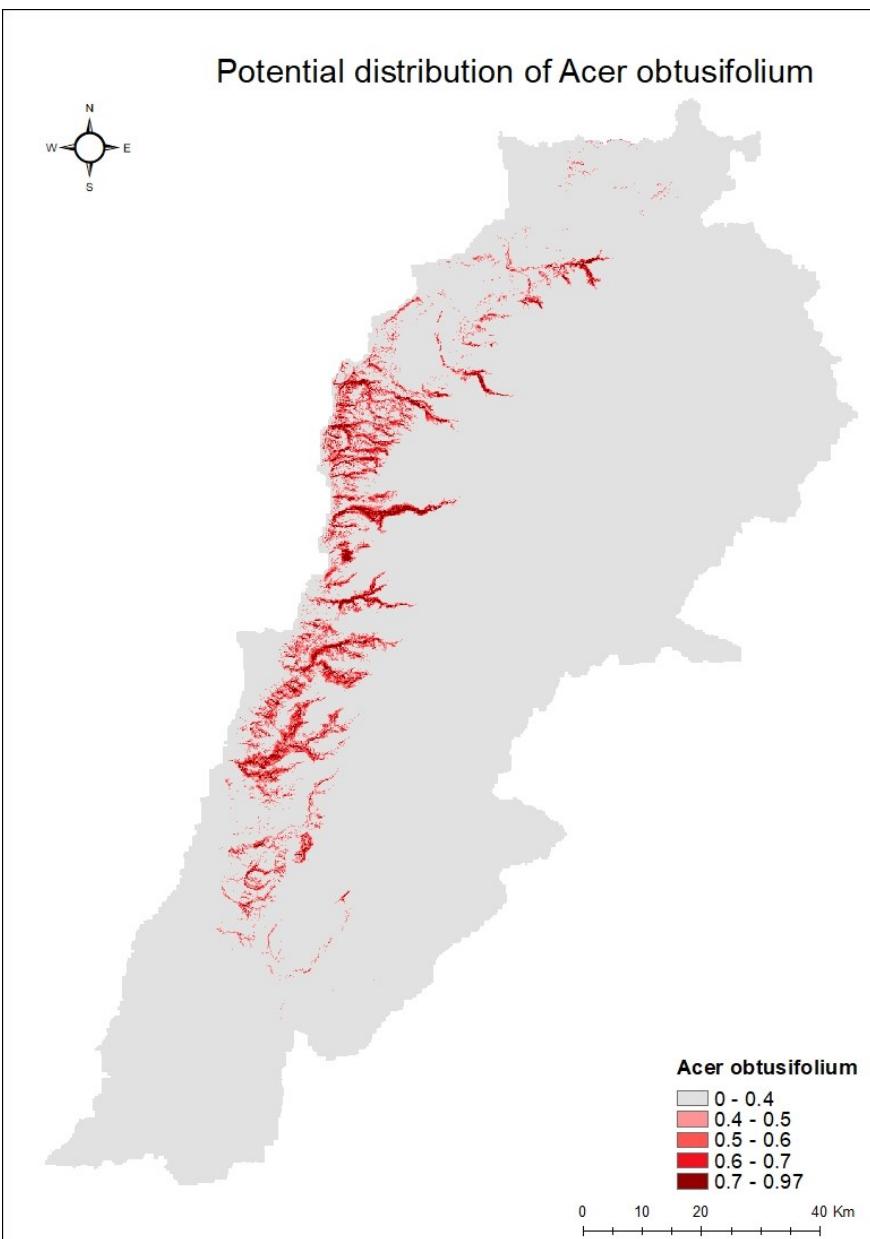
Potential distribution of *Acer monspessulanum* microphyllum

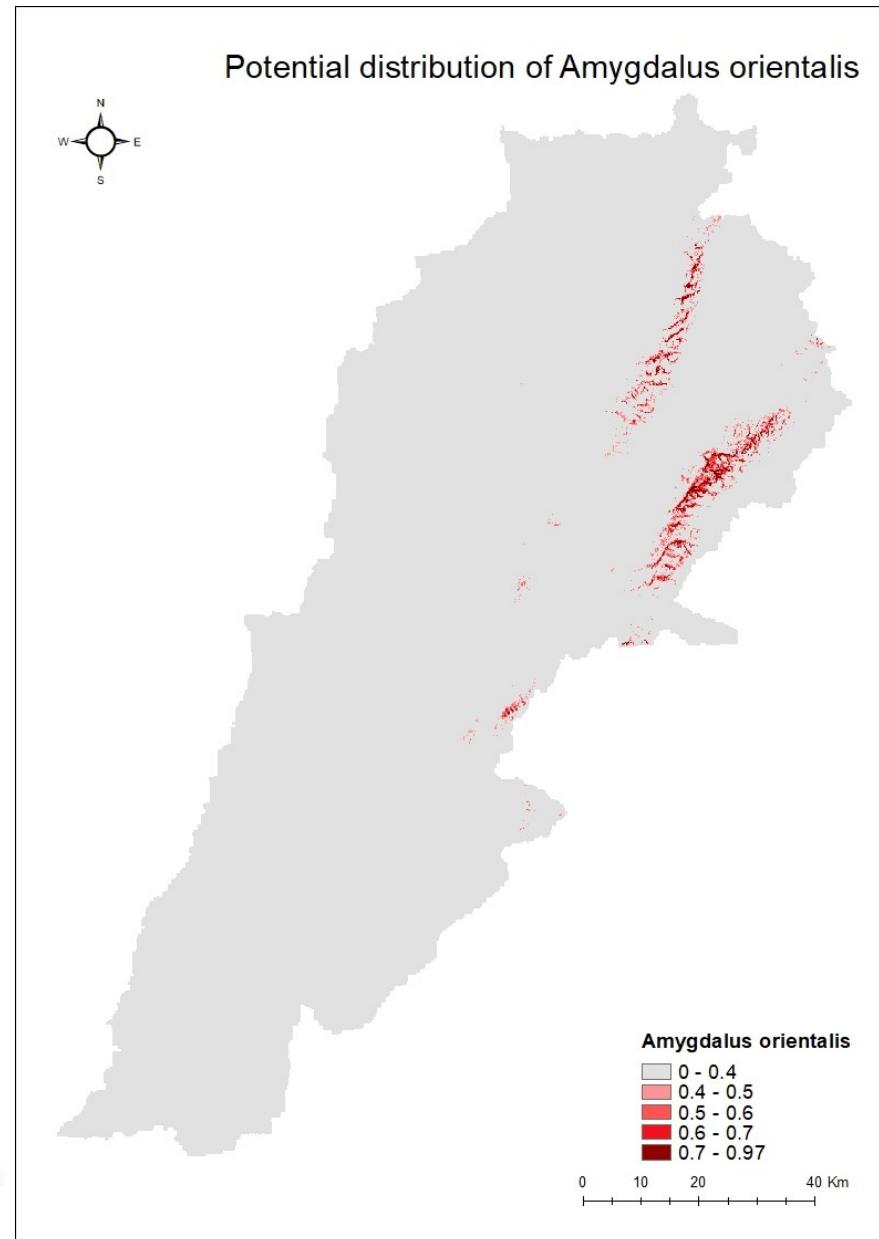
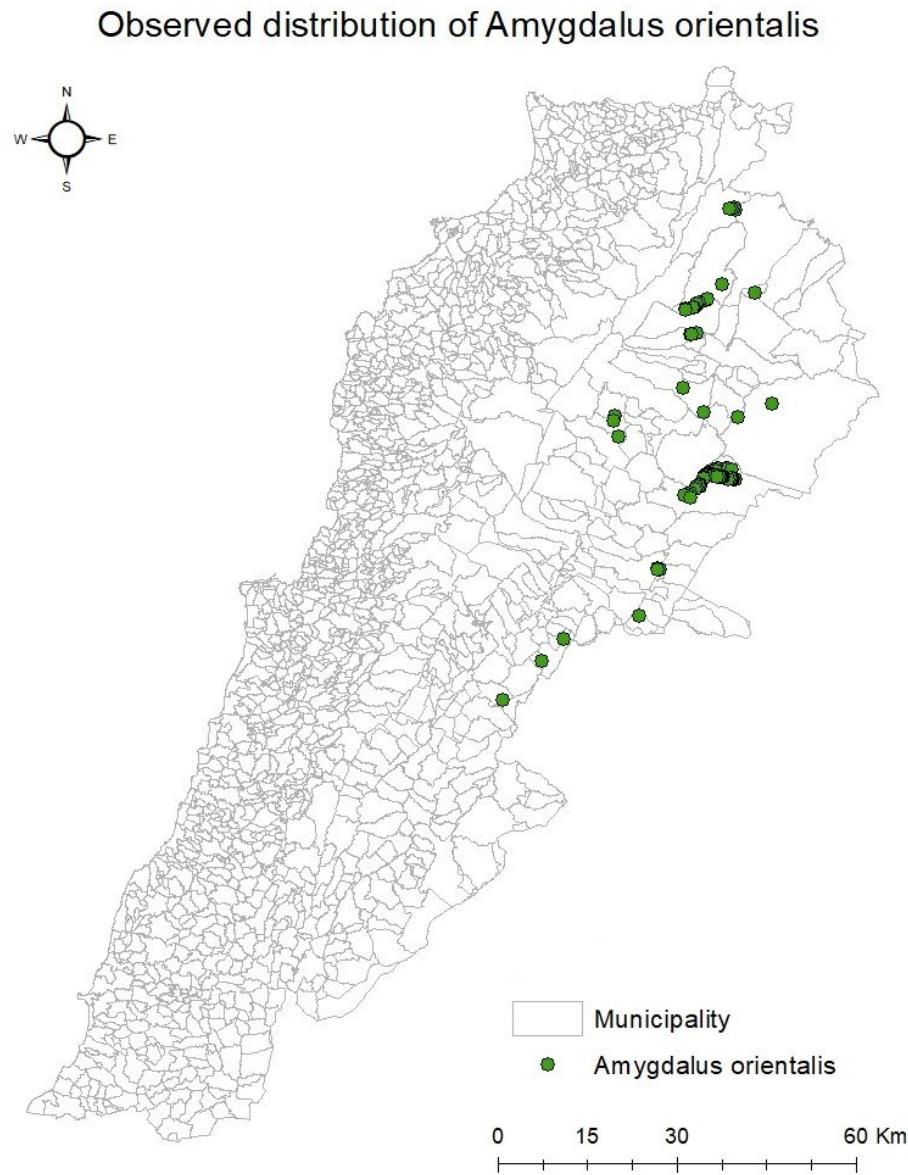


Observed distribution of *Acer obtusifolium*

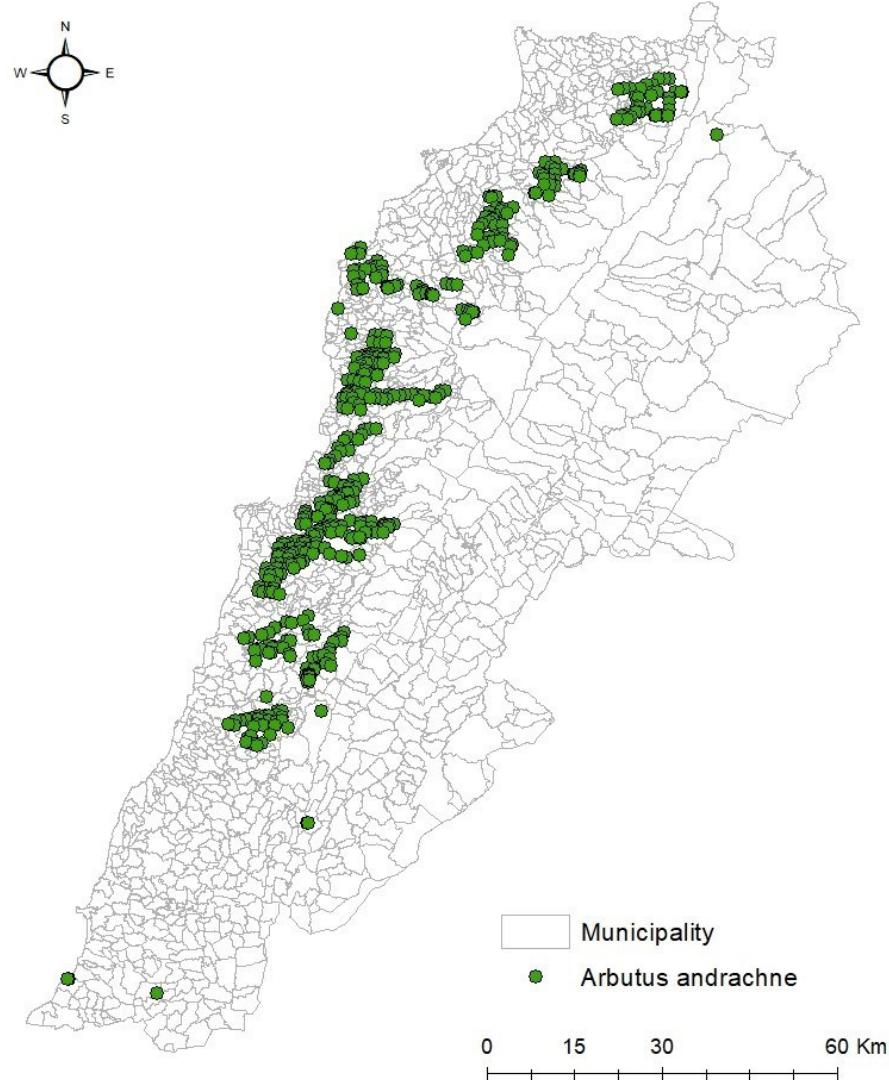


Potential distribution of *Acer obtusifolium*

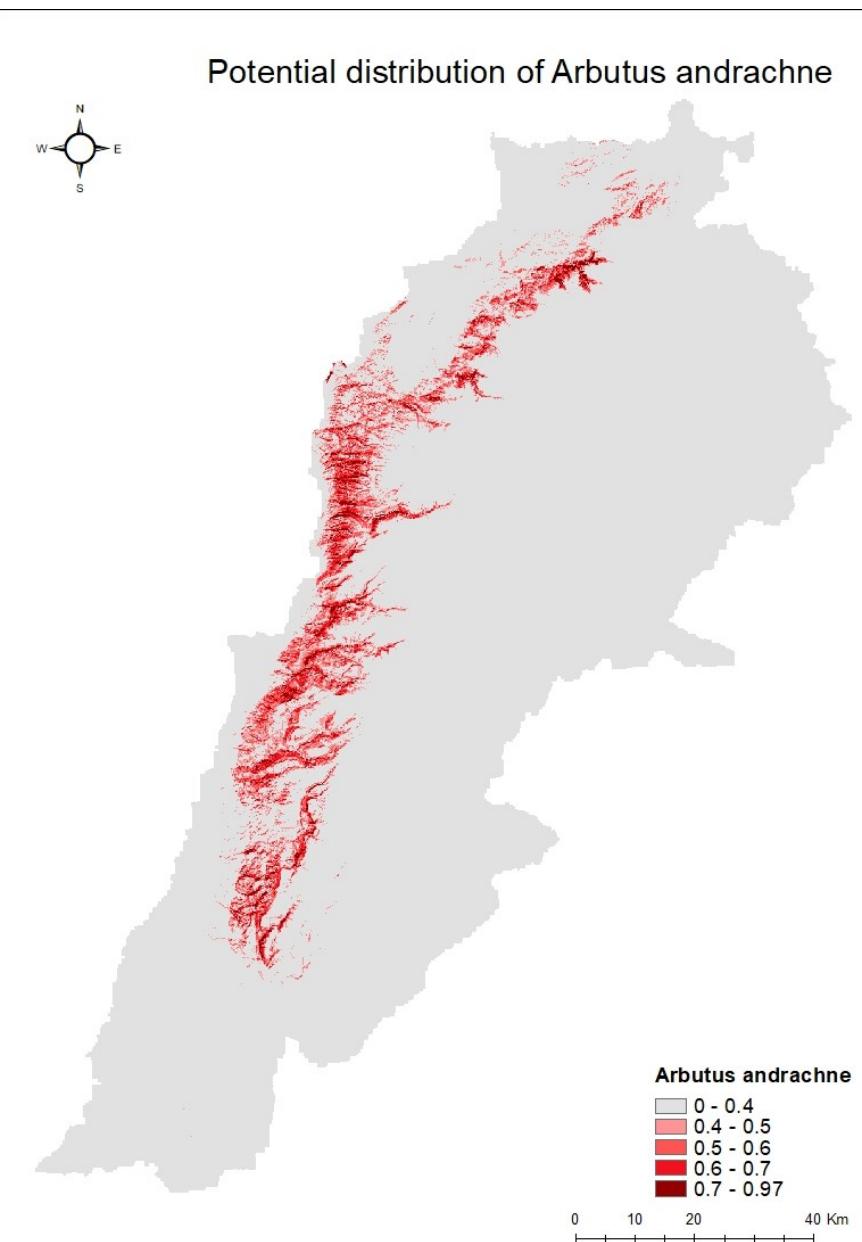


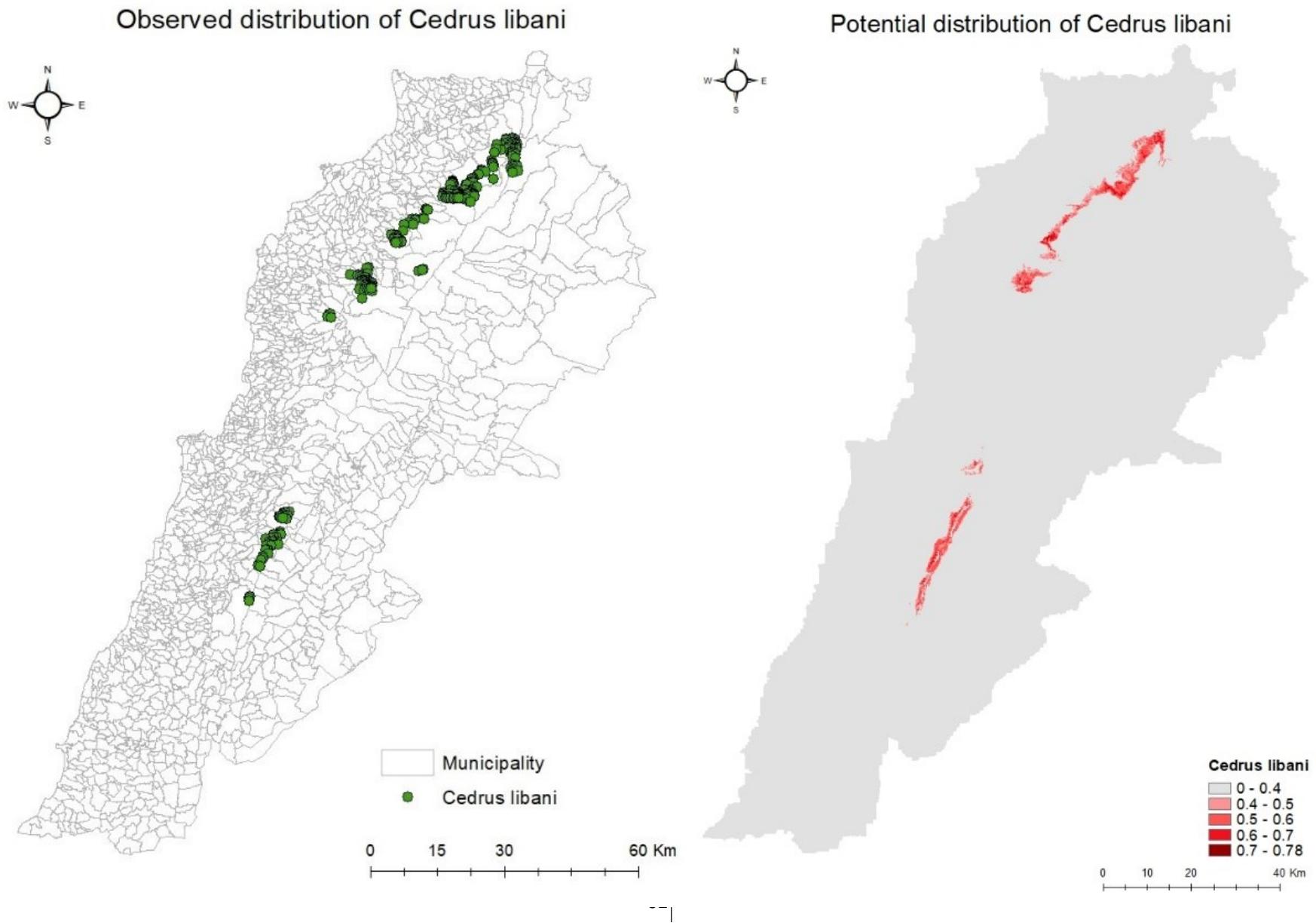


Observed distribution of *Arbutus andrachne*

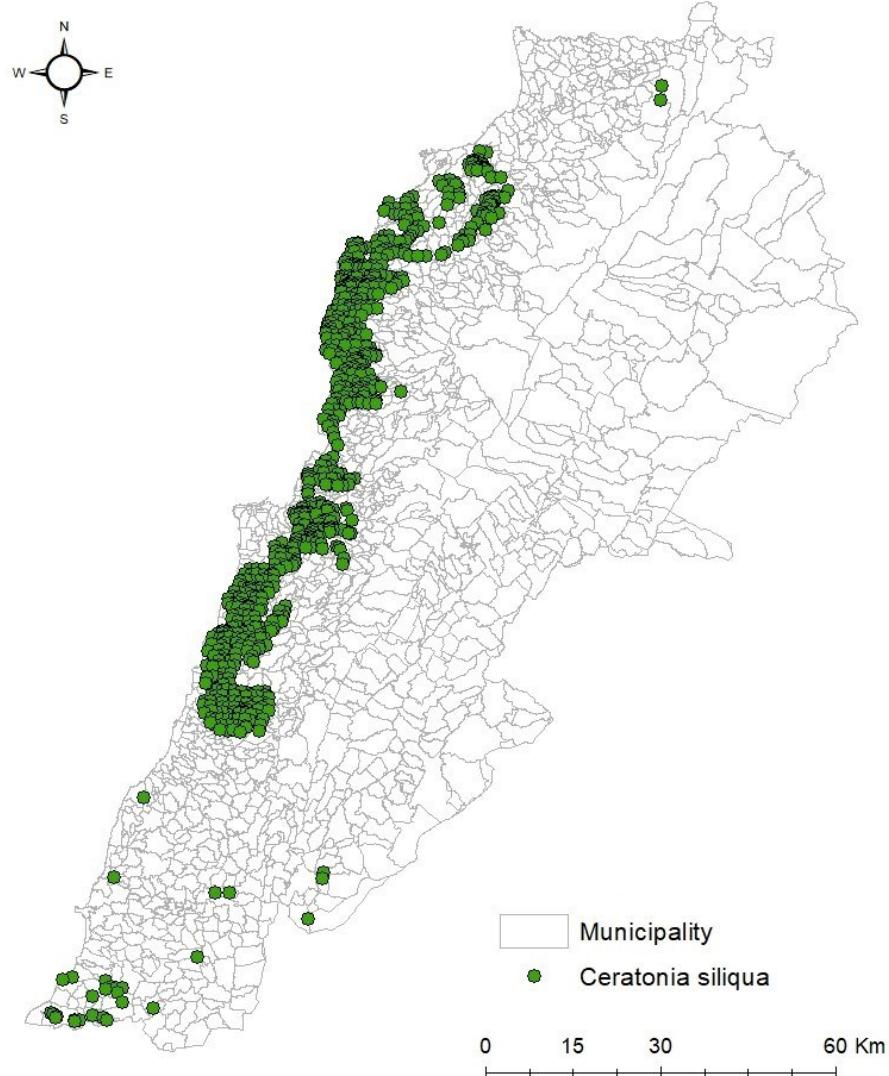


Potential distribution of *Arbutus andrachne*

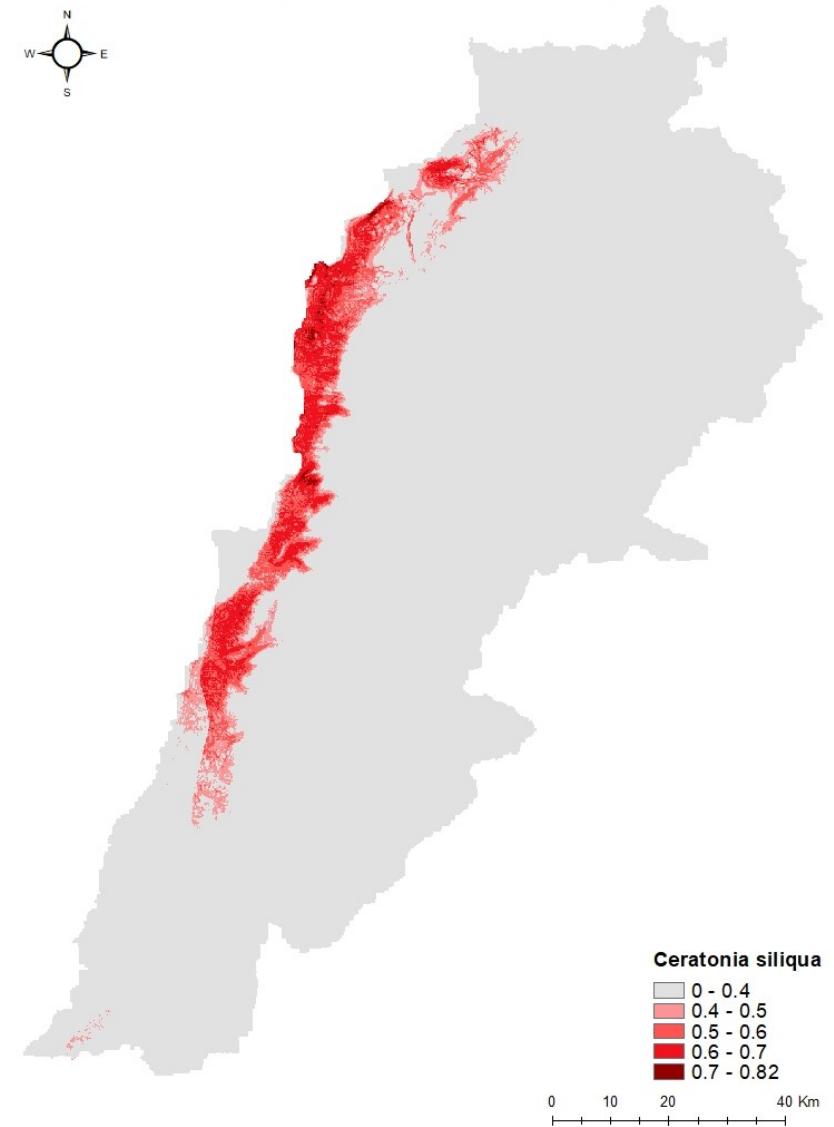


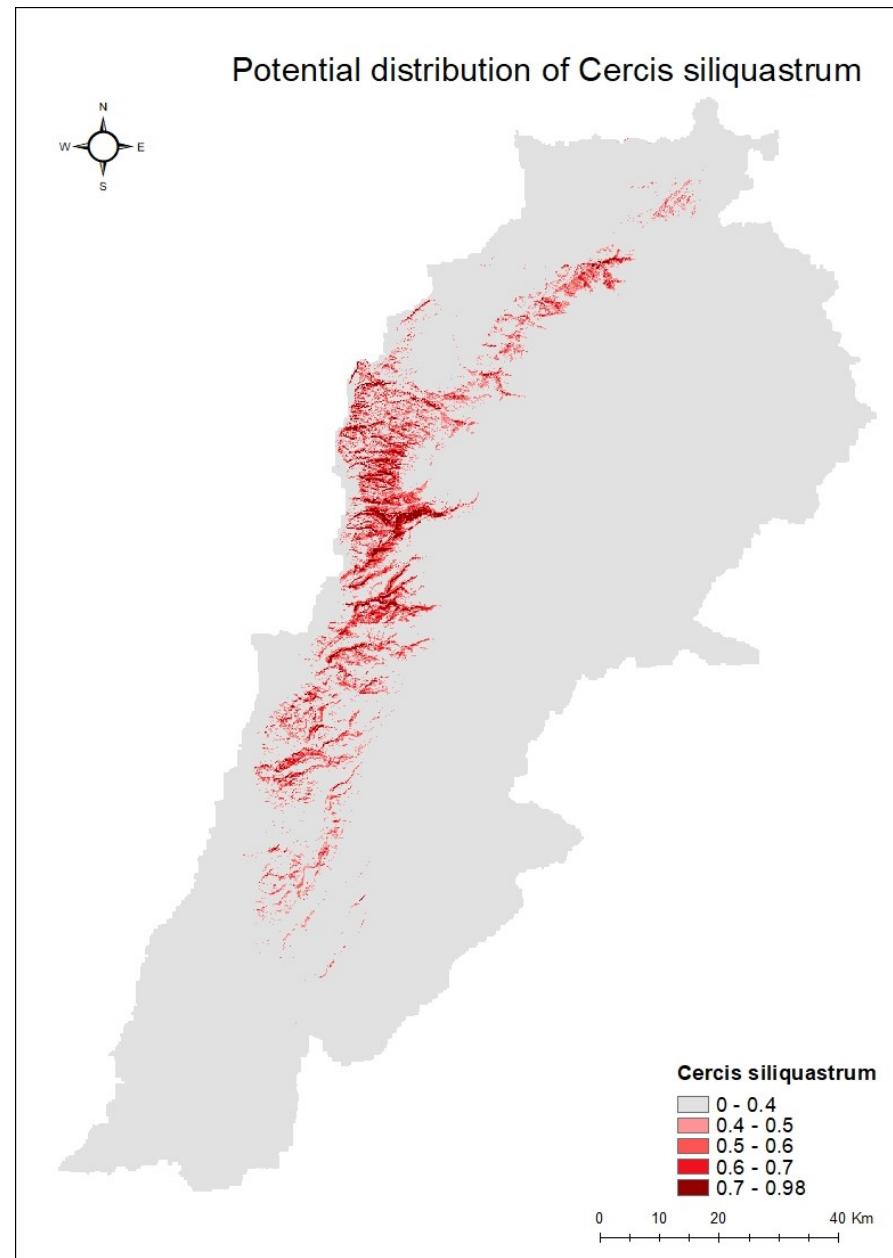
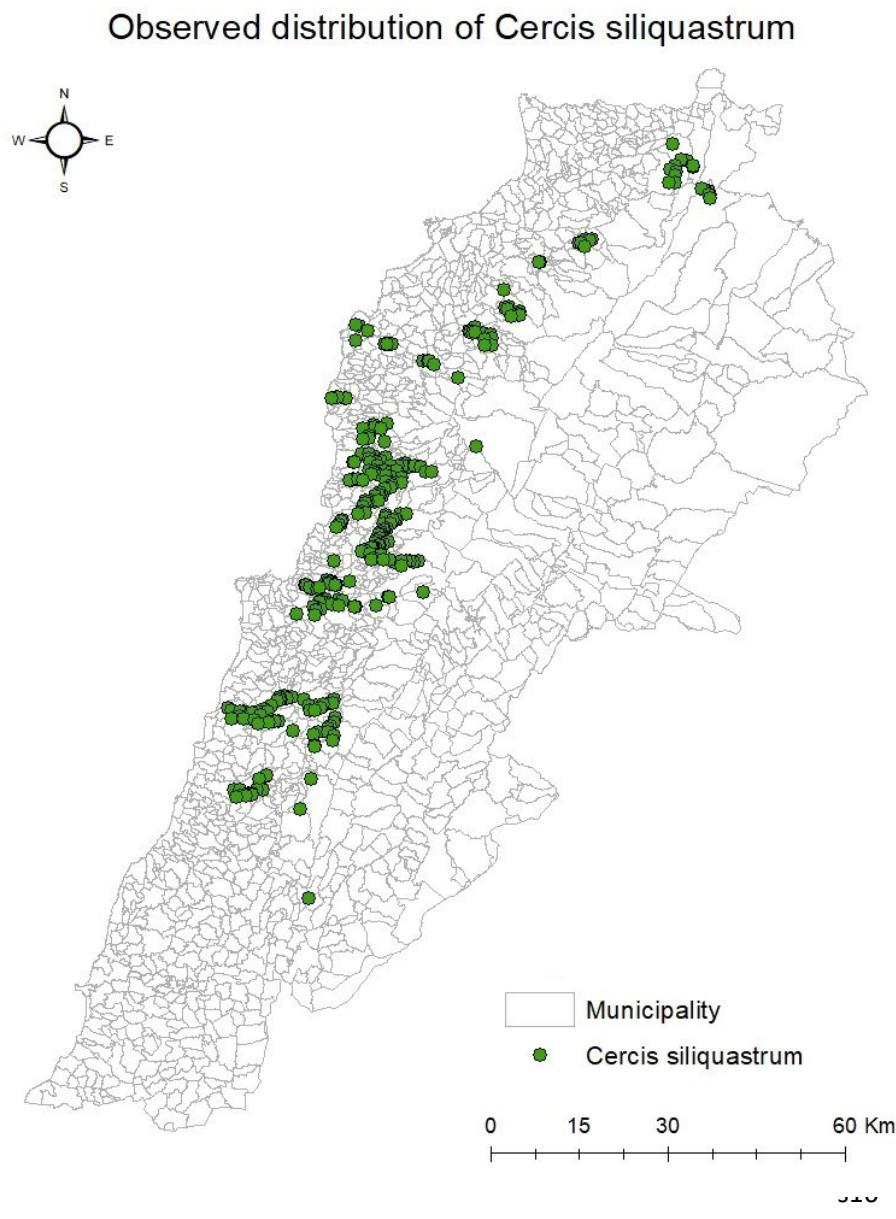


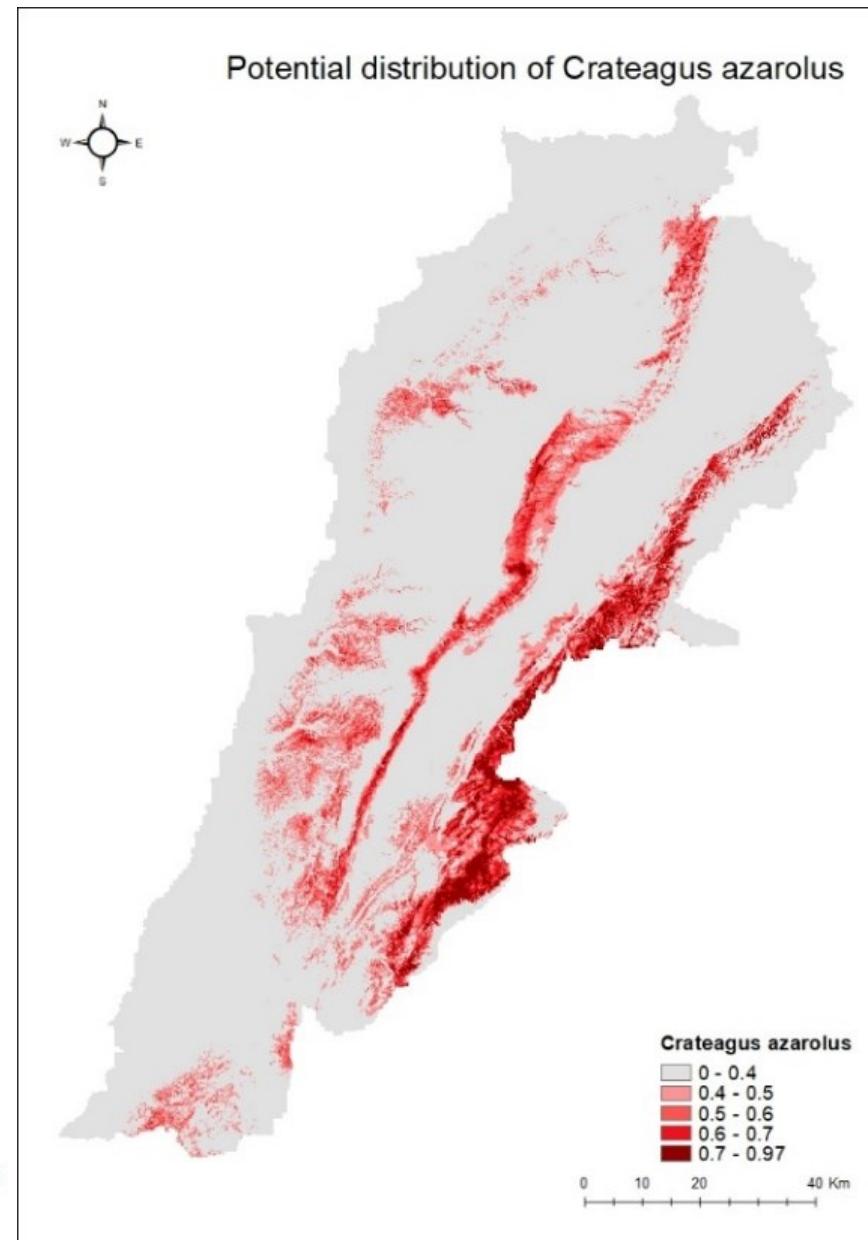
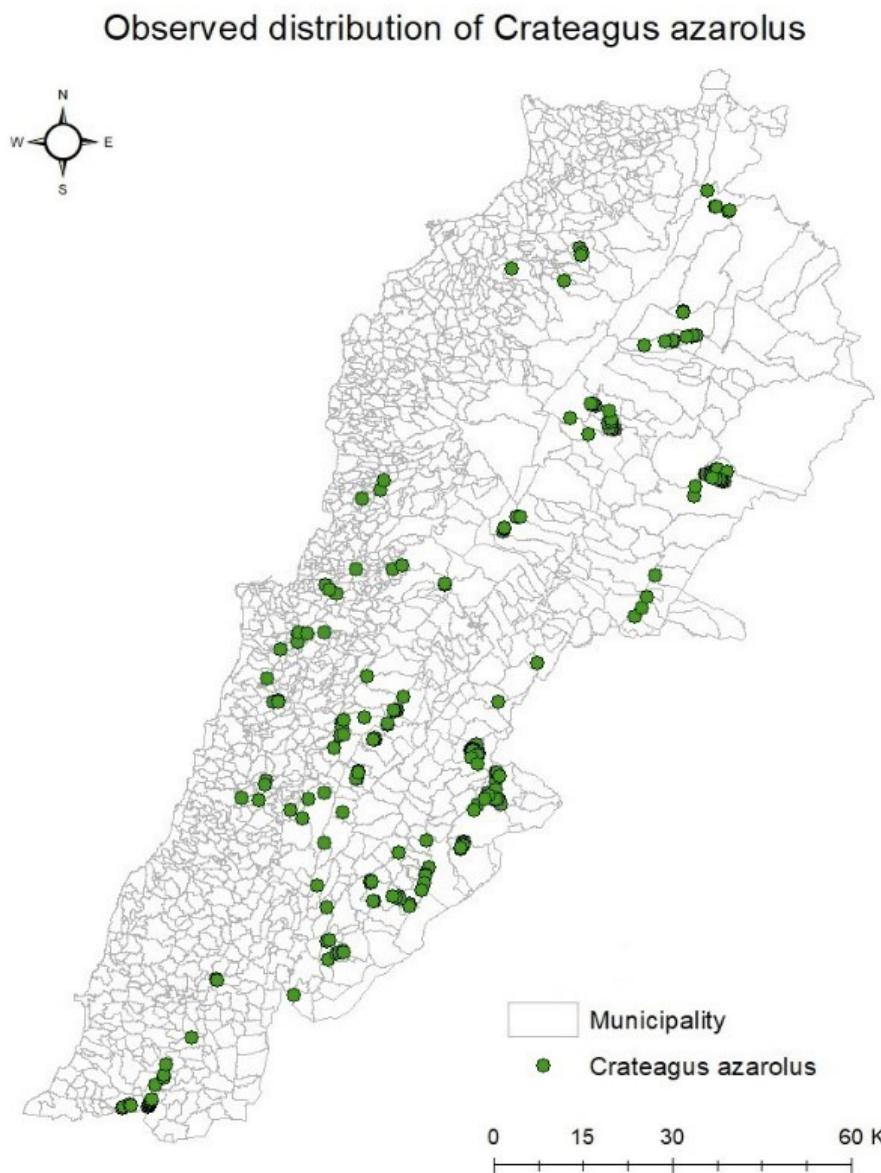
Observed distribution of *Ceratonia siliqua*



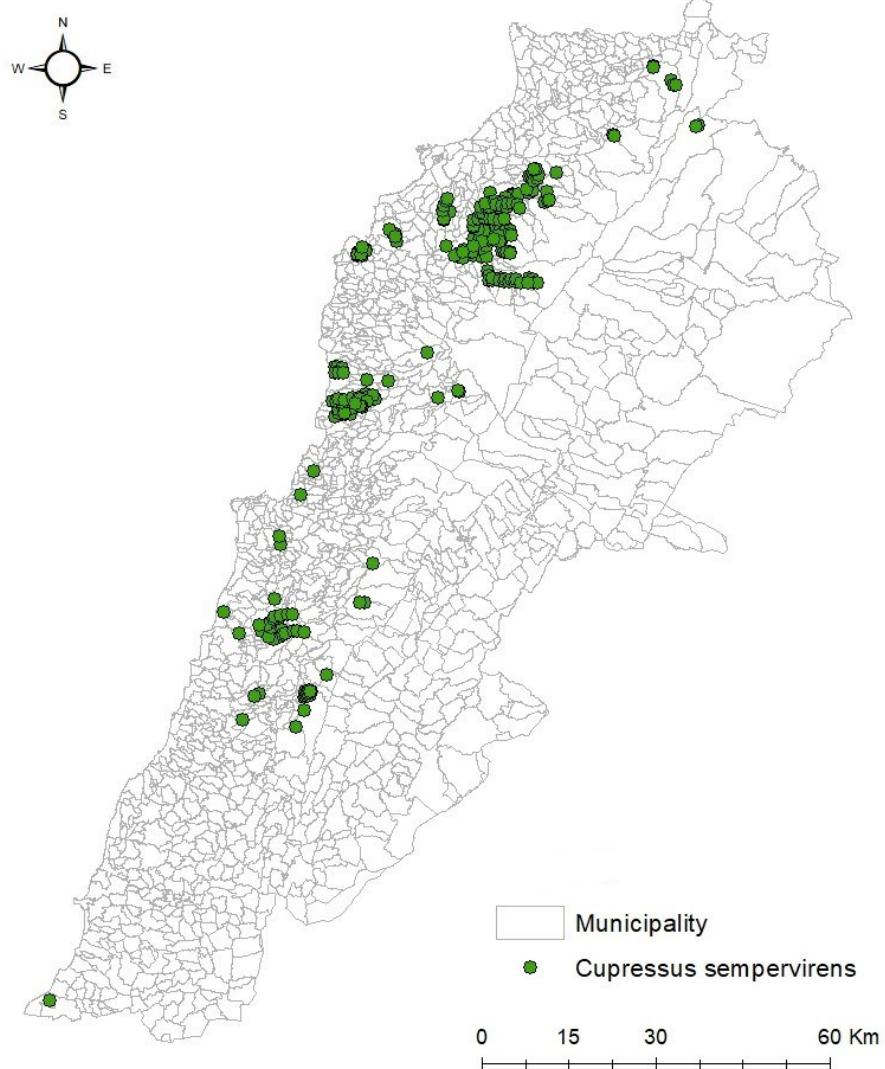
Potential distribution of *Ceratonia siliqua*



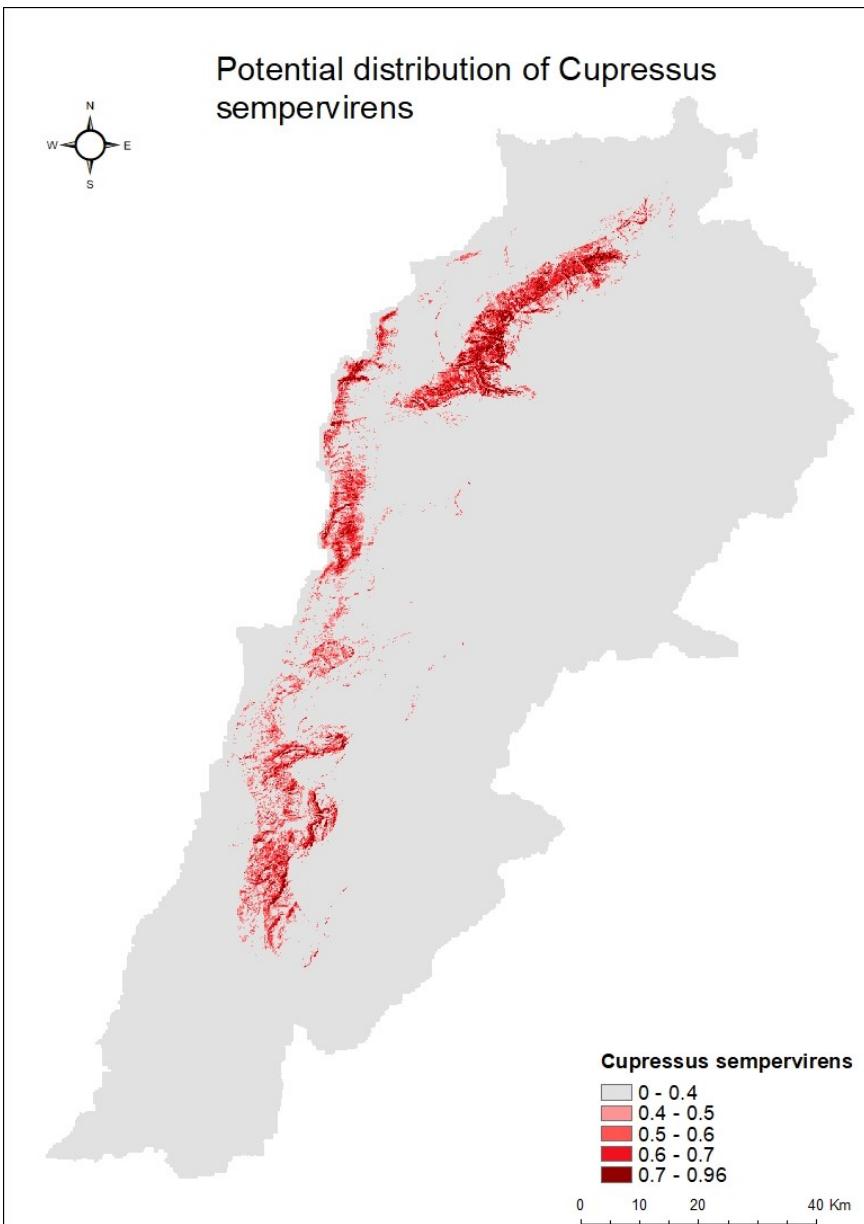




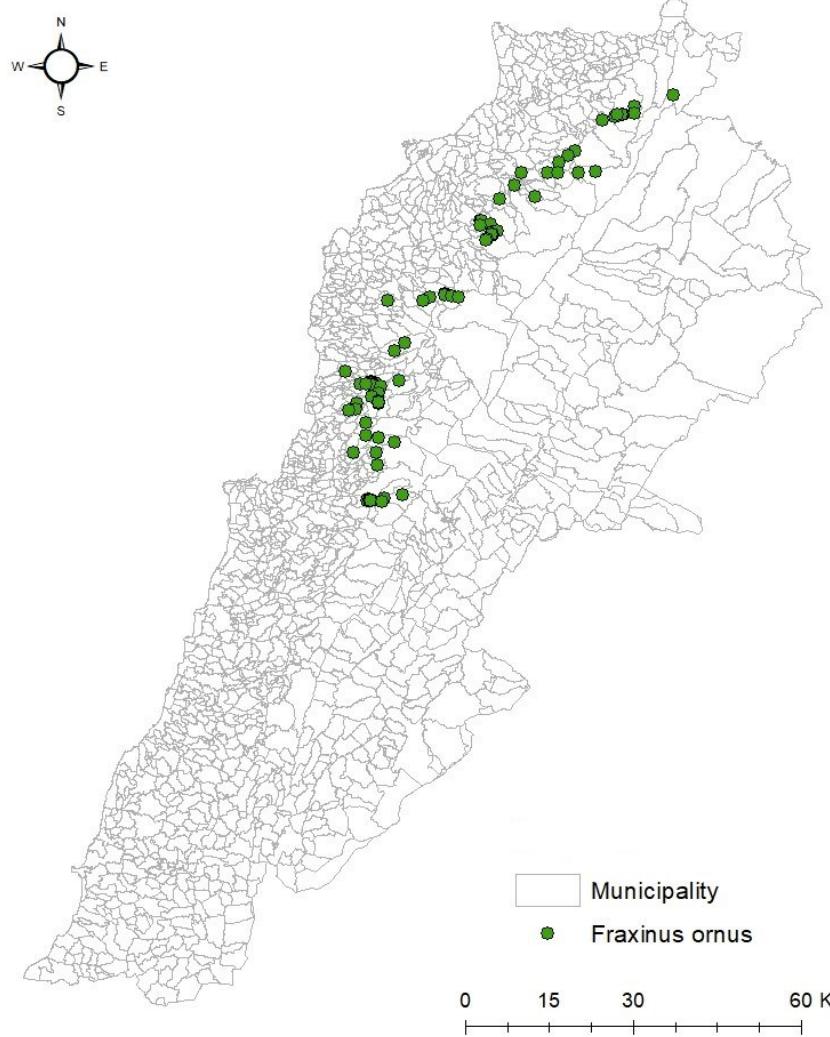
Observed distribution of *Cupressus sempervirens*



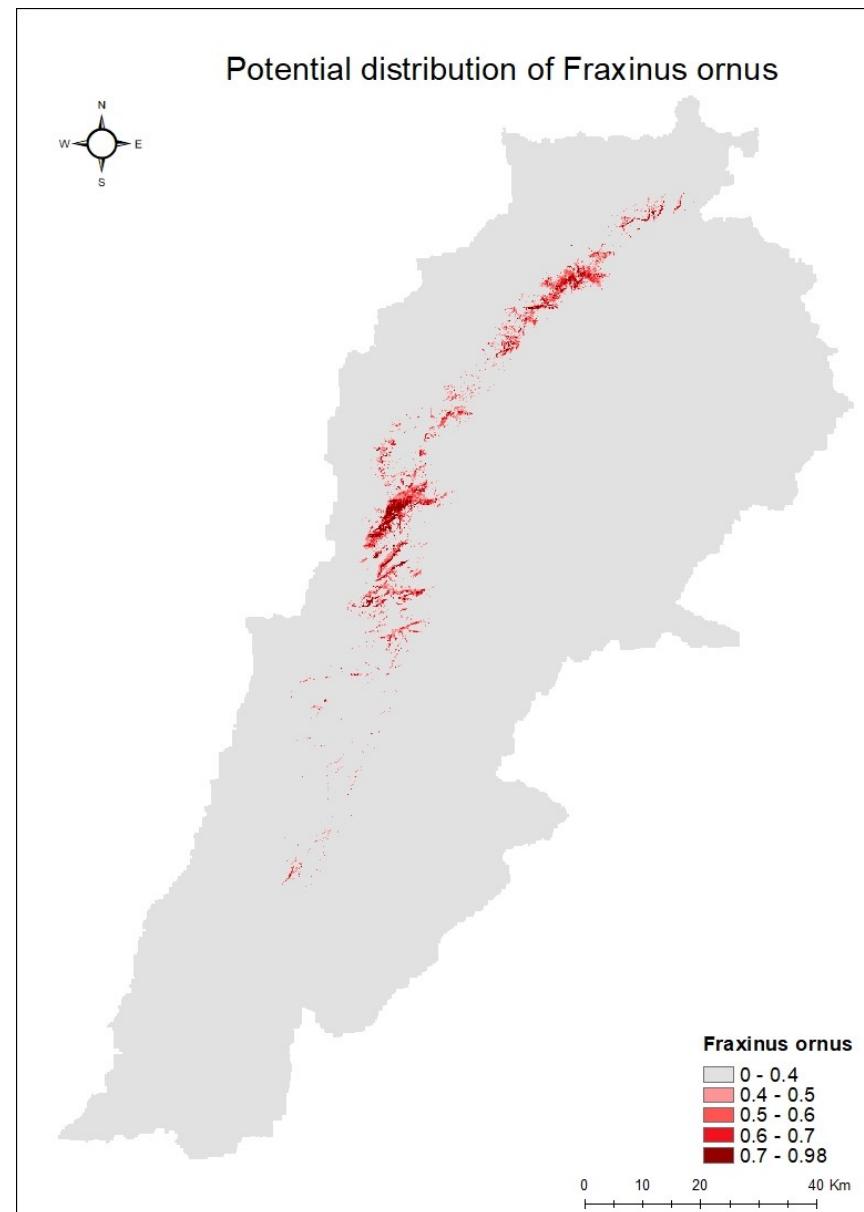
Potential distribution of *Cupressus sempervirens*



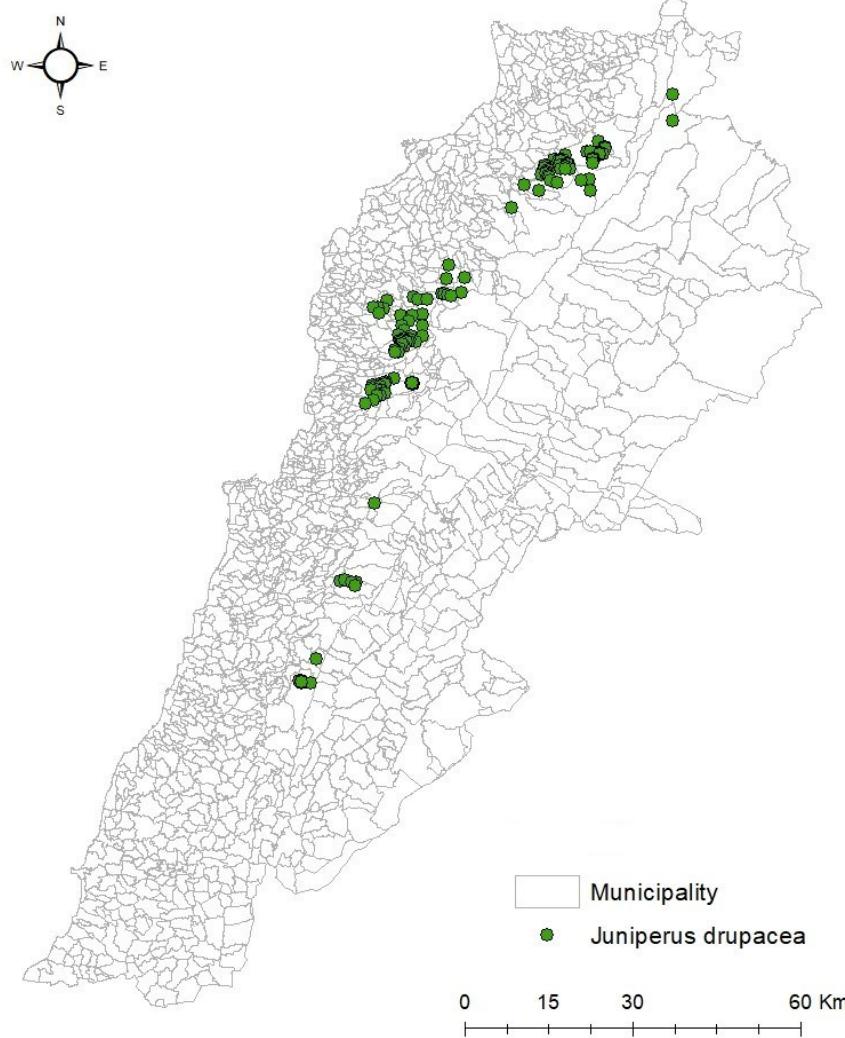
Observed distribution of *Fraxinus ornus*



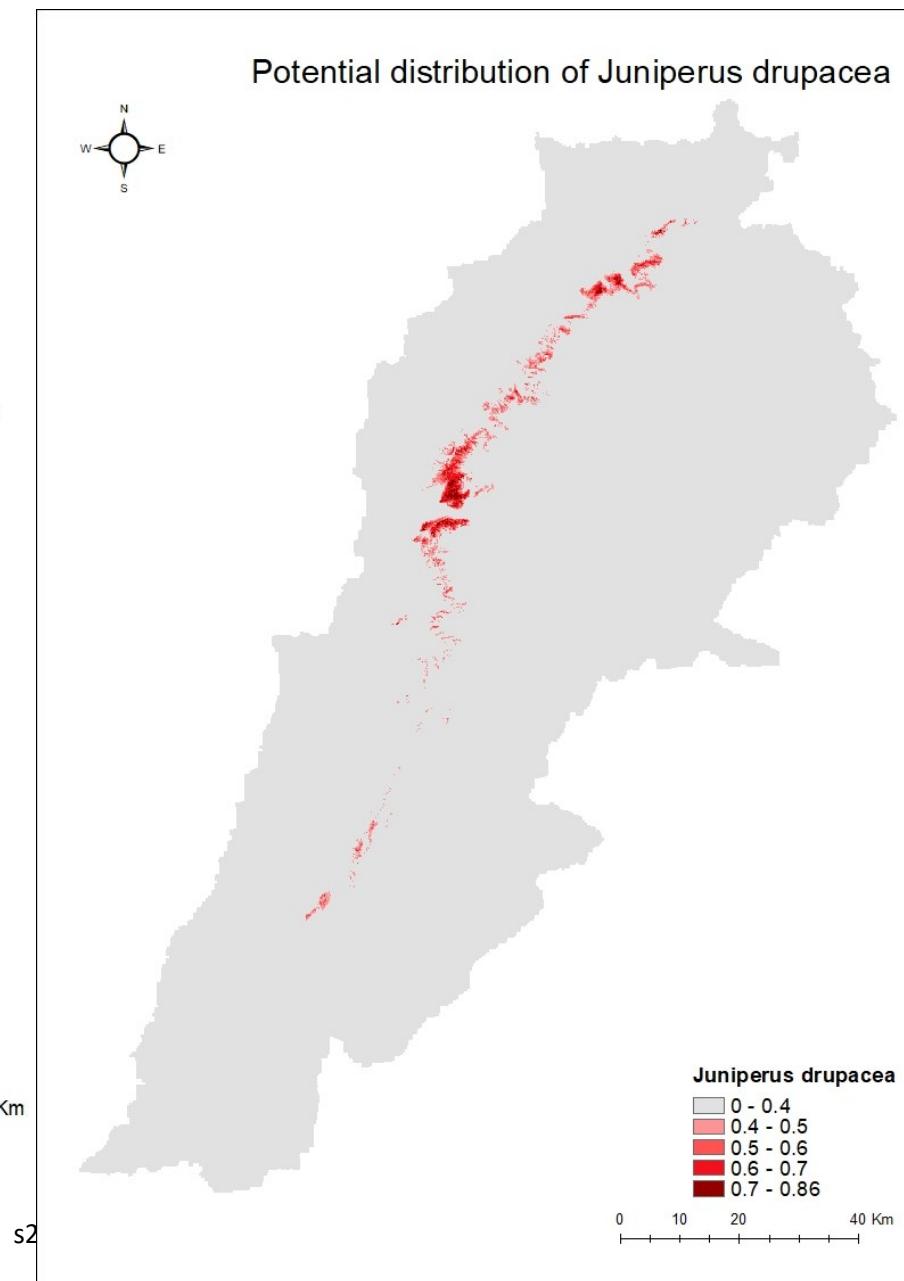
Potential distribution of *Fraxinus ornus*

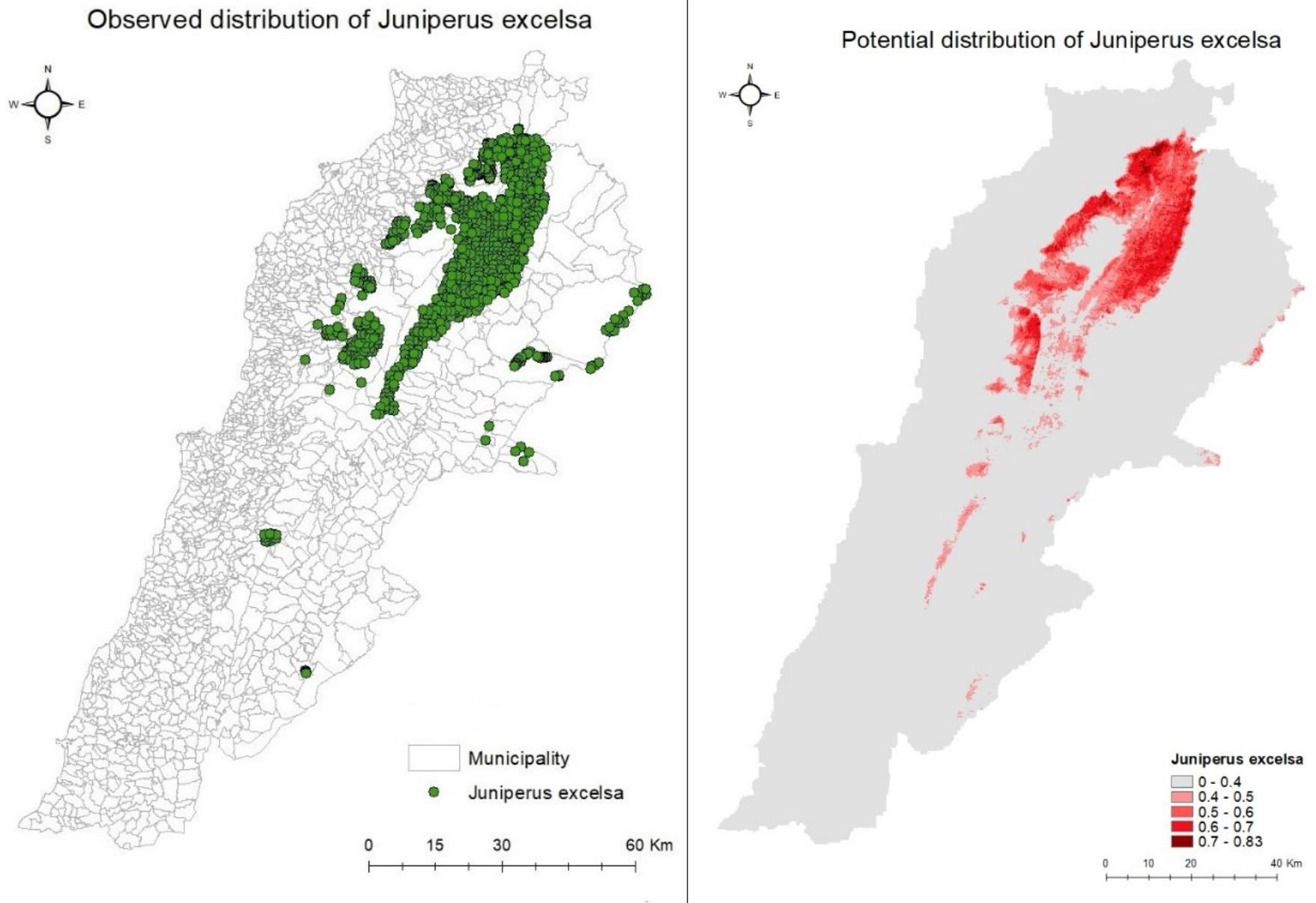


Observed distribution of *Juniperus drupacea*

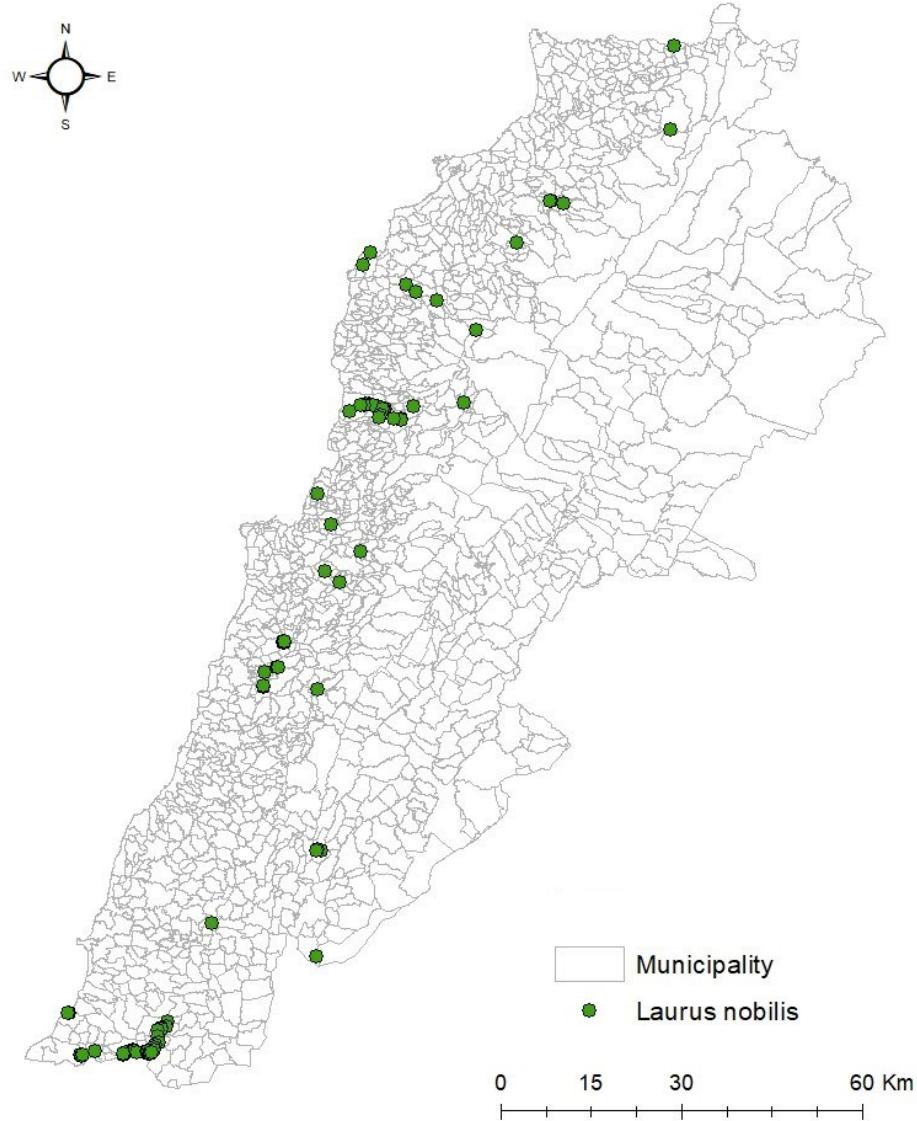


Potential distribution of *Juniperus drupacea*

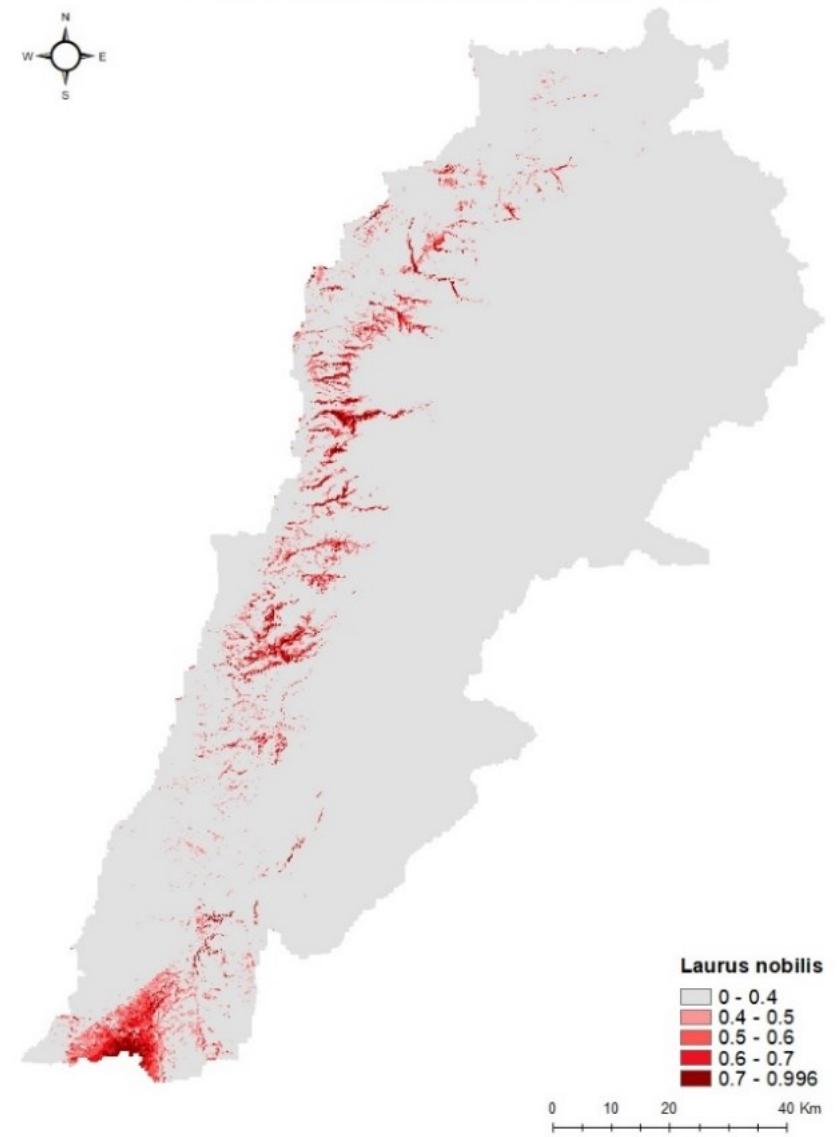




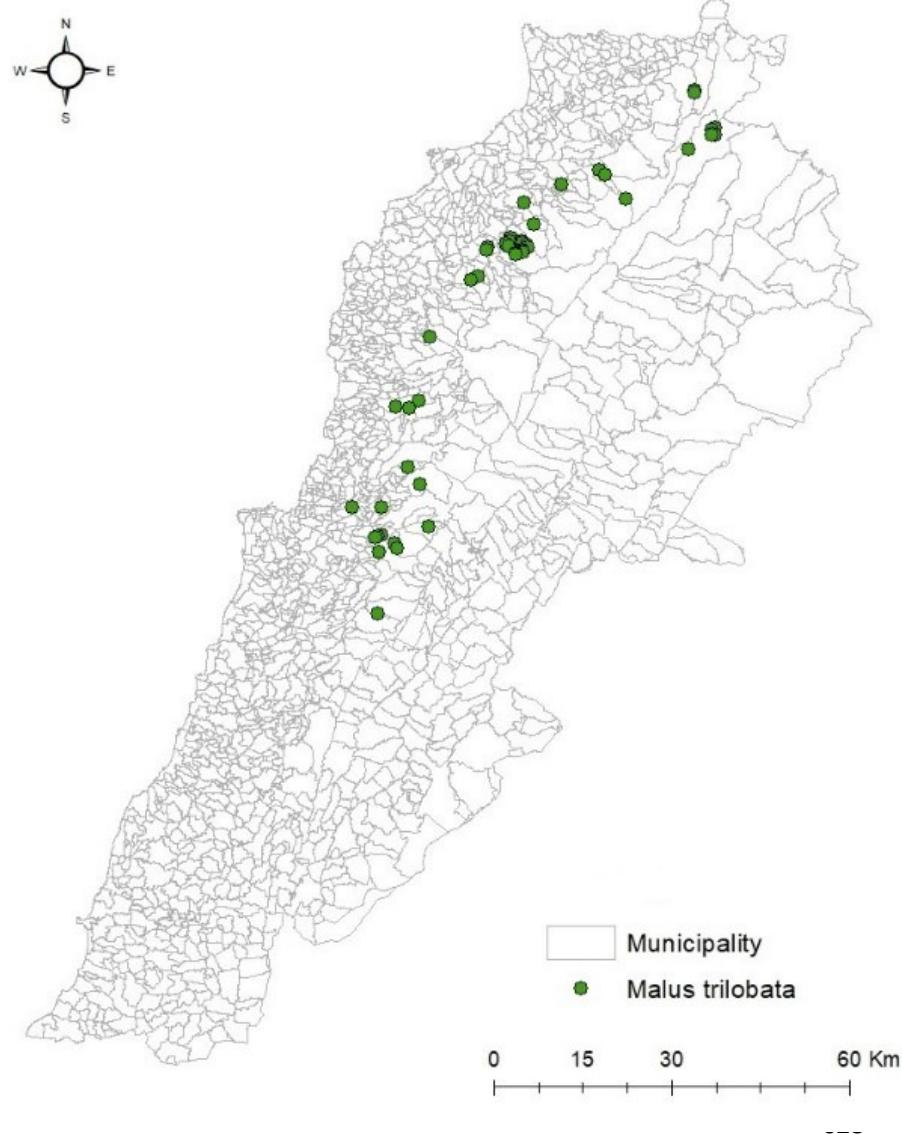
Observed distribution of *Laurus nobilis*



Potential distribution of *Laurus nobilis*



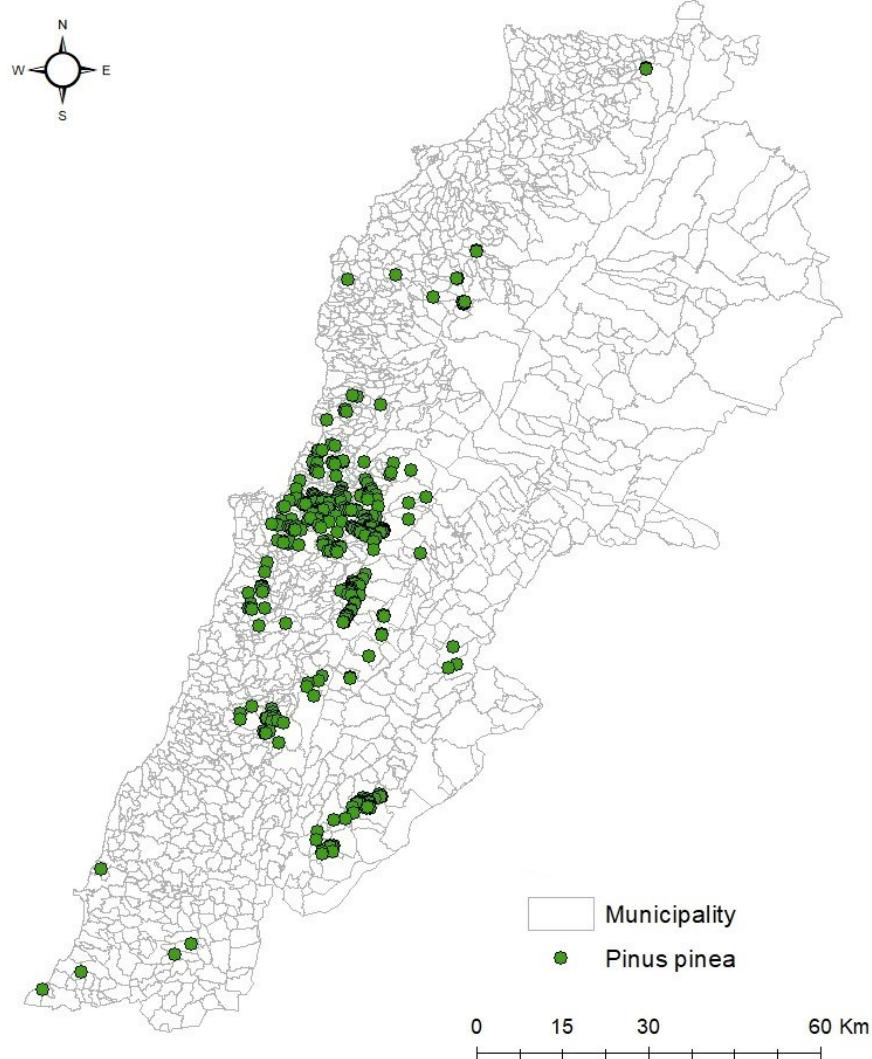
Observed distribution of *Malus trilobata*



Potential distribution of *Malus trilobata*



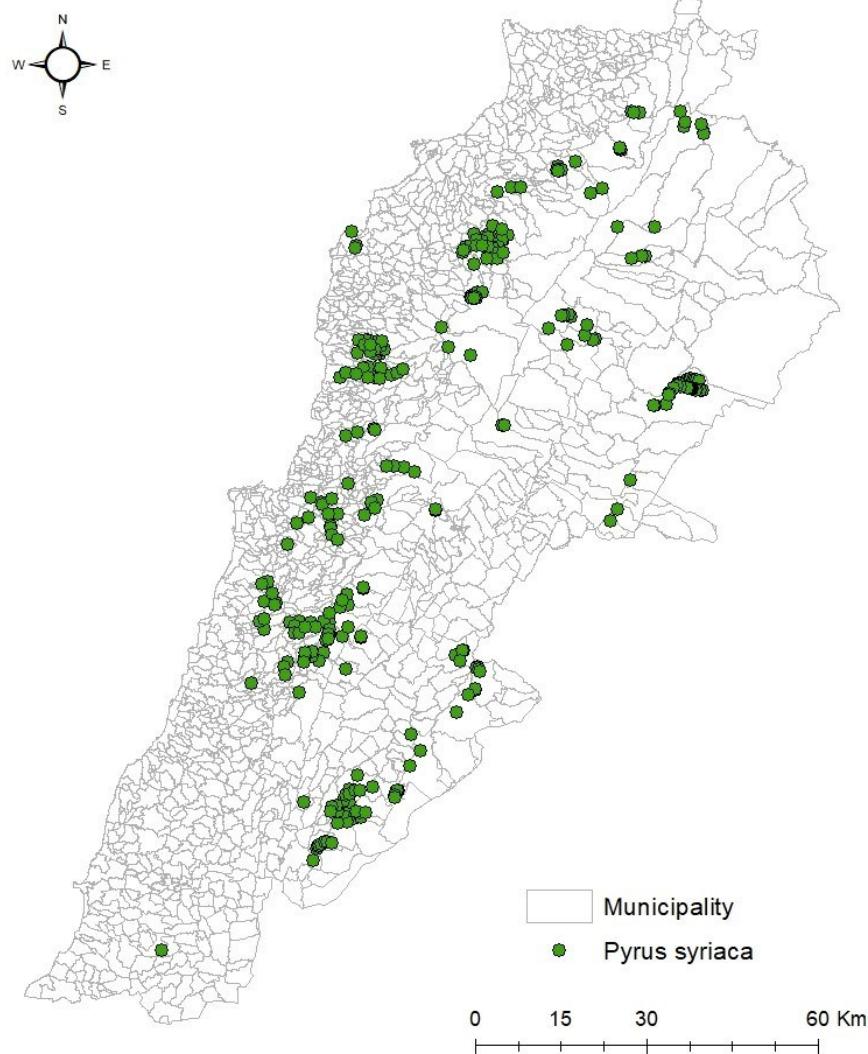
Observed distribution of *Pinus pinea*



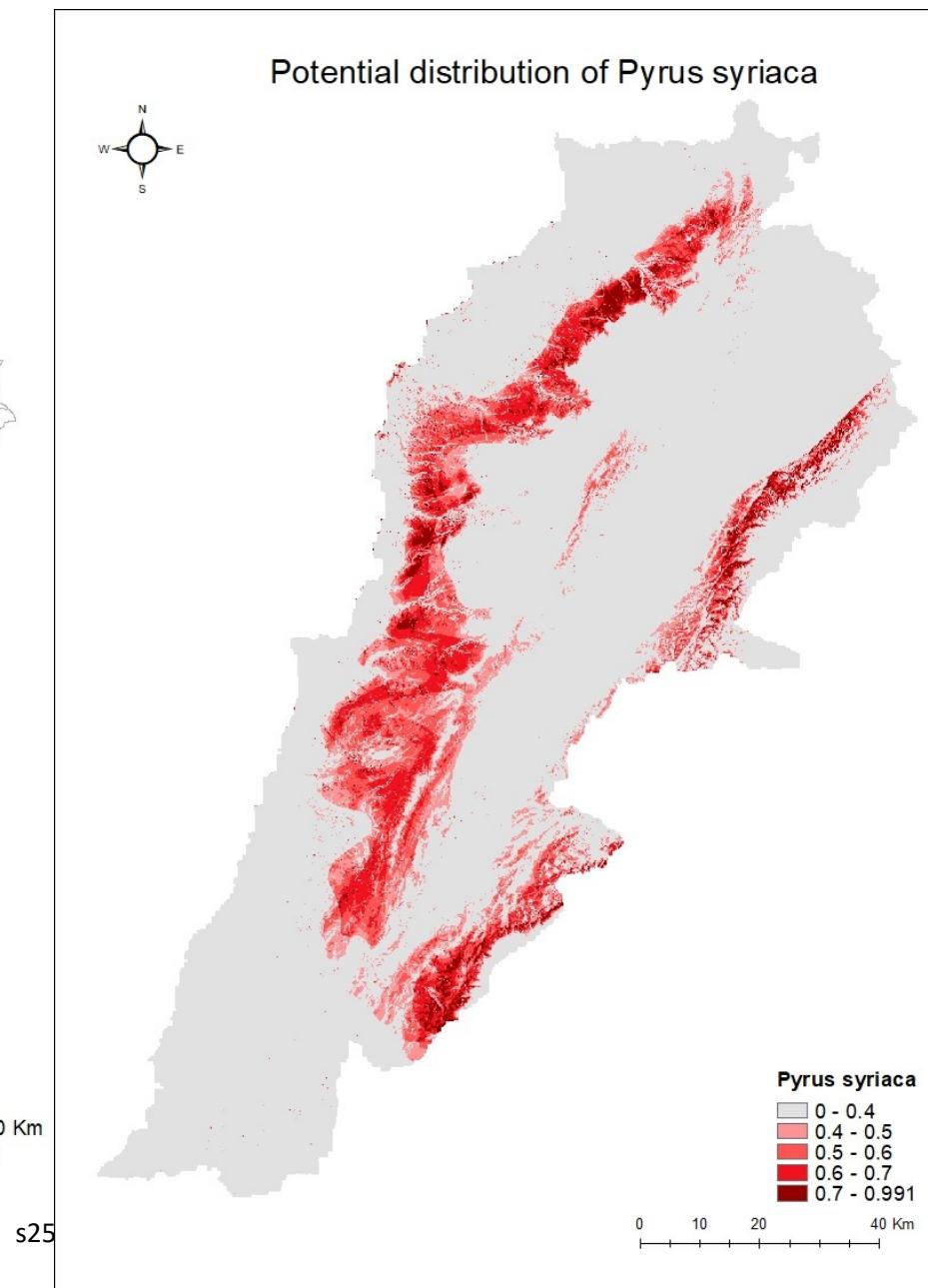
Potential distribution of *Pinus pinea*



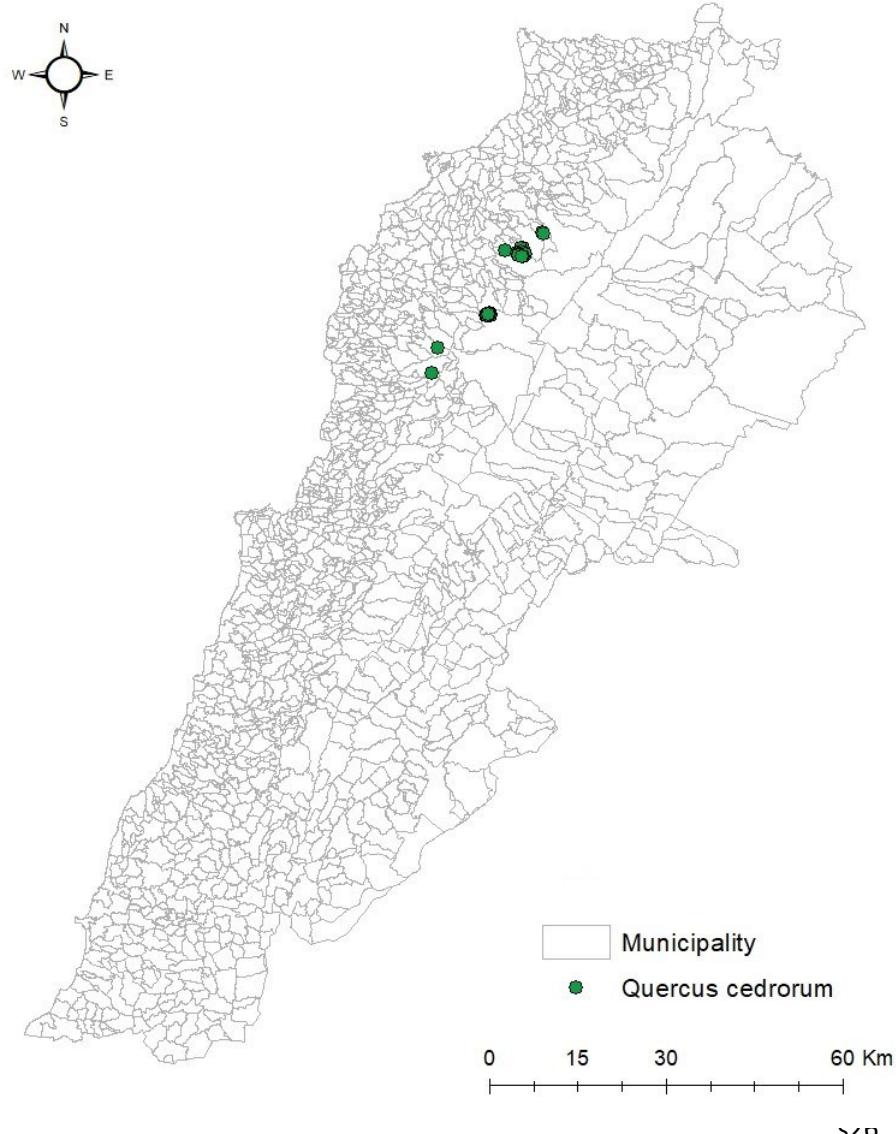
Observed distribution of *Pyrus syriaca*



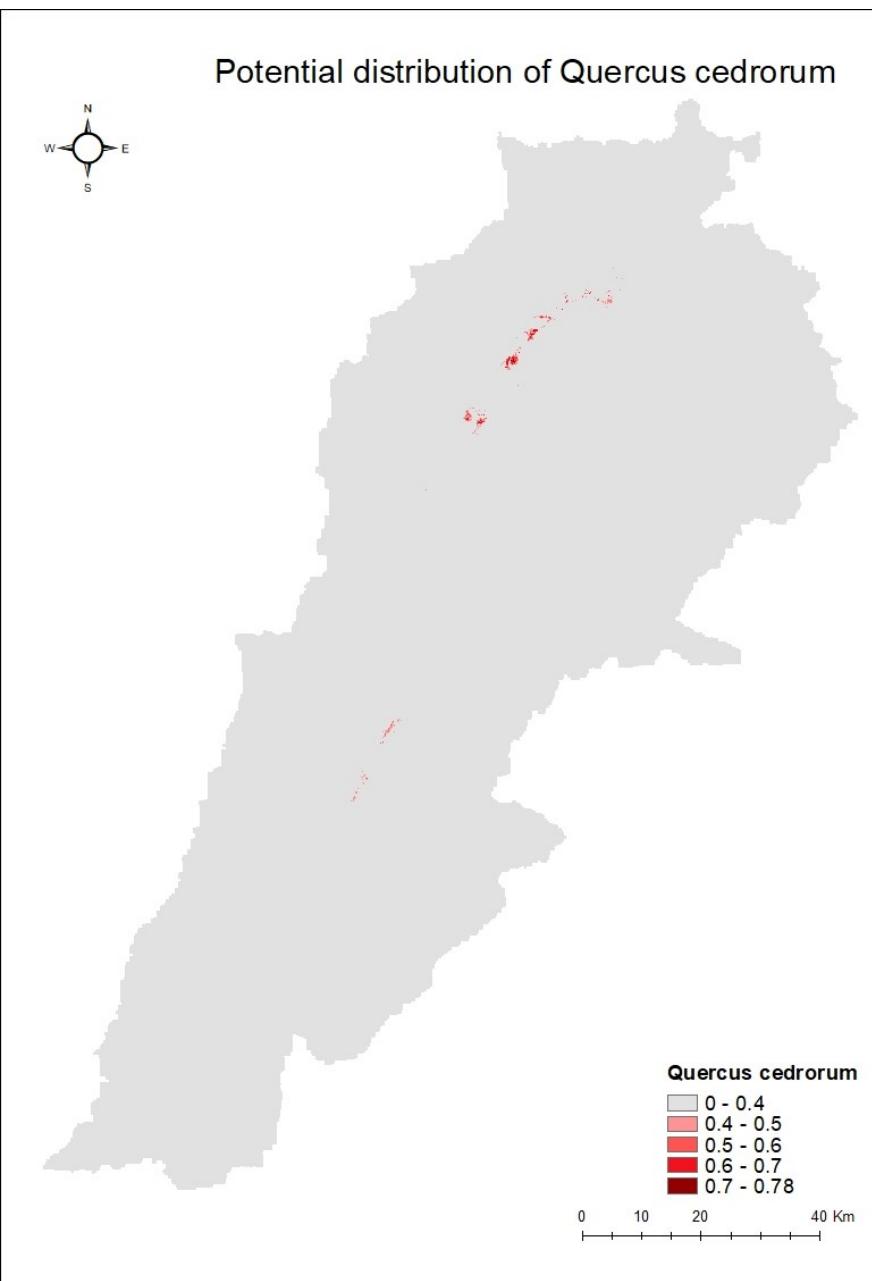
Potential distribution of *Pyrus syriaca*



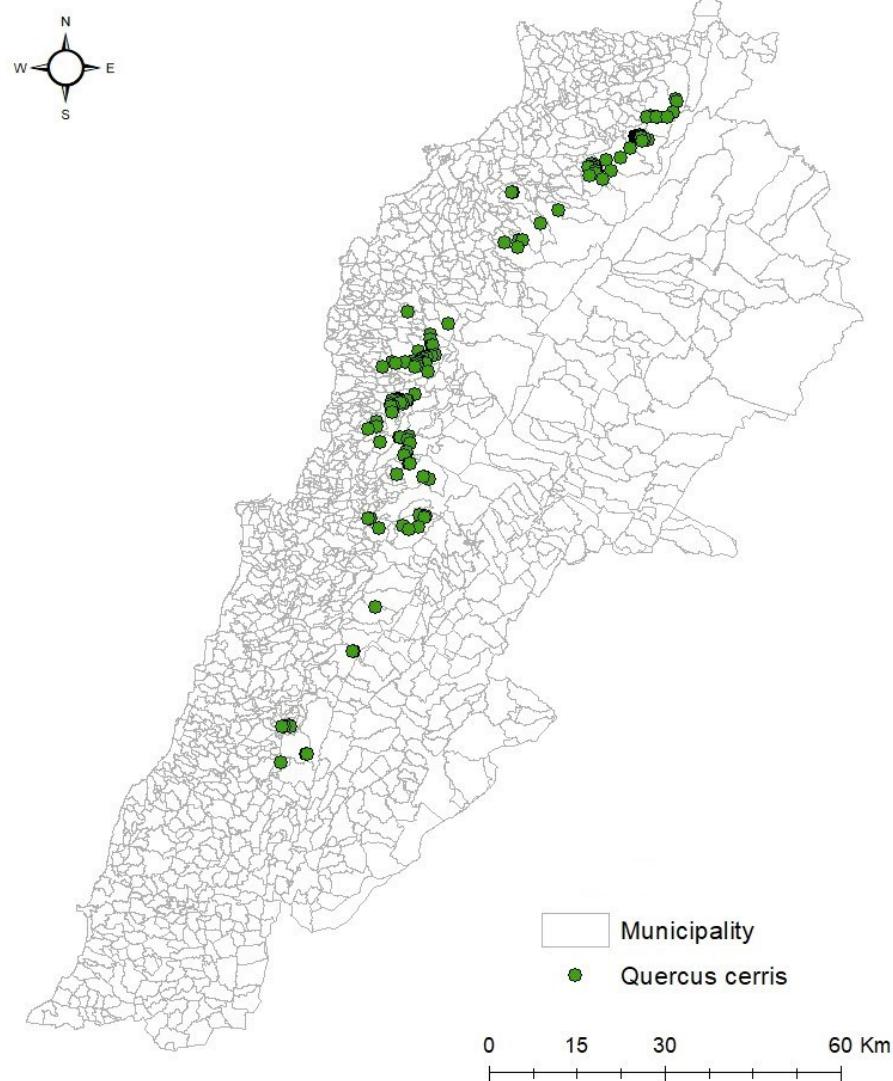
Observed distribution of *Quercus cedrorum*



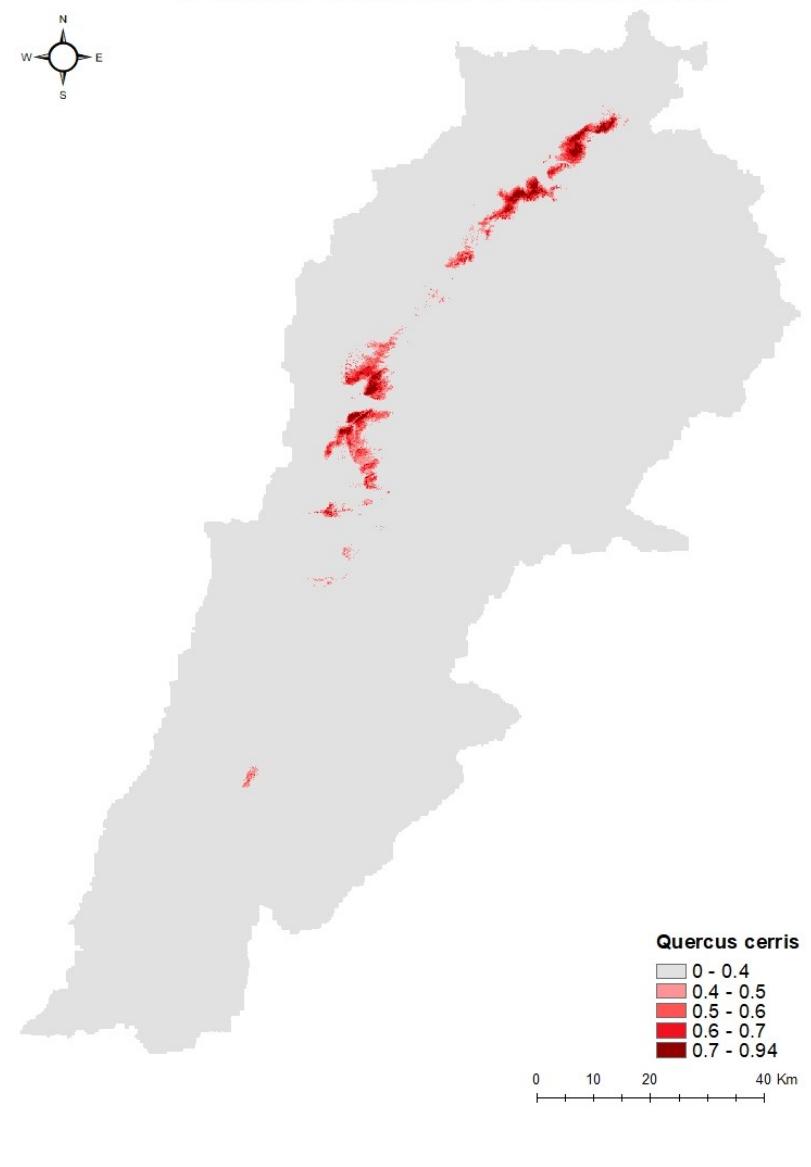
Potential distribution of *Quercus cedrorum*



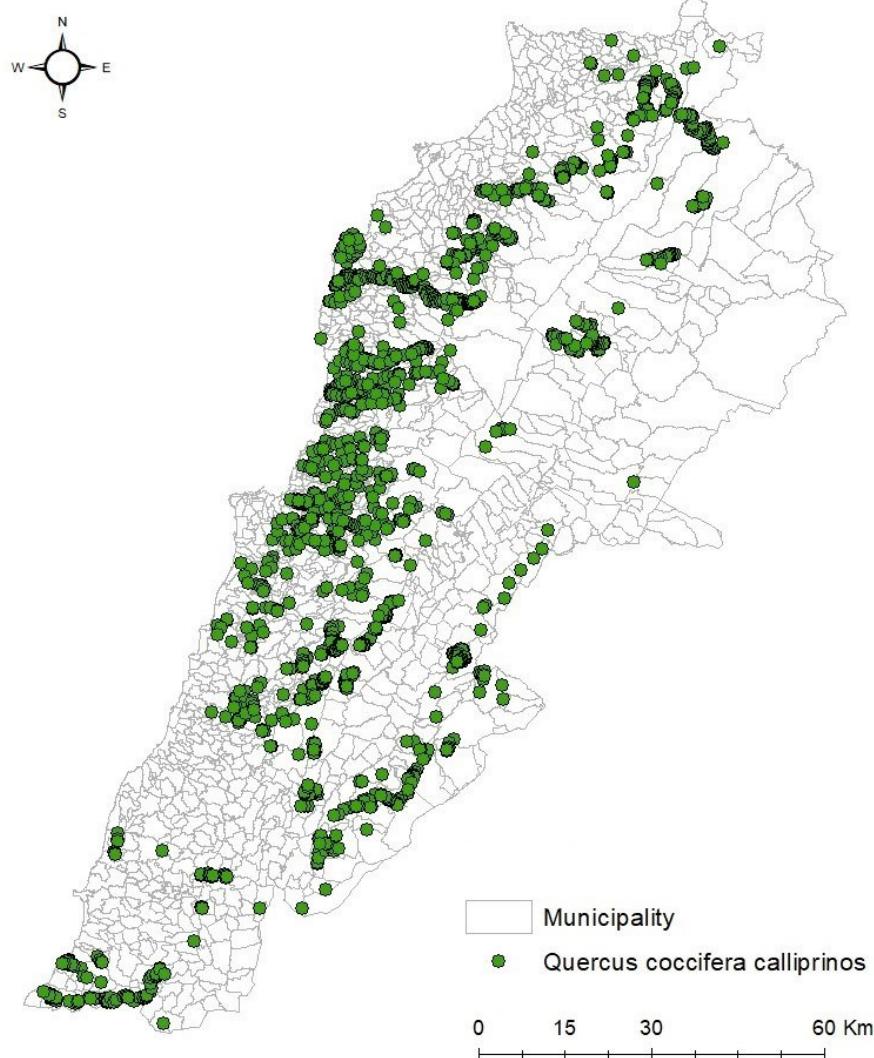
Observed distribution of *Quercus cerris*



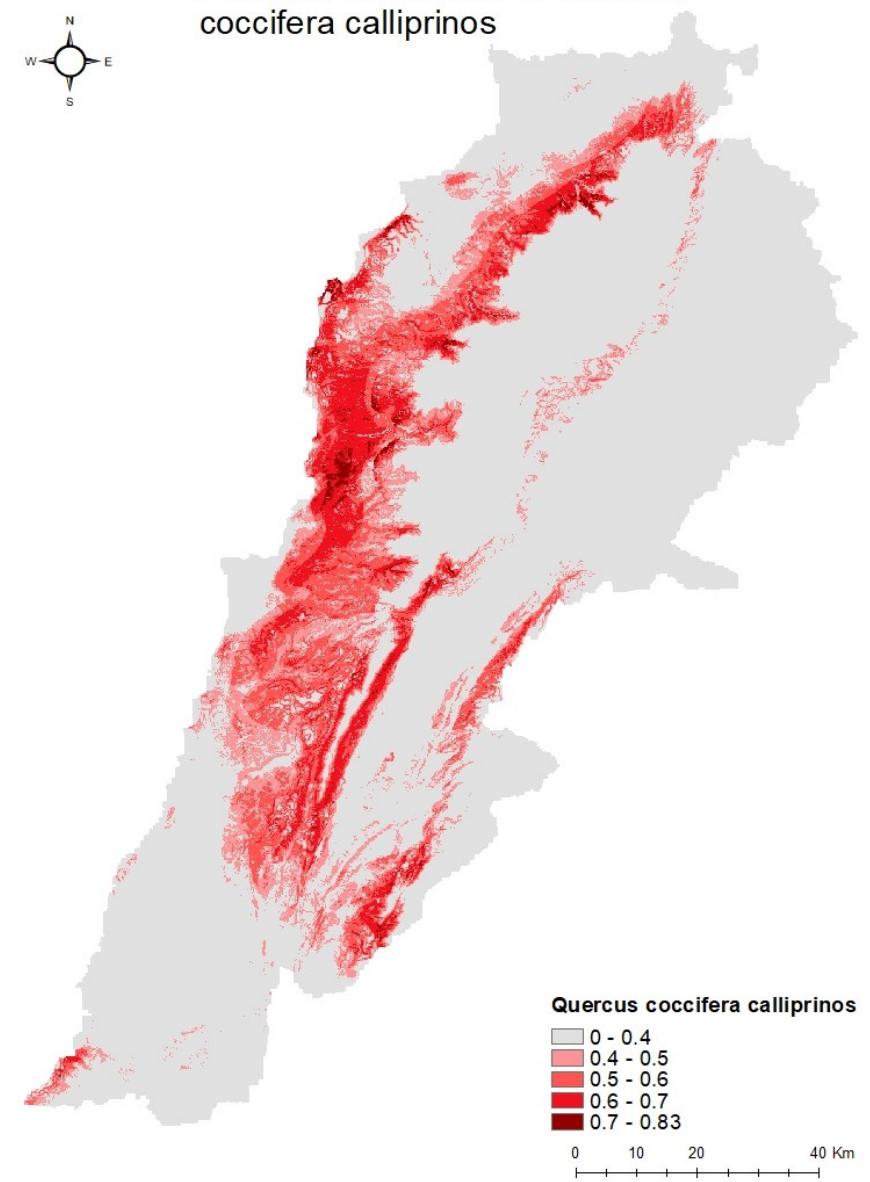
Potential distribution of *Quercus cerris*



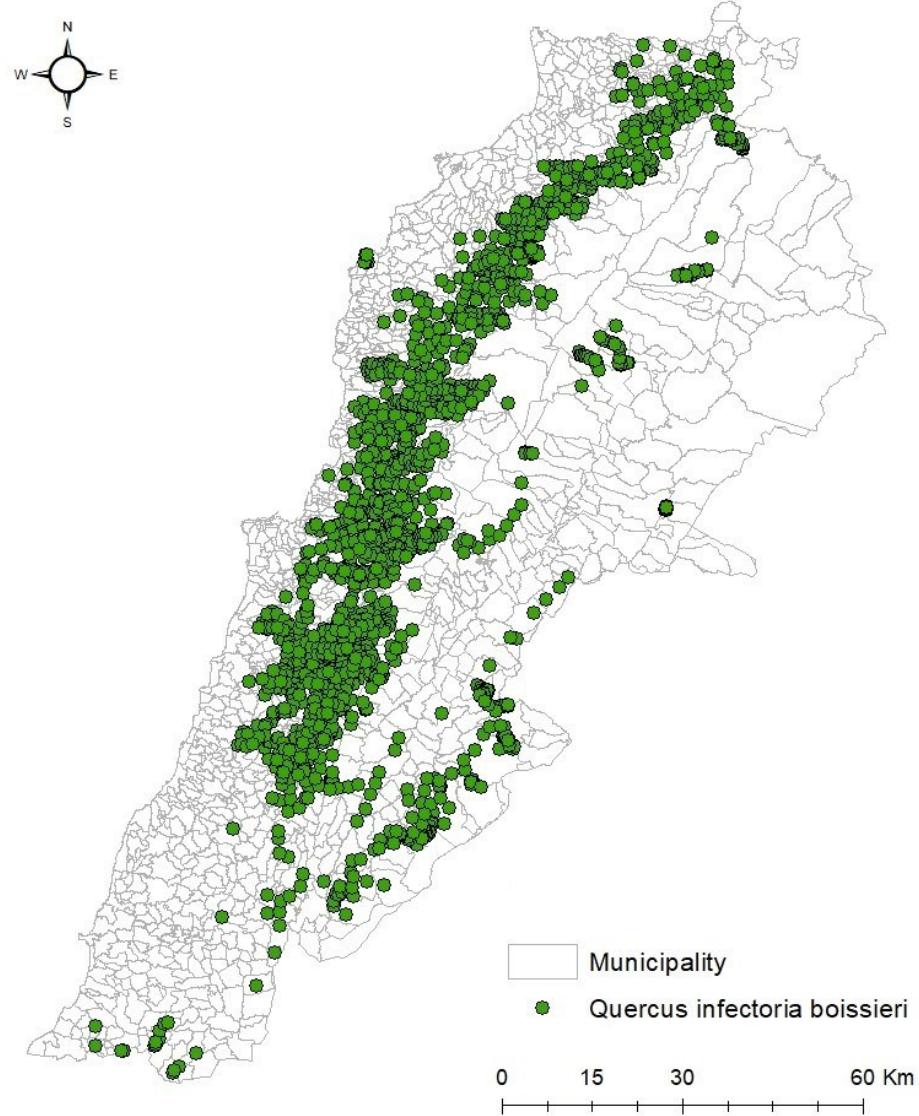
Observed distribution of *Quercus coccifera calliprinos*



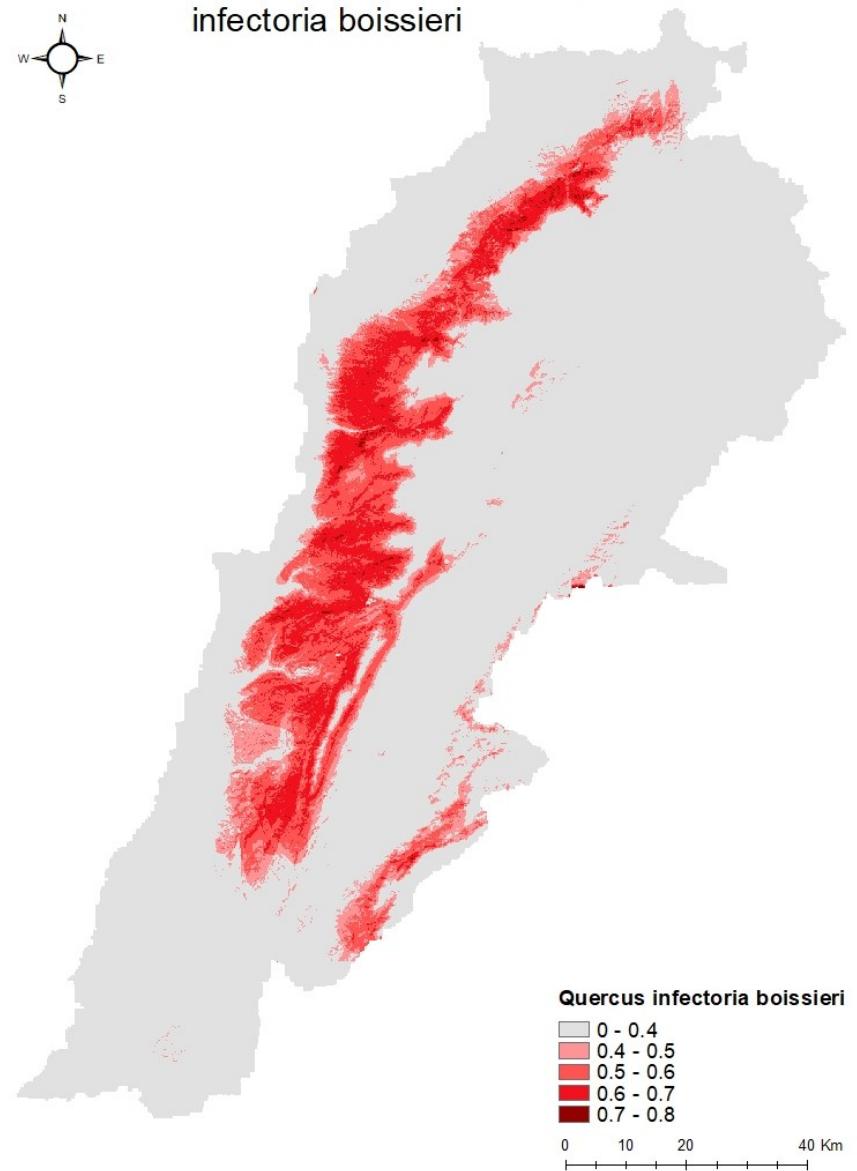
Potential distribution of *Quercus coccifera calliprinos*



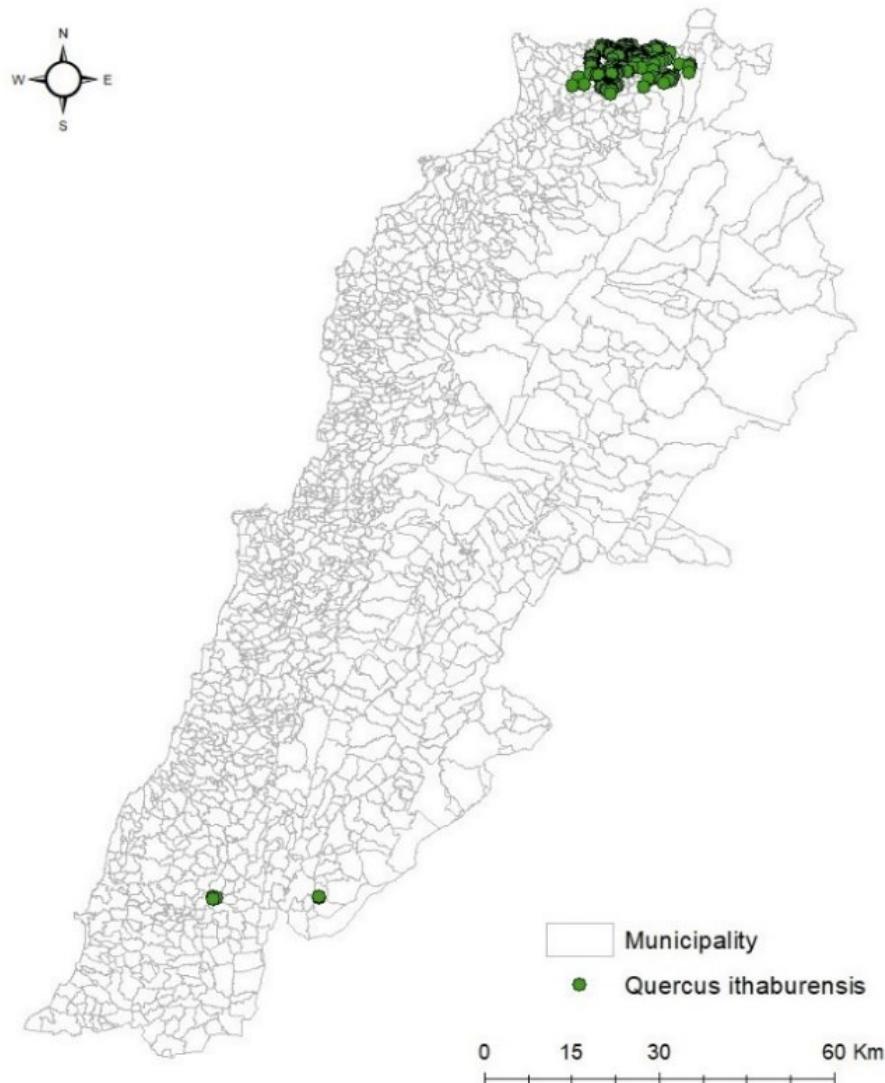
Observed distribution of *Quercus infectoria boissieri*



Potential distribution of *Quercus infectoria boissieri*



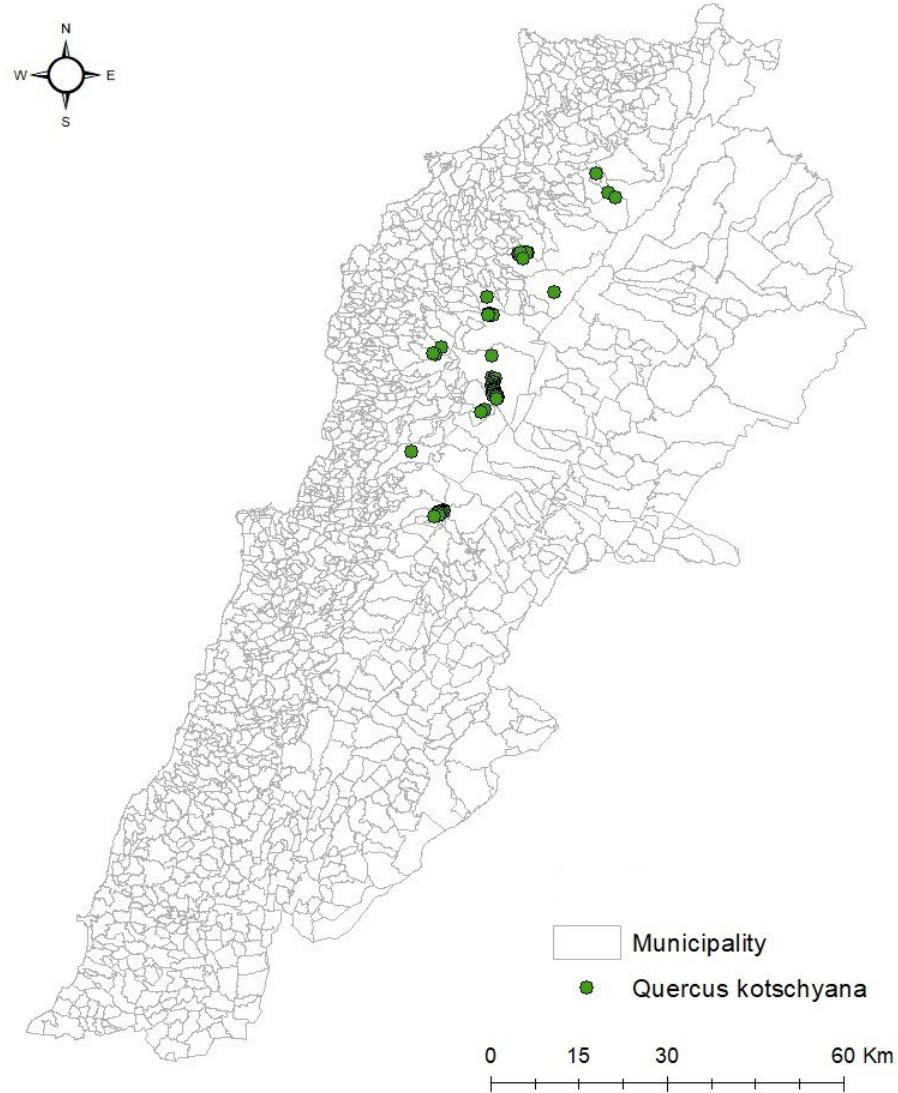
Observed distribution of *Quercus ithaburensis*



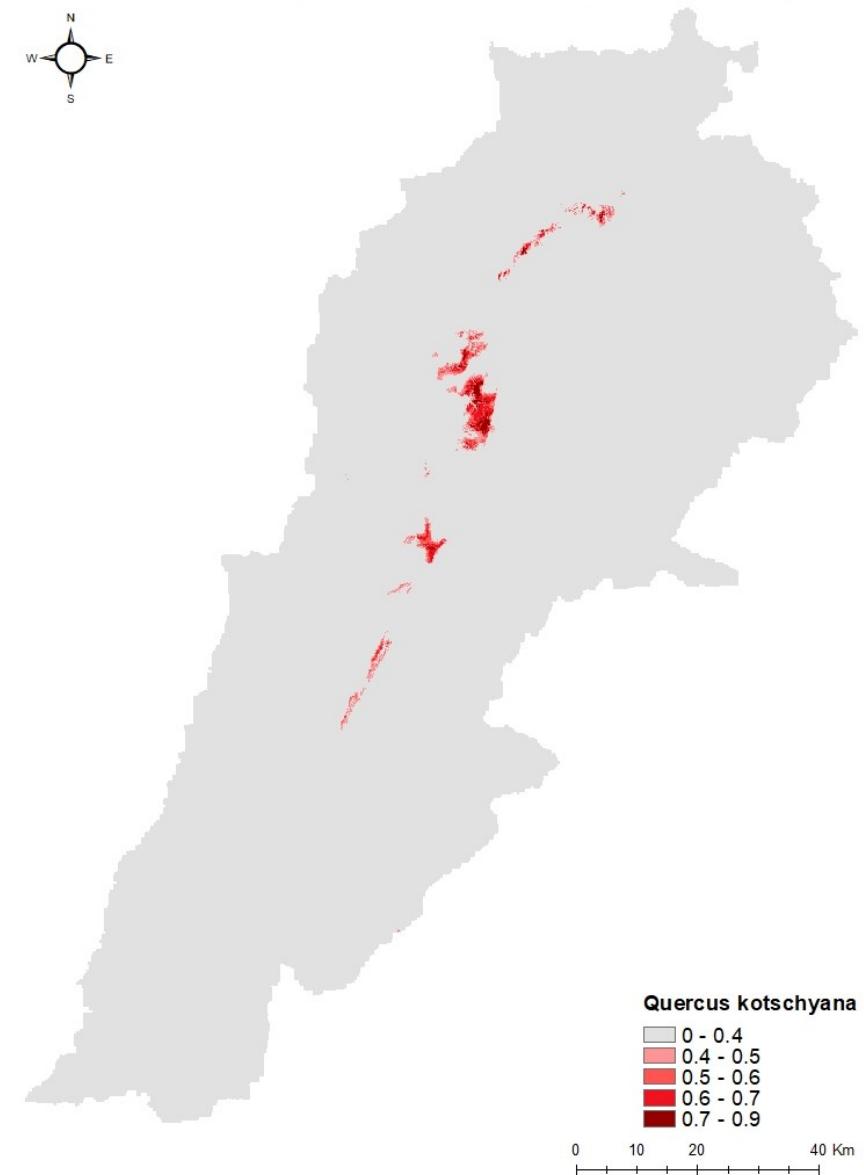
Potential distribution of *Quercus ithaburensis*



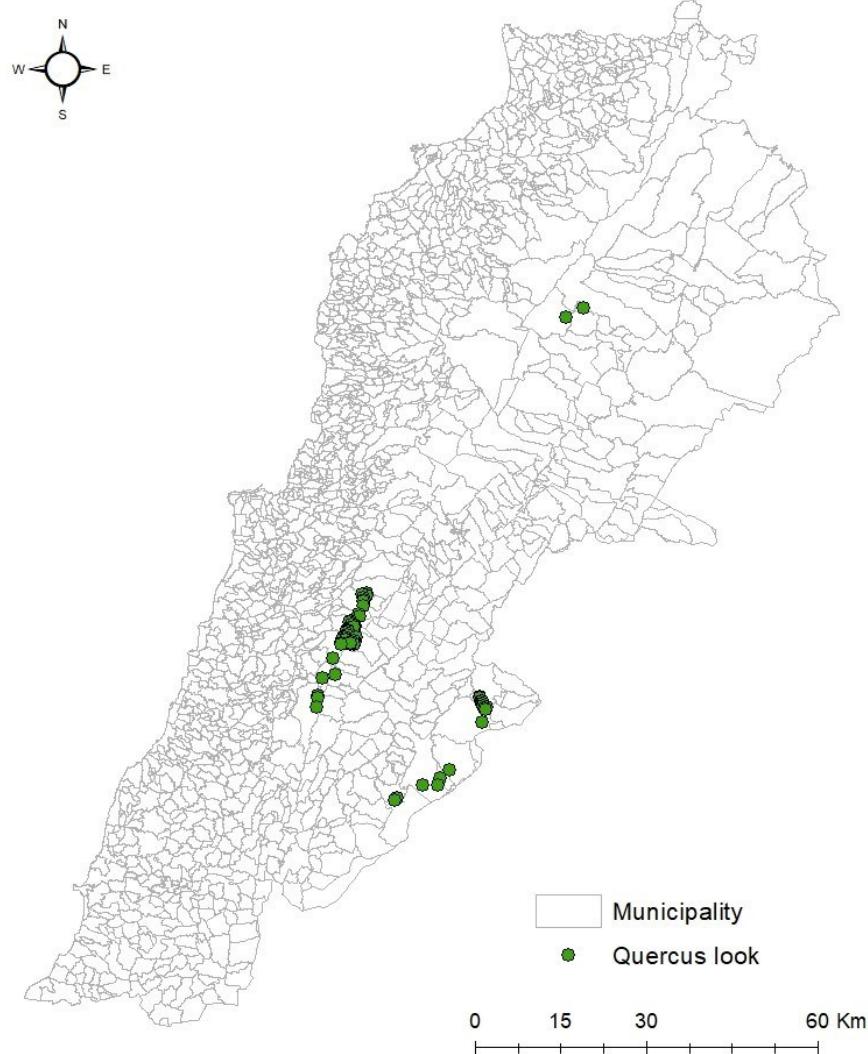
Observed distribution of *Quercus kotschyana*



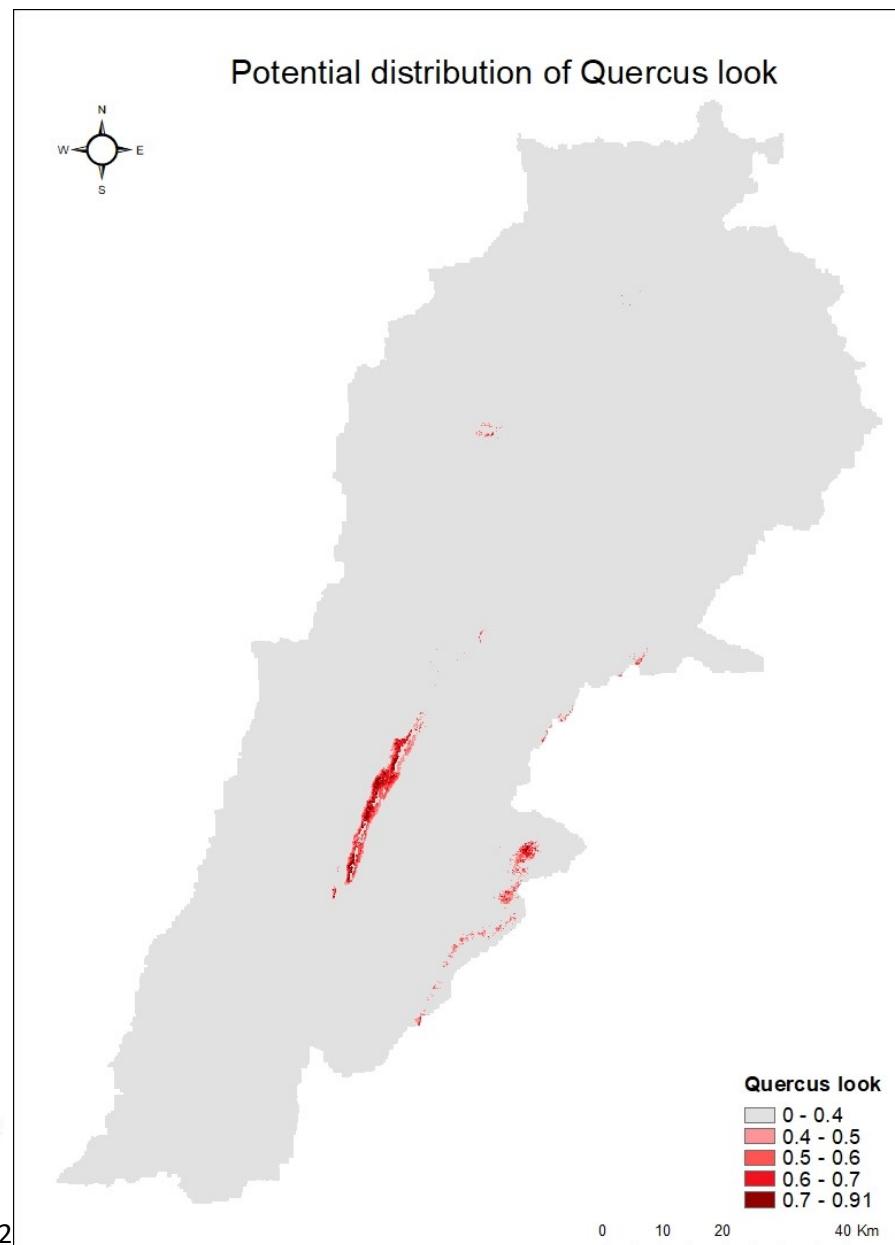
Potential distribution of *Quercus kotschyana*



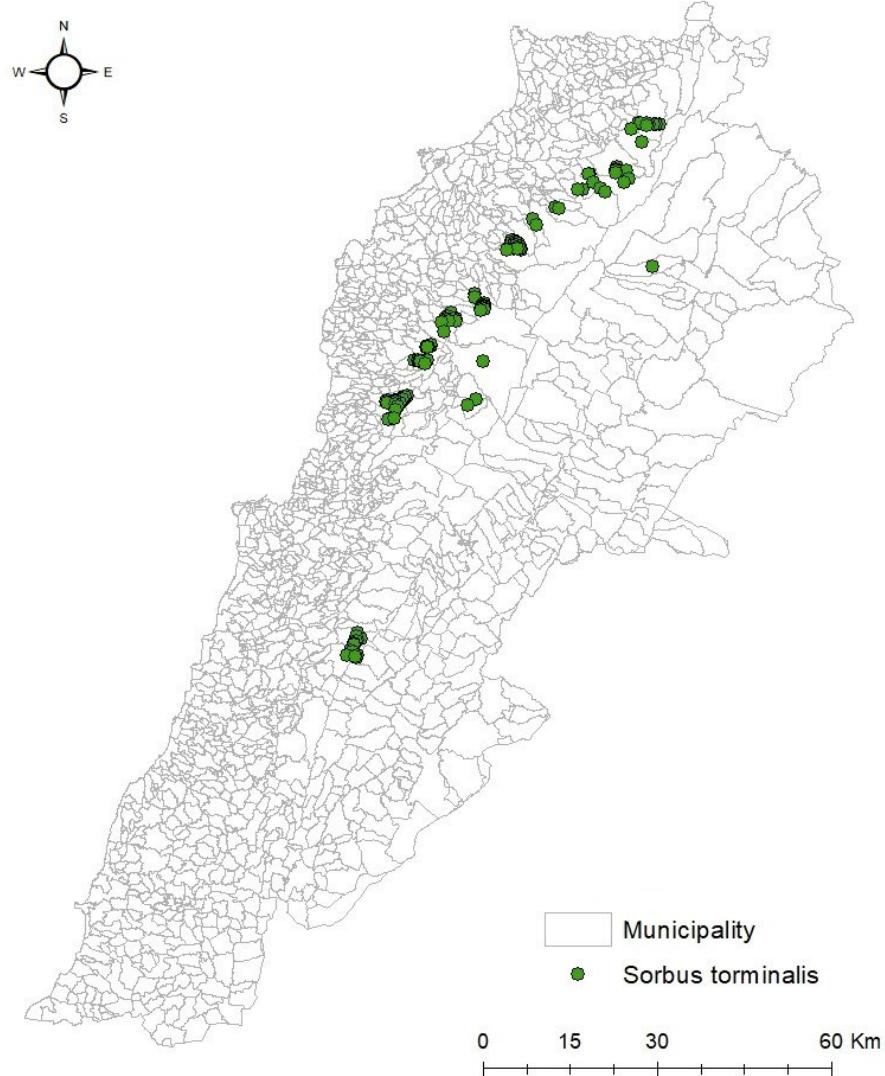
### Observed distribution of *Quercus look*



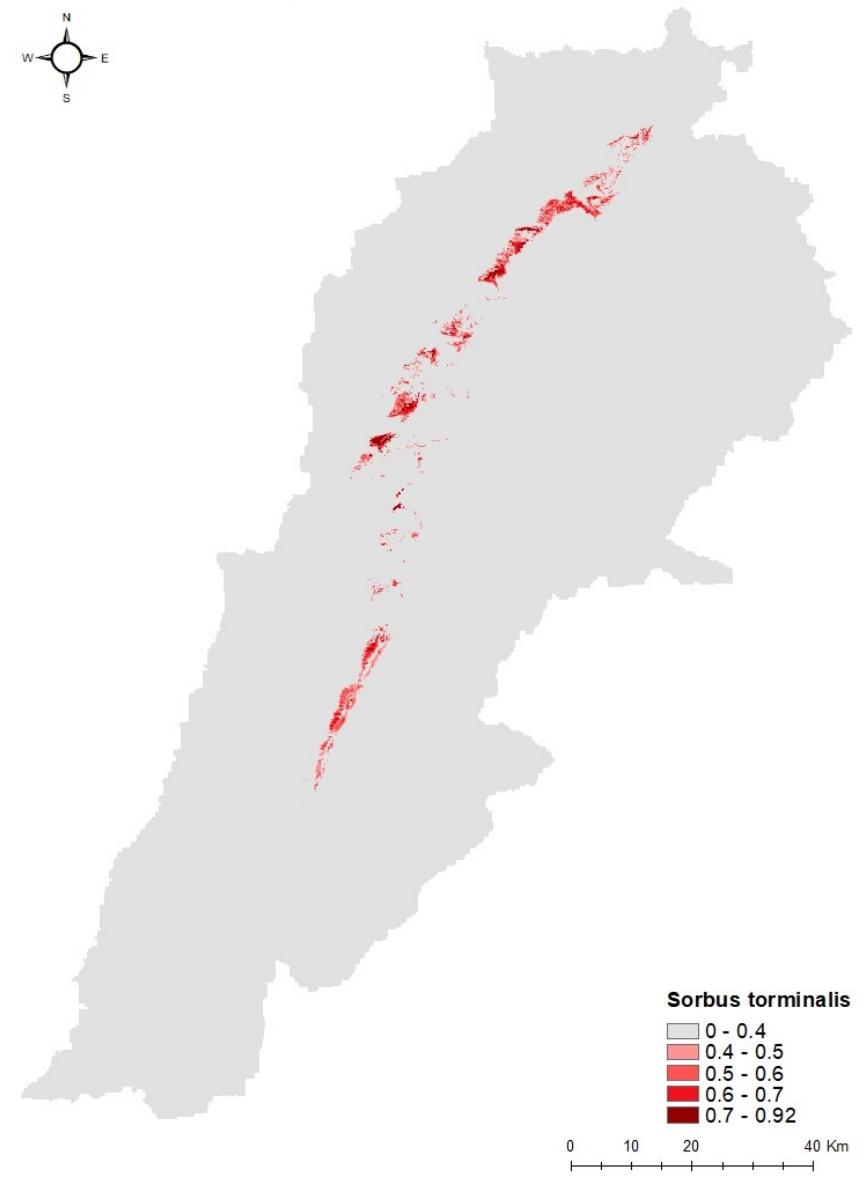
### Potential distribution of *Quercus look*



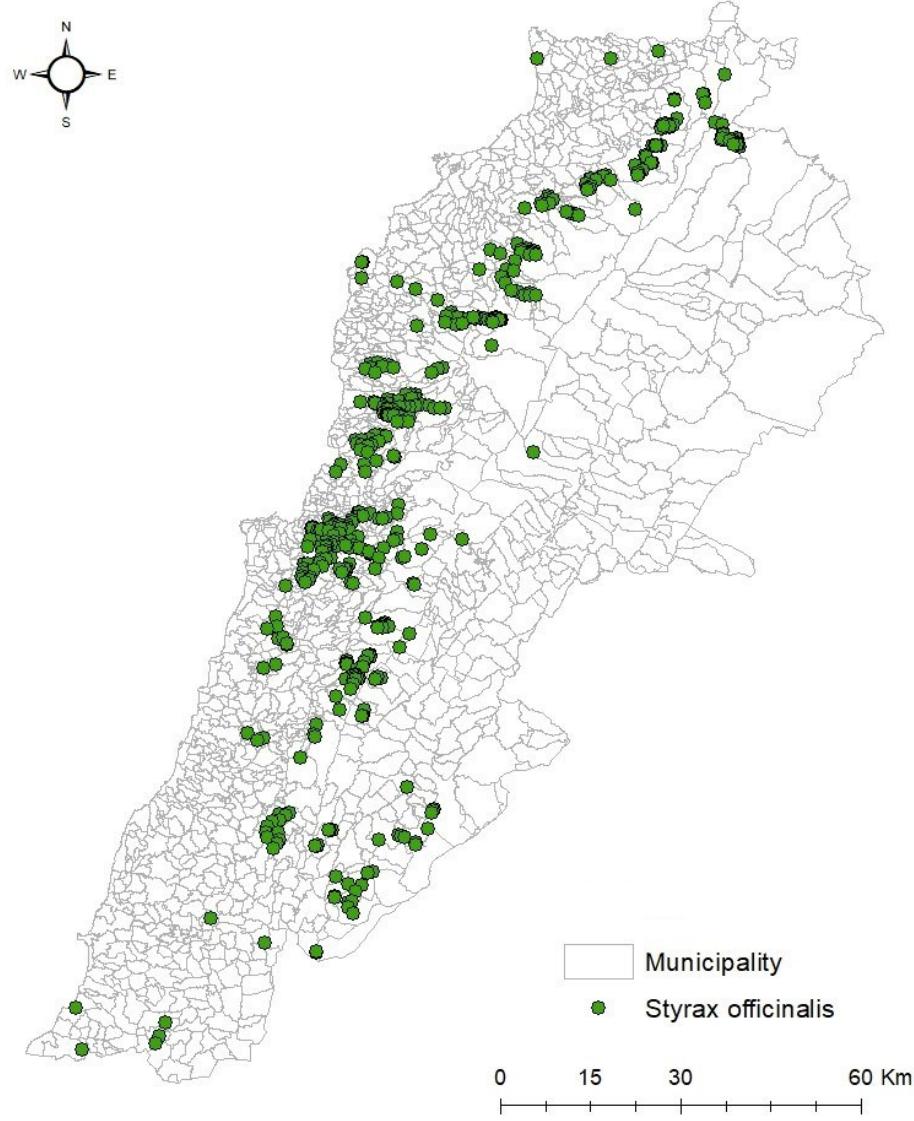
Observed distribution of *Sorbus torminalis*



Potential distribution of *Sorbus torminalis*



Observed distribution of *Styrax officinalis*



Potential distribution of *Styrax officinalis*

