

Summary of models

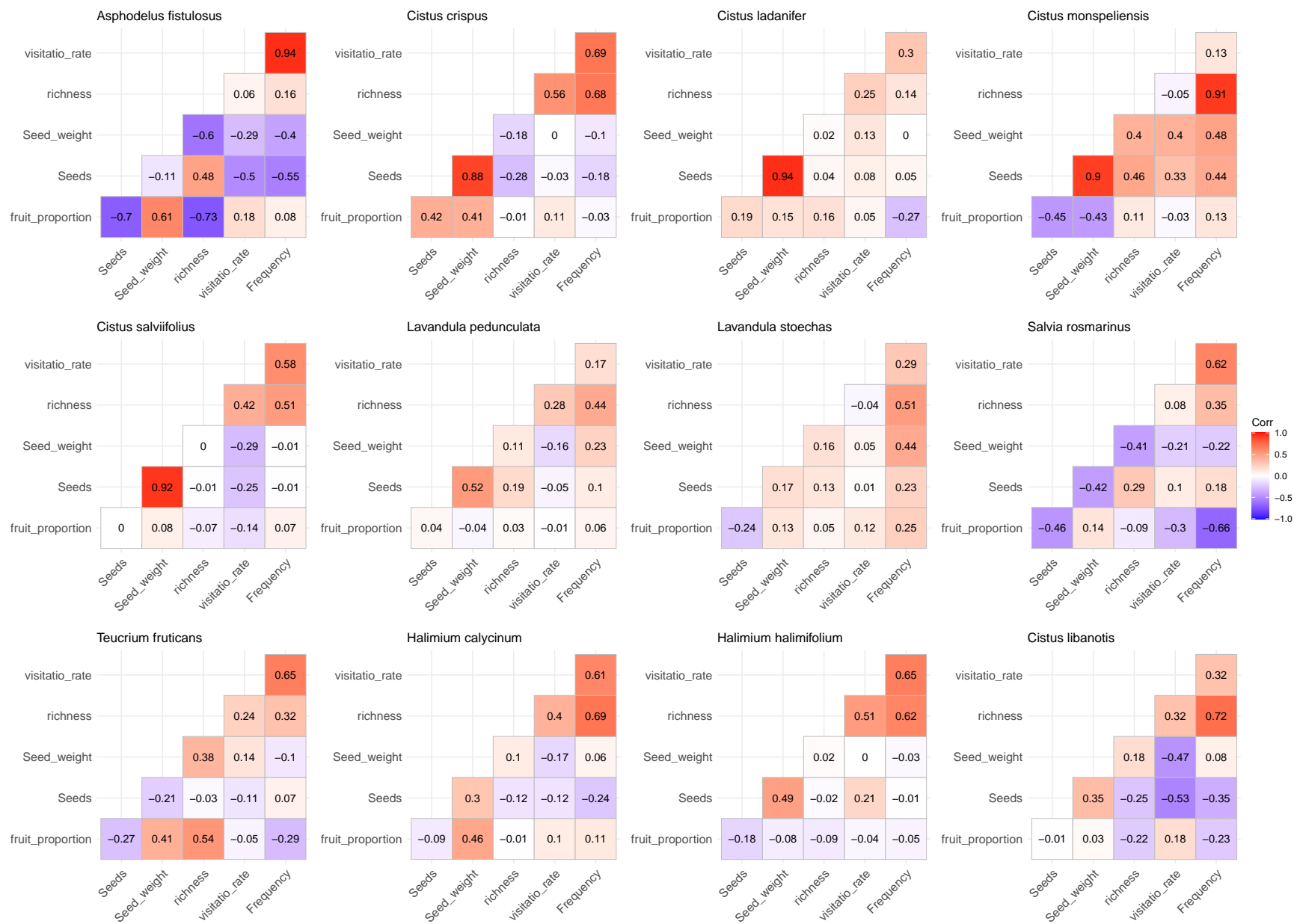
2022-07-08

Data base from beefun: plant individuals per sites (13 sites) for five years (2015-2019). Data base has 400 observation, only matching individuals, some with no pollinator frequency (16 observations). Fruit proportions, seed numbers and seed weight are calculated for each plant individual per plant species in site and year. Richness, visitation rate and frequency of pollinators are also calculated for plant individual per plant species. 16 plant species but 4 are removed because they are present only one site.

Correlation

species	rows	fruit_proportion	Seeds	Seed_weight	richness	visitatio_rate	Frequency
Asphodelus fistulosus	fruit_proportion	1.0000	-0.7023	0.6058	-0.7293	0.1819	0.0830
	Seeds	-0.7023	1.0000	-0.1075	0.4812	-0.4977	-0.5475
	Seed_weight	0.6058	-0.1075	1.0000	-0.6025	-0.2888	-0.4000
	richness	-0.7293	0.4812	-0.6025	1.0000	0.0647	0.1593
	visitatio_rate	0.1819	-0.4977	-0.2888	0.0647	1.0000	0.9421
	Frequency	0.0830	-0.5475	-0.4000	0.1593	0.9421	1.0000
Cistus crispus	fruit_proportion	1.0000	0.4161	0.4117	-0.0105	0.1052	-0.0307
	Seeds	0.4161	1.0000	0.8757	-0.2753	-0.0277	-0.1797
	Seed_weight	0.4117	0.8757	1.0000	-0.1787	-0.0046	-0.0970
	richness	-0.0105	-0.2753	-0.1787	1.0000	0.5627	0.6782
	visitatio_rate	0.1052	-0.0277	-0.0046	0.5627	1.0000	0.6865
	Frequency	-0.0307	-0.1797	-0.0970	0.6782	0.6865	1.0000
Cistus ladanifer	fruit_proportion	1.0000	0.1881	0.1458	0.1638	0.0495	-0.2714
	Seeds	0.1881	1.0000	0.9382	0.0365	0.0813	0.0492
	Seed_weight	0.1458	0.9382	1.0000	0.0195	0.1282	-0.0007
	richness	0.1638	0.0365	0.0195	1.0000	0.2465	0.1351
	visitatio_rate	0.0495	0.0813	0.1282	0.2465	1.0000	0.2981
	Frequency	-0.2714	0.0492	-0.0007	0.1351	0.2981	1.0000
Cistus libanotis	fruit_proportion	1.0000	-0.0060	0.0299	-0.2198	0.1761	-0.2259
	Seeds	-0.0060	1.0000	0.3492	-0.2500	-0.5347	-0.3541
	Seed_weight	0.0299	0.3492	1.0000	0.1833	-0.4670	0.0750
	richness	-0.2198	-0.2500	0.1833	1.0000	0.3220	0.7211
	visitatio_rate	0.1761	-0.5347	-0.4670	0.3220	1.0000	0.3221
	Frequency	-0.2259	-0.3541	0.0750	0.7211	0.3221	1.0000
Cistus monspeliensis	fruit_proportion	1.0000	-0.4485	-0.4345	0.1075	-0.0339	0.1337
	Seeds	-0.4485	1.0000	0.9027	0.4568	0.3329	0.4399
	Seed_weight	-0.4345	0.9027	1.0000	0.3971	0.4014	0.4813
	richness	0.1075	0.4568	0.3971	1.0000	-0.0517	0.9146
	visitatio_rate	-0.0339	0.3329	0.4014	-0.0517	1.0000	0.1264
	Frequency	0.1337	0.4399	0.4813	0.9146	0.1264	1.0000
Cistus salviifolius	fruit_proportion	1.0000	0.0026	0.0781	-0.0713	-0.1379	0.0695
	Seeds	0.0026	1.0000	0.9232	-0.0064	-0.2513	-0.0064
	Seed_weight	0.0781	0.9232	1.0000	0.0014	-0.2908	-0.0137

	richness	-0.0713	-0.0064	0.0014	1.0000	0.4190	0.5100
	visitatio_rate	-0.1379	-0.2513	-0.2908	0.4190	1.0000	0.5811
	Frequency	0.0695	-0.0064	-0.0137	0.5100	0.5811	1.0000
Halimium calycinum	fruit_proportion	1.0000	-0.0904	0.4575	-0.0072	0.0999	0.1097
	Seeds	-0.0904	1.0000	0.3023	-0.1236	-0.1230	-0.2351
	Seed_weight	0.4575	0.3023	1.0000	0.1017	-0.1709	0.0575
	richness	-0.0072	-0.1236	0.1017	1.0000	0.3986	0.6881
	visitatio_rate	0.0999	-0.1230	-0.1709	0.3986	1.0000	0.6119
	Frequency	0.1097	-0.2351	0.0575	0.6881	0.6119	1.0000
Halimium halimifolium	fruit_proportion	1.0000	-0.1827	-0.0810	-0.0886	-0.0362	-0.0520
	Seeds	-0.1827	1.0000	0.4896	-0.0150	0.2056	-0.0134
	Seed_weight	-0.0810	0.4896	1.0000	0.0244	0.0029	-0.0266
	richness	-0.0886	-0.0150	0.0244	1.0000	0.5080	0.6200
	visitatio_rate	-0.0362	0.2056	0.0029	0.5080	1.0000	0.6450
	Frequency	-0.0520	-0.0134	-0.0266	0.6200	0.6450	1.0000
Lavandula pedunculata	fruit_proportion	1.0000	0.0418	-0.0393	0.0282	-0.0103	0.0609
	Seeds	0.0418	1.0000	0.5202	0.1866	-0.0536	0.0996
	Seed_weight	-0.0393	0.5202	1.0000	0.1146	-0.1564	0.2289
	richness	0.0282	0.1866	0.1146	1.0000	0.2759	0.4425
	visitatio_rate	-0.0103	-0.0536	-0.1564	0.2759	1.0000	0.1748
	Frequency	0.0609	0.0996	0.2289	0.4425	0.1748	1.0000
Lavandula stoechas	fruit_proportion	1.0000	-0.2385	0.1316	0.0515	0.1242	0.2541
	Seeds	-0.2385	1.0000	0.1705	0.1310	0.0142	0.2260
	Seed_weight	0.1316	0.1705	1.0000	0.1550	0.0483	0.4355
	richness	0.0515	0.1310	0.1550	1.0000	-0.0407	0.5107
	visitatio_rate	0.1242	0.0142	0.0483	-0.0407	1.0000	0.2883
	Frequency	0.2541	0.2260	0.4355	0.5107	0.2883	1.0000
Salvia rosmarinus	fruit_proportion	1.0000	-0.4606	0.1354	-0.0885	-0.3038	-0.6646
	Seeds	-0.4606	1.0000	-0.4241	0.2924	0.1032	0.1842
	Seed_weight	0.1354	-0.4241	1.0000	-0.4100	-0.2078	-0.2179
	richness	-0.0885	0.2924	-0.4100	1.0000	0.0761	0.3480
	visitatio_rate	-0.3038	0.1032	-0.2078	0.0761	1.0000	0.6244
	Frequency	-0.6646	0.1842	-0.2179	0.3480	0.6244	1.0000
Teucrium fruticans	fruit_proportion	1.0000	-0.2740	0.4067	0.5360	-0.0517	-0.2905
	Seeds	-0.2740	1.0000	-0.2085	-0.0293	-0.1092	0.0717
	Seed_weight	0.4067	-0.2085	1.0000	0.3768	0.1420	-0.1048
	richness	0.5360	-0.0293	0.3768	1.0000	0.2422	0.3227
	visitatio_rate	-0.0517	-0.1092	0.1420	0.2422	1.0000	0.6462
	Frequency	-0.2905	0.0717	-0.1048	0.3227	0.6462	1.0000



Fruit proportion

Summary of models for fruit proportion per plant species. Binomial cbind(fruit_formado, Fruit_No).
Site_ID as factor random

Richness

Plant_gen_sp	term	estimate	std.error	statistic	p.value
Asphodelus fistulosus	(Intercept)	4.5150	0.9547	4.7294	0.0000
	richness	-1.2264	0.3317	-3.6972	0.0002
Cistus crispus	(Intercept)	1.2951	0.3476	3.7258	0.0002
	richness	0.0075	0.0955	0.0781	0.9377
Cistus ladanifer	(Intercept)	2.0043	0.5670	3.5349	0.0004
	richness	0.3137	0.2218	1.4145	0.1572
Cistus libanotis	(Intercept)	6.4750	2.6509	2.4426	0.0146
	richness	-0.6218	0.6177	-1.0067	0.3141
Cistus monspeliensis	(Intercept)	1.4923	1.0640	1.4026	0.1607
	richness	0.0987	0.1861	0.5304	0.5958
Cistus salviifolius	(Intercept)	2.4722	0.3103	7.9672	0.0000
	richness	0.0802	0.1132	0.7083	0.4788
Halimium calycinum	(Intercept)	0.9829	1.7867	0.5501	0.5822
	richness	1.1213	0.8355	1.3422	0.1795
Halimium halimifolium	(Intercept)	1.8474	0.3706	4.9854	0.0000
	richness	-0.1444	0.1189	-1.2148	0.2244
Lavandula pedunculata	(Intercept)	1.5335	0.1970	7.7837	0.0000
	richness	-0.0005	0.0372	-0.0133	0.9894
Lavandula stoechas	(Intercept)	1.8374	0.2181	8.4231	0.0000
	richness	-0.0425	0.0355	-1.1971	0.2313
Salvia rosmarinus	(Intercept)	0.0595	1.1700	0.0509	0.9594
	richness	0.3770	0.3132	1.2038	0.2287
Teucrium fruticans	(Intercept)	0.9465	0.9255	1.0227	0.3064
	richness	0.3603	0.1599	2.2534	0.0242

Visitation rate

Plant_gen_sp	term	estimate	std.error	statistic	p.value
Asphodelus fistulosus	(Intercept)	0.4965	1.1636	0.4267	0.6696
	visitatio_rate	3.1458	1.3602	2.3128	0.0207
Cistus crispus	(Intercept)	1.2214	0.2734	4.4669	0.0000
	visitatio_rate	0.1477	0.2494	0.5920	0.5538
Cistus ladanifer	(Intercept)	2.5362	0.5217	4.8610	0.0000
	visitatio_rate	0.1494	0.3833	0.3898	0.6967
Cistus libanotis	(Intercept)	3.6728	1.5934	2.3049	0.0212
	visitatio_rate	3.7488	6.7995	0.5513	0.5814
Cistus monspeliensis	(Intercept)	0.7588	1.3407	0.5659	0.5714
	visitatio_rate	7.8653	3.9235	2.0046	0.0450
Cistus salviifolius	(Intercept)	2.7814	0.2589	10.7417	0.0000
	visitatio_rate	-0.2649	0.3365	-0.7873	0.4311
Halimium calycinum	(Intercept)	2.1395	1.2107	1.7672	0.0772
	visitatio_rate	1.5875	2.8199	0.5630	0.5735
Halimium halimifolium	(Intercept)	1.5431	0.2835	5.4431	0.0000
	visitatio_rate	-0.2264	0.6535	-0.3464	0.7290
Lavandula pedunculata	(Intercept)	1.4960	0.1889	7.9175	0.0000
	visitatio_rate	0.3205	0.5724	0.5598	0.5756
Lavandula stoechas	(Intercept)	1.7974	0.2195	8.1890	0.0000
	visitatio_rate	-0.1744	0.1742	-1.0010	0.3168
Salvia rosmarinus	(Intercept)	1.4235	1.0810	1.3168	0.1879
	visitatio_rate	-3.4790	0.8607	-4.0419	0.0001
Teucrium fruticans	(Intercept)	2.0589	0.9937	2.0720	0.0383
	visitatio_rate	0.3900	0.6451	0.6044	0.5455

Frequency

Plant_gen_sp	term	estimate	std.error	statistic	p.value
Asphodelus fistulosus	(Intercept)	1.1388	1.1345	1.0038	0.3155
	Frequency	0.0565	0.0501	1.1278	0.2594
Cistus crispus	(Intercept)	1.3263	0.2722	4.8729	0.0000
	Frequency	-0.0007	0.0103	-0.0673	0.9463
Cistus ladanifer	(Intercept)	3.0958	0.4727	6.5488	0.0000
	Frequency	-0.0396	0.0167	-2.3680	0.0179
Cistus libanotis	(Intercept)	8.4758	4.8639	1.7426	0.0814
	Frequency	-0.3165	0.3187	-0.9931	0.3207
Cistus monspeliensis	(Intercept)	1.2876	1.0234	1.2581	0.2084
	Frequency	0.0823	0.0697	1.1818	0.2373
Cistus salviifolius	(Intercept)	2.2811	0.2867	7.9552	0.0000
	Frequency	0.0904	0.0595	1.5186	0.1289
Halimium calycinum	(Intercept)	1.9767	1.3805	1.4319	0.1522
	Frequency	0.1591	0.2309	0.6891	0.4907
Halimium halimifolium	(Intercept)	1.6303	0.2533	6.4366	0.0000
	Frequency	-0.0149	0.0155	-0.9563	0.3389
Lavandula pedunculata	(Intercept)	1.4709	0.1830	8.0372	0.0000
	Frequency	0.0041	0.0029	1.4329	0.1519
Lavandula stoechas	(Intercept)	1.8742	0.2387	7.8533	0.0000
	Frequency	-0.0082	0.0051	-1.6111	0.1072
Salvia rosmarinus	(Intercept)	1.3229	0.9910	1.3350	0.1819
	Frequency	-0.0261	0.0243	-1.0738	0.2829
Teucrium fruticans	(Intercept)	2.5324	0.7048	3.5929	0.0003
	Frequency	-0.0124	0.0108	-1.1504	0.2500

Seed numbers

Summary of models for seed numbers per plant species (LMM). Site_ID as factor random

Richness

Plant_gen_sp	term	estimate	std.error	statistic	df	p.value
Asphodelus fistulosus	(Intercept)	3.4654	1.3493	2.5683	2.8916	0.0857
	richness	0.2472	0.4466	0.5534	9.0430	0.5934
Cistus crispus	(Intercept)	36.5708	2.8143	12.9948	38.0376	0.0000
	richness	-1.2043	0.8402	-1.4334	66.9649	0.1564
Cistus ladanifer	(Intercept)	443.3220	71.2054	6.2260	50.0000	0.0000
	richness	5.2570	32.6053	0.1612	50.0000	0.8726
Cistus libanotis	(Intercept)	15.4273	2.5804	5.9788	13.0000	0.0000
	richness	-0.3443	0.8106	-0.4247	13.0000	0.6780
Cistus monspeliensis	(Intercept)	10.7600	3.5884	2.9986	1.7997	0.1083
	richness	1.3748	0.6913	1.9886	8.0064	0.0819
Cistus salviifolius	(Intercept)	39.9552	3.5938	11.1178	29.6818	0.0000
	richness	-0.8252	1.4612	-0.5647	61.6271	0.5743
Halimium calycinum	(Intercept)	2.8867	0.5884	4.9059	9.9205	0.0006
	richness	-0.1654	0.2874	-0.5757	15.1218	0.5733
Halimium halimifolium	(Intercept)	20.3568	3.1181	6.5286	25.7681	0.0000
	richness	-0.3179	0.9742	-0.3263	38.7013	0.7459
Lavandula pedunculata	(Intercept)	1.8099	0.2404	7.5281	20.0309	0.0000
	richness	0.1655	0.0746	2.2189	41.4257	0.0320
Lavandula stoechas	(Intercept)	1.7900	0.3164	5.6580	14.9116	0.0000
	richness	0.1081	0.1144	0.9452	17.2719	0.3576
Salvia rosmarinus	(Intercept)	2.1681	0.3939	5.5038	9.7665	0.0003
	richness	0.2273	0.1843	1.2329	7.3524	0.2556
Teucrium fruticans	(Intercept)	3.0030	1.2301	2.4413	4.7547	0.0611
	richness	-0.0203	0.3141	-0.0647	8.3222	0.9499

Visitation rate

Plant_gen_sp	term	estimate	std.error	statistic	df	p.value
Asphodelus fistulosus	(Intercept)	4.7912	0.9741	4.9186	2.1984	0.0321
	visitatio_rate	-2.3007	0.7880	-2.9198	10.0665	0.0152
Cistus crispus	(Intercept)	33.0723	2.2014	15.0230	18.5426	0.0000
	visitatio_rate	0.2652	2.0614	0.1287	65.0385	0.8980
Cistus ladanifer	(Intercept)	434.4788	49.5054	8.7764	50.0000	0.0000
	visitatio_rate	19.9018	38.1184	0.5221	50.0000	0.6039
Cistus libanotis	(Intercept)	18.4116	2.4443	7.5324	13.0000	0.0000
	visitatio_rate	-12.3331	6.8112	-1.8107	13.0000	0.0933
Cistus monspeliensis	(Intercept)	14.6758	3.8979	3.7651	1.3623	0.1117
	visitatio_rate	-1.9138	12.6807	-0.1509	8.8220	0.8834
Cistus salviifolius	(Intercept)	42.2472	2.7703	15.2500	11.2023	0.0000
	visitatio_rate	-7.8955	3.1032	-2.5443	61.6521	0.0135
Halimium calycinum	(Intercept)	2.6921	0.2993	8.9950	4.7195	0.0004
	visitatio_rate	-0.2679	0.3988	-0.6718	14.8252	0.5121
Halimium halimifolium	(Intercept)	17.5450	2.4622	7.1257	16.6106	0.0000
	visitatio_rate	6.9085	5.3574	1.2895	37.6092	0.2051
Lavandula pedunculata	(Intercept)	2.3285	0.2140	10.8807	16.9954	0.0000
	visitatio_rate	-1.3882	1.2719	-1.0914	44.2517	0.2810
Lavandula stoechas	(Intercept)	2.0226	0.2486	8.1365	6.9469	0.0001
	visitatio_rate	-0.1259	0.3576	-0.3521	16.3344	0.7293
Salvia rosmarinus	(Intercept)	2.5472	0.2466	10.3310	7.5006	0.0000
	visitatio_rate	0.0913	0.5837	0.1564	7.8366	0.8796
Teucrium fruticans	(Intercept)	3.4215	1.3129	2.6061	1.1841	0.2008
	visitatio_rate	-1.3499	1.0419	-1.2956	8.9790	0.2274

Frequency

Plant_gen_sp	term	estimate	std.error	statistic	df	p.value
Asphodelus fistulosus	(Intercept)	5.0011	1.0272	4.8688	2.1183	0.0354
	Frequency	-0.1919	0.0453	-4.2339	10.1567	0.0017
Cistus crispus	(Intercept)	34.4764	2.1731	15.8652	19.6302	0.0000
	Frequency	-0.0861	0.0943	-0.9128	66.2448	0.3646
Cistus ladanifer	(Intercept)	445.7937	41.3571	10.7791	8.6904	0.0000
	Frequency	1.0945	3.4961	0.3131	47.9735	0.7556
Cistus libanotis	(Intercept)	16.6750	3.0156	5.5295	13.0000	0.0001
	Frequency	-0.2011	0.2512	-0.8003	13.0000	0.4379
Cistus monspeliensis	(Intercept)	12.2415	3.2677	3.7462	1.3935	0.1090
	Frequency	0.3798	0.2297	1.6538	8.0287	0.1366
Cistus salviifolius	(Intercept)	39.0624	2.7633	14.1363	14.7526	0.0000
	Frequency	-0.1335	0.3137	-0.4257	61.6022	0.6718
Halimium calycinum	(Intercept)	2.8413	0.3441	8.2577	5.8556	0.0002
	Frequency	-0.0408	0.0363	-1.1255	16.7285	0.2763
Halimium halimifolium	(Intercept)	19.6936	2.3599	8.3451	12.9016	0.0000
	Frequency	-0.0134	0.1362	-0.0982	38.5434	0.9223
Lavandula pedunculata	(Intercept)	2.1991	0.1945	11.3084	13.6221	0.0000
	Frequency	-0.0015	0.0065	-0.2339	42.3653	0.8162
Lavandula stoechas	(Intercept)	1.9482	0.2746	7.0946	6.7577	0.0002
	Frequency	0.0043	0.0119	0.3580	18.8438	0.7243
Salvia rosmarinus	(Intercept)	2.5404	0.2264	11.2196	6.4121	0.0000
	Frequency	0.0010	0.0034	0.2989	7.6277	0.7730
Teucrium fruticans	(Intercept)	2.8432	0.8269	3.4386	1.4344	0.1174
	Frequency	0.0007	0.0188	0.0362	7.0442	0.9721

Seed weight

Summary of models for seed weight per plant species (LMM). Site_ID as factor random

Richness

Plant_gen_sp	term	estimate	std.error	statistic	df	p.value
Asphodelus fistulosus	(Intercept)	0.0243	0.0036	6.7263	12.0000	0.0000
	richness	-0.0043	0.0017	-2.6046	12.0000	0.0230
Cistus crispus	(Intercept)	0.0181	0.0017	10.6510	38.9028	0.0000
	richness	-0.0004	0.0005	-0.8496	66.8890	0.3986
Cistus ladanifer	(Intercept)	0.1210	0.0201	6.0328	26.8825	0.0000
	richness	0.0015	0.0088	0.1680	49.8533	0.8673
Cistus libanotis	(Intercept)	0.0101	0.0026	3.9190	13.0000	0.0018
	richness	0.0009	0.0008	1.1408	13.0000	0.2745
Cistus monspeliensis	(Intercept)	0.0120	0.0050	2.3829	1.6927	0.1624
	richness	0.0016	0.0009	1.7029	8.0056	0.1270
Cistus salviifolius	(Intercept)	0.0451	0.0040	11.3906	62.0000	0.0000
	richness	-0.0007	0.0017	-0.4005	62.0000	0.6902
Halimium calycinum	(Intercept)	0.0078	0.0029	2.7026	8.7498	0.0249
	richness	-0.0005	0.0014	-0.3319	14.2839	0.7448
Halimium halimifolium	(Intercept)	0.0108	0.0027	3.9765	39.0000	0.0003
	richness	-0.0001	0.0009	-0.1582	39.0000	0.8751
Lavandula pedunculata	(Intercept)	0.0011	0.0002	5.5846	19.7439	0.0000
	richness	0.0000	0.0001	-0.2808	41.2723	0.7803
Lavandula stoechas	(Intercept)	0.0006	0.0001	5.4273	14.1182	0.0001
	richness	0.0000	0.0000	0.4682	16.8254	0.6457
Salvia rosmarinus	(Intercept)	0.0006	0.0001	4.1715	10.0000	0.0019
	richness	0.0000	0.0001	-0.6764	10.0000	0.5141
Teucrium fruticans	(Intercept)	0.0019	0.0015	1.2443	9.0000	0.2448
	richness	0.0005	0.0004	1.2202	9.0000	0.2534

Visitation rate

Plant_gen_sp	term	estimate	std.error	statistic	df	p.value
Asphodelus fistulosus	(Intercept)	0.0170	0.0042	4.0849	2.3197	0.0426
	visitatio_rate	-0.0065	0.0062	-1.0491	10.0502	0.3187
Cistus crispus	(Intercept)	0.0168	0.0013	13.3075	19.6706	0.0000
	visitatio_rate	0.0001	0.0012	0.0457	65.7685	0.9637
Cistus ladanifer	(Intercept)	0.1139	0.0147	7.7355	10.2480	0.0000
	visitatio_rate	0.0100	0.0102	0.9786	49.9932	0.3325
Cistus libanotis	(Intercept)	0.0166	0.0026	6.4686	13.0000	0.0000
	visitatio_rate	-0.0123	0.0071	-1.7165	13.0000	0.1098
Cistus monspeliensis	(Intercept)	0.0159	0.0051	3.0959	1.3450	0.1450
	visitatio_rate	0.0011	0.0163	0.0683	8.7824	0.9471
Cistus salviifolius	(Intercept)	0.0488	0.0027	17.7958	62.0000	0.0000
	visitatio_rate	-0.0095	0.0035	-2.7560	62.0000	0.0077
Halimium calycinum	(Intercept)	0.0073	0.0014	5.2540	3.7255	0.0076
	visitatio_rate	-0.0018	0.0021	-0.8611	15.8657	0.4020
Halimium halimifolium	(Intercept)	0.0108	0.0021	5.1510	39.0000	0.0000
	visitatio_rate	-0.0011	0.0052	-0.2066	39.0000	0.8374
Lavandula pedunculata	(Intercept)	0.0013	0.0002	7.3989	15.3061	0.0000
	visitatio_rate	-0.0021	0.0009	-2.2726	43.2801	0.0281
Lavandula stoechas	(Intercept)	0.0007	0.0001	7.2630	6.6904	0.0002
	visitatio_rate	-0.0001	0.0001	-0.7786	15.6946	0.4478
Salvia rosmarinus	(Intercept)	0.0005	0.0001	6.9770	10.0000	0.0000
	visitatio_rate	-0.0001	0.0002	-0.3765	10.0000	0.7144
Teucrium fruticans	(Intercept)	0.0032	0.0012	2.7775	9.0000	0.0215
	visitatio_rate	0.0006	0.0013	0.4303	9.0000	0.6771

Frequency

Plant_gen_sp	term	estimate	std.error	statistic	df	p.value
Asphodelus fistulosus	(Intercept)	0.0180	0.0040	4.4686	2.5503	0.0292
	Frequency	-0.0006	0.0004	-1.5109	11.1414	0.1586
Cistus crispus	(Intercept)	0.0172	0.0013	13.4878	20.2752	0.0000
	Frequency	0.0000	0.0001	-0.4133	66.5839	0.6807
Cistus ladanifer	(Intercept)	0.1233	0.0127	9.7363	6.6855	0.0000
	Frequency	0.0001	0.0010	0.0850	48.7699	0.9326
Cistus libanotis	(Intercept)	0.0105	0.0031	3.3371	13.0000	0.0054
	Frequency	0.0002	0.0003	0.7608	13.0000	0.4603
Cistus monspeliensis	(Intercept)	0.0130	0.0045	2.8828	1.2823	0.1662
	Frequency	0.0006	0.0003	2.0262	8.0208	0.0772
Cistus salviifolius	(Intercept)	0.0446	0.0030	14.9216	62.0000	0.0000
	Frequency	-0.0001	0.0004	-0.3664	62.0000	0.7153
Halimium calycinum	(Intercept)	0.0066	0.0015	4.5403	17.0000	0.0003
	Frequency	0.0000	0.0002	0.2374	17.0000	0.8152
Halimium halimifolium	(Intercept)	0.0110	0.0019	5.7278	39.0000	0.0000
	Frequency	0.0000	0.0001	-0.3684	39.0000	0.7145
Lavandula pedunculata	(Intercept)	0.0010	0.0002	6.0369	11.8943	0.0001
	Frequency	0.0000	0.0000	0.9901	40.4707	0.3280
Lavandula stoechas	(Intercept)	0.0006	0.0001	6.0402	9.8374	0.0001
	Frequency	0.0000	0.0000	1.8235	19.9882	0.0832
Salvia rosmarinus	(Intercept)	0.0005	0.0001	7.9646	10.0000	0.0000
	Frequency	0.0000	0.0000	-0.5367	10.0000	0.6032
Teucrium fruticans	(Intercept)	0.0039	0.0010	3.8093	9.0000	0.0042
	Frequency	0.0000	0.0000	-0.3160	9.0000	0.7592

join together Lavandula species

(L.pedunculata (49 obs) and L.stoechas (24 obs))

Fruit proportion - richness

Plant_gen_sp	term	estimate	std.error	statistic	p.value
Asphodelus fistulosus	(Intercept)	4.5150	0.9547	4.7294	0.0000
	richness	-1.2264	0.3317	-3.6972	0.0002
Cistus crispus	(Intercept)	1.2951	0.3476	3.7258	0.0002
	richness	0.0075	0.0955	0.0781	0.9377
Cistus ladanifer	(Intercept)	2.0043	0.5670	3.5349	0.0004
	richness	0.3137	0.2218	1.4145	0.1572
Cistus libanotis	(Intercept)	6.4750	2.6509	2.4426	0.0146
	richness	-0.6218	0.6177	-1.0067	0.3141
Cistus monspeliensis	(Intercept)	1.4923	1.0640	1.4026	0.1607
	richness	0.0987	0.1861	0.5304	0.5958
Cistus salviifolius	(Intercept)	2.4722	0.3103	7.9672	0.0000
	richness	0.0802	0.1132	0.7083	0.4788
Halimium calycinum	(Intercept)	0.9829	1.7867	0.5501	0.5822
	richness	1.1213	0.8355	1.3422	0.1795
Halimium halimifolium	(Intercept)	1.8474	0.3706	4.9854	0.0000
	richness	-0.1444	0.1189	-1.2148	0.2244
Lavandula	(Intercept)	1.7855	0.1840	9.7024	0.0000
	richness	-0.0384	0.0239	-1.6044	0.1086
Salvia rosmarinus	(Intercept)	0.0595	1.1700	0.0509	0.9594
	richness	0.3770	0.3132	1.2038	0.2287
Teucrium fruticans	(Intercept)	0.9465	0.9255	1.0227	0.3064
	richness	0.3603	0.1599	2.2534	0.0242

Fruit proportion - visitation rate

Plant_gen_sp	term	estimate	std.error	statistic	p.value
Asphodelus fistulosus	(Intercept)	0.4965	1.1636	0.4267	0.6696
	visitatio_rate	3.1458	1.3602	2.3128	0.0207
Cistus crispus	(Intercept)	1.2214	0.2734	4.4669	0.0000
	visitatio_rate	0.1477	0.2494	0.5920	0.5538
Cistus ladanifer	(Intercept)	2.5362	0.5217	4.8610	0.0000
	visitatio_rate	0.1494	0.3833	0.3898	0.6967
Cistus libanotis	(Intercept)	3.6728	1.5934	2.3049	0.0212
	visitatio_rate	3.7488	6.7995	0.5513	0.5814
Cistus monspeliensis	(Intercept)	0.7588	1.3407	0.5659	0.5714
	visitatio_rate	7.8653	3.9235	2.0046	0.0450
Cistus salviifolius	(Intercept)	2.7814	0.2589	10.7417	0.0000
	visitatio_rate	-0.2649	0.3365	-0.7873	0.4311
Halimium calycinum	(Intercept)	2.1395	1.2107	1.7672	0.0772
	visitatio_rate	1.5875	2.8199	0.5630	0.5735
Halimium halimifolium	(Intercept)	1.5431	0.2835	5.4431	0.0000
	visitatio_rate	-0.2264	0.6535	-0.3464	0.7290
Lavandula	(Intercept)	1.6814	0.1712	9.8235	0.0000
	visitatio_rate	0.1042	0.1818	0.5732	0.5665
Salvia rosmarinus	(Intercept)	1.4235	1.0810	1.3168	0.1879
	visitatio_rate	-3.4790	0.8607	-4.0419	0.0001
Teucrium fruticans	(Intercept)	2.0589	0.9937	2.0720	0.0383
	visitatio_rate	0.3900	0.6451	0.6044	0.5455

Fruit proportion - frequency

Plant_gen_sp	term	estimate	std.error	statistic	p.value
Asphodelus fistulosus	(Intercept)	1.1388	1.1345	1.0038	0.3155
	Frequency	0.0565	0.0501	1.1278	0.2594
Cistus crispus	(Intercept)	1.3263	0.2722	4.8729	0.0000
	Frequency	-0.0007	0.0103	-0.0673	0.9463
Cistus ladanifer	(Intercept)	3.0958	0.4727	6.5488	0.0000
	Frequency	-0.0396	0.0167	-2.3680	0.0179
Cistus libanotis	(Intercept)	8.4758	4.8639	1.7426	0.0814
	Frequency	-0.3165	0.3187	-0.9931	0.3207
Cistus monspeliensis	(Intercept)	1.2876	1.0234	1.2581	0.2084
	Frequency	0.0823	0.0697	1.1818	0.2373
Cistus salviifolius	(Intercept)	2.2811	0.2867	7.9552	0.0000
	Frequency	0.0904	0.0595	1.5186	0.1289
Halimium calycinum	(Intercept)	1.9767	1.3805	1.4319	0.1522
	Frequency	0.1591	0.2309	0.6891	0.4907
Halimium halimifolium	(Intercept)	1.6303	0.2533	6.4366	0.0000
	Frequency	-0.0149	0.0155	-0.9563	0.3389
Lavandula	(Intercept)	1.5985	0.1716	9.3154	0.0000
	Frequency	0.0064	0.0023	2.7944	0.0052
Salvia rosmarinus	(Intercept)	1.3229	0.9910	1.3350	0.1819
	Frequency	-0.0261	0.0243	-1.0738	0.2829
Teucrium fruticans	(Intercept)	2.5324	0.7048	3.5929	0.0003
	Frequency	-0.0124	0.0108	-1.1504	0.2500

Seed number - richness

Plant_gen_sp	term	estimate	std.error	statistic	df	p.value
Asphodelus fistulosus	(Intercept)	3.4654	1.3493	2.5683	2.8916	0.0857
	richness	0.2472	0.4466	0.5534	9.0430	0.5934
Cistus crispus	(Intercept)	36.5708	2.8143	12.9948	38.0376	0.0000
	richness	-1.2043	0.8402	-1.4334	66.9649	0.1564
Cistus ladanifer	(Intercept)	443.3220	71.2054	6.2260	50.0000	0.0000
	richness	5.2570	32.6053	0.1612	50.0000	0.8726
Cistus libanotis	(Intercept)	15.4273	2.5804	5.9788	13.0000	0.0000
	richness	-0.3443	0.8106	-0.4247	13.0000	0.6780
Cistus monspeliensis	(Intercept)	10.7600	3.5884	2.9986	1.7997	0.1083
	richness	1.3748	0.6913	1.9886	8.0064	0.0819
Cistus salviifolius	(Intercept)	39.9552	3.5938	11.1178	29.6818	0.0000
	richness	-0.8252	1.4612	-0.5647	61.6271	0.5743
Halimium calycinum	(Intercept)	2.8867	0.5884	4.9059	9.9205	0.0006
	richness	-0.1654	0.2874	-0.5757	15.1218	0.5733
Halimium halimifolium	(Intercept)	20.3568	3.1181	6.5286	25.7681	0.0000
	richness	-0.3179	0.9742	-0.3263	38.7013	0.7459
Lavandula	(Intercept)	1.9797	0.2001	9.8957	23.6358	0.0000
	richness	0.0914	0.0645	1.4175	62.5866	0.1613
Salvia rosmarinus	(Intercept)	2.1681	0.3939	5.5038	9.7665	0.0003
	richness	0.2273	0.1843	1.2329	7.3524	0.2556
Teucrium fruticans	(Intercept)	3.0030	1.2301	2.4413	4.7547	0.0611
	richness	-0.0203	0.3141	-0.0647	8.3222	0.9499

Seed number - visitation rate

Plant_gen_sp	term	estimate	std.error	statistic	df	p.value
Asphodelus fistulosus	(Intercept)	4.7912	0.9741	4.9186	2.1984	0.0321
	visitatio_rate	-2.3007	0.7880	-2.9198	10.0665	0.0152
Cistus crispus	(Intercept)	33.0723	2.2014	15.0230	18.5426	0.0000
	visitatio_rate	0.2652	2.0614	0.1287	65.0385	0.8980
Cistus ladanifer	(Intercept)	434.4788	49.5054	8.7764	50.0000	0.0000
	visitatio_rate	19.9018	38.1184	0.5221	50.0000	0.6039
Cistus libanotis	(Intercept)	18.4116	2.4443	7.5324	13.0000	0.0000
	visitatio_rate	-12.3331	6.8112	-1.8107	13.0000	0.0933
Cistus monspeliensis	(Intercept)	14.6758	3.8979	3.7651	1.3623	0.1117
	visitatio_rate	-1.9138	12.6807	-0.1509	8.8220	0.8834
Cistus salviifolius	(Intercept)	42.2472	2.7703	15.2500	11.2023	0.0000
	visitatio_rate	-7.8955	3.1032	-2.5443	61.6521	0.0135
Halimium calycinum	(Intercept)	2.6921	0.2993	8.9950	4.7195	0.0004
	visitatio_rate	-0.2679	0.3988	-0.6718	14.8252	0.5121
Halimium halimifolium	(Intercept)	17.5450	2.4622	7.1257	16.6106	0.0000
	visitatio_rate	6.9085	5.3574	1.2895	37.6092	0.2051
Lavandula	(Intercept)	2.2074	0.1572	14.0445	10.2988	0.0000
	visitatio_rate	-0.2220	0.3027	-0.7333	63.1871	0.4661
Salvia rosmarinus	(Intercept)	2.5472	0.2466	10.3310	7.5006	0.0000
	visitatio_rate	0.0913	0.5837	0.1564	7.8366	0.8796
Teucrium fruticans	(Intercept)	3.4215	1.3129	2.6061	1.1841	0.2008
	visitatio_rate	-1.3499	1.0419	-1.2956	8.9790	0.2274

Seed number - frequency

Plant_gen_sp	term	estimate	std.error	statistic	df	p.value
Asphodelus fistulosus	(Intercept)	5.0011	1.0272	4.8688	2.1183	0.0354
	Frequency	-0.1919	0.0453	-4.2339	10.1567	0.0017
Cistus crispus	(Intercept)	34.4764	2.1731	15.8652	19.6302	0.0000
	Frequency	-0.0861	0.0943	-0.9128	66.2448	0.3646
Cistus ladanifer	(Intercept)	445.7937	41.3571	10.7791	8.6904	0.0000
	Frequency	1.0945	3.4961	0.3131	47.9735	0.7556
Cistus libanotis	(Intercept)	16.6750	3.0156	5.5295	13.0000	0.0001
	Frequency	-0.2011	0.2512	-0.8003	13.0000	0.4379
Cistus monspeliensis	(Intercept)	12.2415	3.2677	3.7462	1.3935	0.1090
	Frequency	0.3798	0.2297	1.6538	8.0287	0.1366
Cistus salviifolius	(Intercept)	39.0624	2.7633	14.1363	14.7526	0.0000
	Frequency	-0.1335	0.3137	-0.4257	61.6022	0.6718
Halimium calycinum	(Intercept)	2.8413	0.3441	8.2577	5.8556	0.0002
	Frequency	-0.0408	0.0363	-1.1255	16.7285	0.2763
Halimium halimifolium	(Intercept)	19.6936	2.3599	8.3451	12.9016	0.0000
	Frequency	-0.0134	0.1362	-0.0982	38.5434	0.9223
Lavandula	(Intercept)	2.1532	0.1744	12.3495	14.6840	0.0000
	Frequency	0.0012	0.0060	0.2085	66.4777	0.8355
Salvia rosmarinus	(Intercept)	2.5404	0.2264	11.2196	6.4121	0.0000
	Frequency	0.0010	0.0034	0.2989	7.6277	0.7730
Teucrium fruticans	(Intercept)	2.8432	0.8269	3.4386	1.4344	0.1174
	Frequency	0.0007	0.0188	0.0362	7.0442	0.9721

Seed weight - richness

Plant_gen_sp	term	estimate	std.error	statistic	df	p.value
Asphodelus fistulosus	(Intercept)	0.0243	0.0036	6.7263	12.0000	0.0000
	richness	-0.0043	0.0017	-2.6046	12.0000	0.0230
Cistus crispus	(Intercept)	0.0181	0.0017	10.6510	38.9028	0.0000
	richness	-0.0004	0.0005	-0.8496	66.8890	0.3986
Cistus ladanifer	(Intercept)	0.1210	0.0201	6.0328	26.8825	0.0000
	richness	0.0015	0.0088	0.1680	49.8533	0.8673
Cistus libanotis	(Intercept)	0.0101	0.0026	3.9190	13.0000	0.0018
	richness	0.0009	0.0008	1.1408	13.0000	0.2745
Cistus monspeliensis	(Intercept)	0.0120	0.0050	2.3829	1.6927	0.1624
	richness	0.0016	0.0009	1.7029	8.0056	0.1270
Cistus salviifolius	(Intercept)	0.0451	0.0040	11.3906	62.0000	0.0000
	richness	-0.0007	0.0017	-0.4005	62.0000	0.6902
Halimium calycinum	(Intercept)	0.0078	0.0029	2.7026	8.7498	0.0249
	richness	-0.0005	0.0014	-0.3319	14.2839	0.7448
Halimium halimifolium	(Intercept)	0.0108	0.0027	3.9765	39.0000	0.0003
	richness	-0.0001	0.0009	-0.1582	39.0000	0.8751
Lavandula	(Intercept)	0.0010	0.0002	6.4577	17.4583	0.0000
	richness	0.0000	0.0000	-0.0794	60.3408	0.9370
Salvia rosmarinus	(Intercept)	0.0006	0.0001	4.1715	10.0000	0.0019
	richness	0.0000	0.0001	-0.6764	10.0000	0.5141
Teucrium fruticans	(Intercept)	0.0019	0.0015	1.2443	9.0000	0.2448
	richness	0.0005	0.0004	1.2202	9.0000	0.2534

Seed weight - visitation rate

Plant_gen_sp	term	estimate	std.error	statistic	df	p.value
Asphodelus fistulosus	(Intercept)	0.0170	0.0042	4.0849	2.3197	0.0426
	visitatio_rate	-0.0065	0.0062	-1.0491	10.0502	0.3187
Cistus crispus	(Intercept)	0.0168	0.0013	13.3075	19.6706	0.0000
	visitatio_rate	0.0001	0.0012	0.0457	65.7685	0.9637
Cistus ladanifer	(Intercept)	0.1139	0.0147	7.7355	10.2480	0.0000
	visitatio_rate	0.0100	0.0102	0.9786	49.9932	0.3325
Cistus libanotis	(Intercept)	0.0166	0.0026	6.4686	13.0000	0.0000
	visitatio_rate	-0.0123	0.0071	-1.7165	13.0000	0.1098
Cistus monspeliensis	(Intercept)	0.0159	0.0051	3.0959	1.3450	0.1450
	visitatio_rate	0.0011	0.0163	0.0683	8.7824	0.9471
Cistus salviifolius	(Intercept)	0.0488	0.0027	17.7958	62.0000	0.0000
	visitatio_rate	-0.0095	0.0035	-2.7560	62.0000	0.0077
Halimium calycinum	(Intercept)	0.0073	0.0014	5.2540	3.7255	0.0076
	visitatio_rate	-0.0018	0.0021	-0.8611	15.8657	0.4020
Halimium halimifolium	(Intercept)	0.0108	0.0021	5.1510	39.0000	0.0000
	visitatio_rate	-0.0011	0.0052	-0.2066	39.0000	0.8374
Lavandula	(Intercept)	0.0010	0.0001	8.0887	9.1927	0.0000
	visitatio_rate	-0.0002	0.0002	-1.1263	60.3414	0.2645
Salvia rosmarinus	(Intercept)	0.0005	0.0001	6.9770	10.0000	0.0000
	visitatio_rate	-0.0001	0.0002	-0.3765	10.0000	0.7144
Teucrium fruticans	(Intercept)	0.0032	0.0012	2.7775	9.0000	0.0215
	visitatio_rate	0.0006	0.0013	0.4303	9.0000	0.6771

Seed weight - frequency

Plant_gen_sp	term	estimate	std.error	statistic	df	p.value
Asphodelus fistulosus	(Intercept)	0.0180	0.0040	4.4686	2.5503	0.0292
	Frequency	-0.0006	0.0004	-1.5109	11.1414	0.1586
Cistus crispus	(Intercept)	0.0172	0.0013	13.4878	20.2752	0.0000
	Frequency	0.0000	0.0001	-0.4133	66.5839	0.6807
Cistus ladanifer	(Intercept)	0.1233	0.0127	9.7363	6.6855	0.0000
	Frequency	0.0001	0.0010	0.0850	48.7699	0.9326
Cistus libanotis	(Intercept)	0.0105	0.0031	3.3371	13.0000	0.0054
	Frequency	0.0002	0.0003	0.7608	13.0000	0.4603
Cistus monspeliensis	(Intercept)	0.0130	0.0045	2.8828	1.2823	0.1662
	Frequency	0.0006	0.0003	2.0262	8.0208	0.0772
Cistus salviifolius	(Intercept)	0.0446	0.0030	14.9216	62.0000	0.0000
	Frequency	-0.0001	0.0004	-0.3664	62.0000	0.7153
Halimium calycinum	(Intercept)	0.0066	0.0015	4.5403	17.0000	0.0003
	Frequency	0.0000	0.0002	0.2374	17.0000	0.8152
Halimium halimifolium	(Intercept)	0.0110	0.0019	5.7278	39.0000	0.0000
	Frequency	0.0000	0.0001	-0.3684	39.0000	0.7145
Lavandula	(Intercept)	0.0008	0.0001	6.0650	12.1185	0.0001
	Frequency	0.0000	0.0000	2.3226	62.5732	0.0235
Salvia rosmarinus	(Intercept)	0.0005	0.0001	7.9646	10.0000	0.0000
	Frequency	0.0000	0.0000	-0.5367	10.0000	0.6032
Teucrium fruticans	(Intercept)	0.0039	0.0010	3.8093	9.0000	0.0042
	Frequency	0.0000	0.0000	-0.3160	9.0000	0.7592