Models with year

2022-10-05

Seed number

we analyse whether the visitation rate of all pollinators, years and their interaction affect to the seed number for each plant species
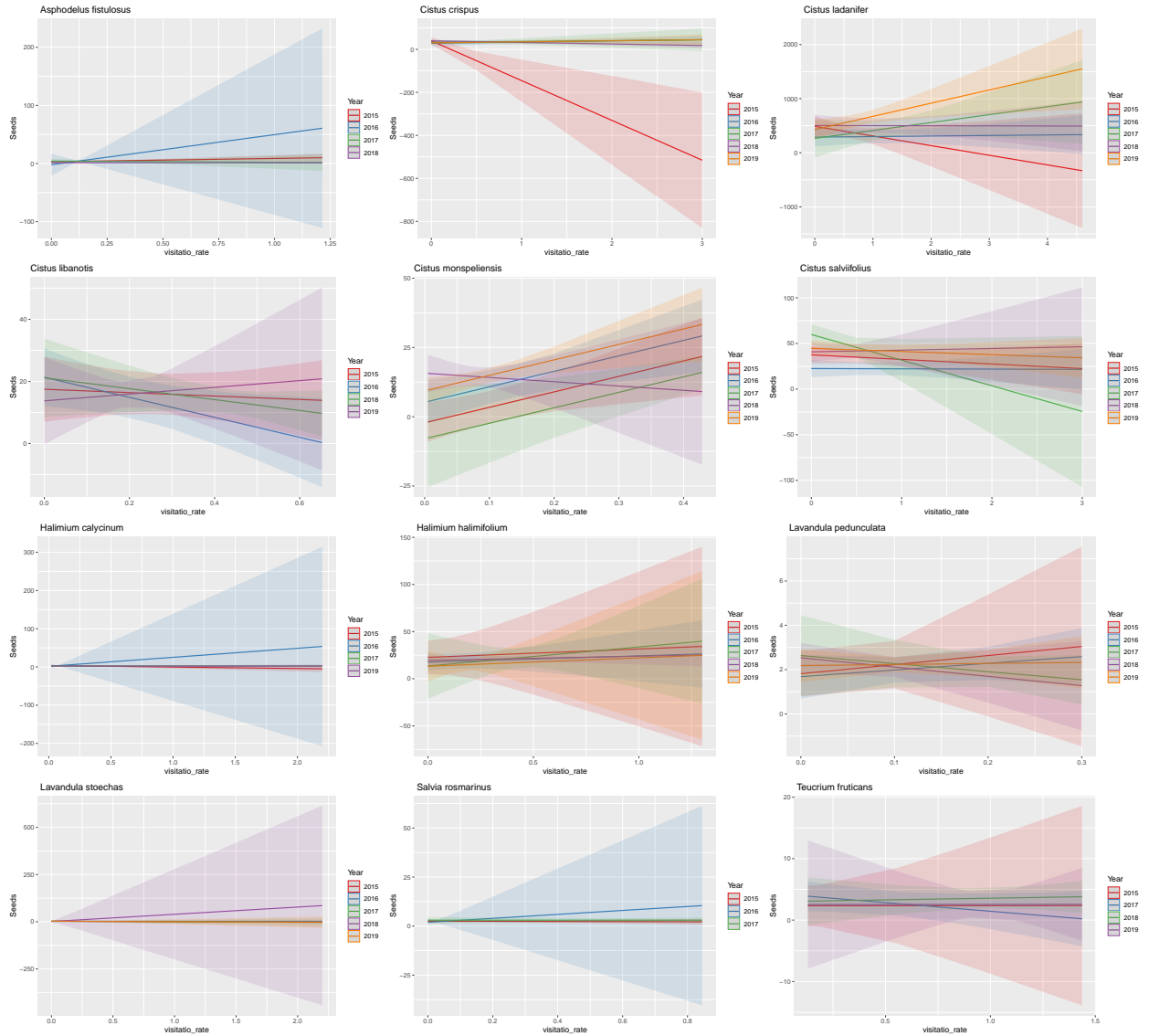
A- linear model: lm(Seeds~visitatio_rate * Year

Plant_gen_sp	term	estimate	std.error	statistic	p.value
Asphodelus fistulosus	(Intercept)	3.0260	0.8088	3.7411	**0.0073**
	visitatio_rate	5.7266	3.4085	1.6801	0.1368
	Year2016	-5.1093	9.7394	-0.5246	0.6161
	Year2017	1.1217	2.1216	0.5287	0.6133
	Year2018	-1.5567	1.3826	-1.1259	0.2973
	visitatio_rate:Year2016	46.0234	80.1800	0.5740	0.5839
	visitatio_rate:Year2017	-7.6997	8.3435	-0.9228	0.3868
	visitatio_rate:Year2018	-5.9262	3.6989	-1.6021	0.1532
Cistus crispus	(Intercept)	39.6667	8.4181	4.7121	**0.0000**
	visitatio_rate	-185.1111	55.5567	-3.3319	**0.0015**
	Year2016	-11.2113	11.2820	-0.9937	0.3243
	Year2017	-6.8728	9.1650	-0.7499	0.4563
	Year2018	-0.3055	8.8115	-0.0347	0.9725
	Year2019	-9.3712	9.0665	-1.0336	0.3055
	visitatio_rate:Year2016	190.7614	55.7606	3.4211	**0.0011**
	visitatio_rate:Year2017	188.9941	56.4155	3.3500	**0.0014**
	visitatio_rate:Year2018	177.9735	55.6309	3.1992	**0.0022**
	visitatio_rate:Year2019	189.9160	55.7932	3.4039	**0.0012**
Cistus ladanifer	(Intercept)	488.2839	97.7329	4.9961	**0.0000**
	visitatio_rate	-178.2900	134.3129	-1.3274	0.1914
	Year2016	-199.4426	131.2333	-1.5198	0.1359
	Year2017	-222.4937	206.3065	-1.0785	0.2868
	Year2018	14.9977	139.7125	0.1073	0.9150
	Year2019	-59.3937	135.8342	-0.4373	0.6641
	visitatio_rate:Year2016	188.3636	143.5834	1.3119	0.1965
	visitatio_rate:Year2017	324.6391	179.2934	1.8107	0.0772
	visitatio_rate:Year2018	176.2307	149.0566	1.1823	0.2436
	visitatio_rate:Year2019	422.3346	166.3031	2.5395	**0.0148**
Cistus libanotis	(Intercept)	17.4970	5.3569	3.2662	**0.0114**
	visitatio_rate	-5.4939	15.0639	-0.3647	0.7248
	Year2016	3.8364	7.1596	0.5358	0.6066
	Year2018	3.6808	8.3756	0.4395	0.6720
	Year2019	-3.7393	8.9443	-0.4181	0.6869
	visitatio_rate:Year2016	-26.7561	21.3396	-1.2538	0.2453
	visitatio_rate:Year2018	-12.0825	20.8164	-0.5804	0.5776

	visitatio_rate:Year2019	16.3481	36.6178	0.4465	0.6671
Cistus monspeliensis	(Intercept)	-2.1936	3.6982	-0.5932	0.5850
	visitatio_rate	55.8703	20.1663	2.7705	0.0503
	Year2016	7.4109	4.2947	1.7256	0.1595
	Year2017	-5.7508	7.7695	-0.7402	0.5003
	Year2018	17.9181	5.1863	3.4549	**0.0259**
	Year2019	11.5483	3.3042	3.4951	**0.0250**
	visitatio_rate:Year2016	NA	NA	NA	**NA**
	visitatio_rate:Year2017	NA	NA	NA	**NA**
	visitatio_rate:Year2018	-71.3462	43.5548	-1.6381	0.1767
	visitatio_rate:Year2019	NA	NA	NA	**NA**
Cistus salviifolius	(Intercept)	37.5365	4.6845	8.0130	**0.0000**
	visitatio_rate	-5.0199	5.7298	-0.8761	0.3847
	Year2016	-15.0376	6.7203	-2.2376	**0.0292**
	Year2017	22.2334	7.3821	3.0118	**0.0039**
	Year2018	3.2469	7.0129	0.4630	0.6452
	Year2019	7.1414	6.4051	1.1149	0.2696
	visitatio_rate:Year2016	4.7236	7.4177	0.6368	0.5268
	visitatio_rate:Year2017	-23.0746	16.4328	-1.4042	0.1658
	visitatio_rate:Year2018	6.8757	13.6064	0.5053	0.6153
	visitatio_rate:Year2019	1.5547	7.2712	0.2138	0.8315
Halimium calycinum	(Intercept)	3.6192	0.6195	5.8418	**0.0001**
	visitatio_rate	-3.8773	2.1328	-1.8180	0.0964
	Year2016	-2.0081	4.4315	-0.4531	0.6593
	Year2017	-1.0074	0.9338	-1.0788	0.3038
	Year2019	-1.2481	0.7373	-1.6928	0.1186
	visitatio_rate:Year2016	27.4884	62.5295	0.4396	0.6687
	visitatio_rate:Year2017	3.8764	2.2021	1.7603	0.1061
	visitatio_rate:Year2019	3.8587	2.4148	1.5979	0.1384
Halimium halimifolium	(Intercept)	22.6667	9.0536	2.5036	**0.0170**
	visitatio_rate	8.8803	40.9521	0.2168	0.8296
	Year2016	-5.0326	10.1786	-0.4944	0.6240
	Year2017	-9.1667	19.9041	-0.4605	0.6479
	Year2018	-3.1865	9.4552	-0.3370	0.7381
	Year2019	-9.4292	12.2528	-0.7696	0.4466
	visitatio_rate:Year2016	-2.2240	43.7919	-0.0508	0.9598
	visitatio_rate:Year2017	11.3102	56.3551	0.2007	0.8421
	visitatio_rate:Year2018	-4.4799	41.4147	-0.1082	0.9145
	visitatio_rate:Year2019	NA	NA	NA	**NA**
Lavandula pedunculata	(Intercept)	1.8146	0.5213	3.4811	**0.0012**
	visitatio_rate	4.0965	9.0590	0.4522	0.6536
	Year2016	-0.1336	0.7264	-0.1839	0.8551
	Year2017	0.8188	1.0654	0.7685	0.4468
	Year2018	0.7180	0.6237	1.1512	0.2566
	Year2019	0.3668	0.6423	0.5712	0.5712
	visitatio_rate:Year2016	-1.0835	9.6658	-0.1121	0.9113
	visitatio_rate:Year2017	-7.7336	10.0598	-0.7688	0.4467
	visitatio_rate:Year2018	-8.2855	10.0608	-0.8235	0.4152
	visitatio_rate:Year2019	-3.6094	9.5531	-0.3778	0.7076
Lavandula stoechas	(Intercept)	2.4225	0.4088	5.9264	**0.0000**
	visitatio_rate	-2.1661	1.5124	-1.4322	0.1740
	Year2016	-0.3318	0.5379	-0.6169	0.5472
	Year2017	0.4834	0.7556	0.6398	0.5327
	Year2018	-1.2410	1.0444	-1.1882	0.2545

	Year2019	0.4535	1.1763	0.3855	0.7056
	visitatio_rate:Year2016	2.3508	1.5737	1.4938	0.1574
	visitatio_rate:Year2017	-0.7832	5.6295	-0.1391	0.8913
	visitatio_rate:Year2018	40.4747	123.0223	0.3290	0.7470
	visitatio_rate:Year2019	-0.2801	7.8057	-0.0359	0.9719
Salvia rosmarinus	(Intercept)	2.5116	0.3234	7.7651	**0.0001**
	visitatio_rate	-0.4070	1.0878	-0.3741	0.7194
	Year2016	-0.5731	0.9439	-0.6071	0.5630
	Year2017	0.4884	0.9128	0.5351	0.6092
	visitatio_rate:Year2016	10.4627	31.5853	0.3313	0.7501
	visitatio_rate:Year2017	0.4070	1.7866	0.2278	0.8263
Teucrium fruticans	(Intercept)	2.3309	1.8735	1.2442	0.2814
	visitatio_rate	0.0184	6.2045	0.0030	0.9978
	Year2017	1.9173	2.3583	0.8130	0.4618
	Year2018	0.6776	2.9201	0.2320	0.8279
	Year2019	0.2067	5.5916	0.0370	0.9723
	visitatio_rate:Year2017	-2.8288	6.5718	-0.4304	0.6890
	visitatio_rate:Year2018	0.5354	6.5679	0.0815	0.9389
	visitatio_rate:Year2019	NA	NA	NA	**NA**

Plant_gen_sp	r.squared	adj.r.squared	sigma	statistic	p.value	df	logLik	AIC	BIC	deviance	df.residual	nobs
A.fistulosus	0.755	0.509	1.095	3.075	0.081	7	-16.924	51.847	58.220	8.387	7	15
C.crispus	0.298	0.193	8.418	2.833	0.008	9	-243.057	508.115	532.848	4251.877	60	70
C.ladanifer	0.370	0.238	208.694	2.804	0.011	9	-352.729	727.458	749.131	1872792.392	43	53
C.libanotis	0.472	0.011	4.750	1.023	0.481	7	-42.089	102.177	109.130	180.509	8	16
C.monspeliensis	0.836	0.589	3.012	3.389	0.129	6	-22.175	60.349	63.532	36.298	4	11
C.salviifolius	0.430	0.338	12.503	4.688	0.000	9	-254.941	531.882	555.968	8753.969	56	66
H. calycinum	0.329	-0.098	0.936	0.771	0.624	7	-20.506	59.013	67.513	9.632	11	19
H.halimifolium	0.116	-0.081	9.054	0.589	0.781	8	-157.974	335.947	354.014	2950.816	36	45
L.pedunculata	0.093	-0.116	0.694	0.445	0.902	9	-46.043	114.086	134.896	18.789	39	49
L.stoechas	0.347	-0.073	0.795	0.825	0.604	9	-22.069	66.138	79.096	8.840	14	24
S.rosmarinus	0.188	-0.392	0.740	0.325	0.883	5	-10.506	35.013	38.968	3.832	7	13
T.fructicans	0.388	-0.530	1.691	0.422	0.835	6	-15.826	47.651	50.834	11.443	4	11

Cistus monspeliensis - Halimium halimifolium - Teucrium fructicans Warning message: In predict.lm(model, newdata = fitfram, type = "response", se.fit = se,: prediction from a rank-deficient fit may be misleading

Importante: Cistus crispus en 2015 solo tiene dos valores, uno con 0 semillas y visitation rate 0.214; y otro con casi 40 semillas y visitation rate 0