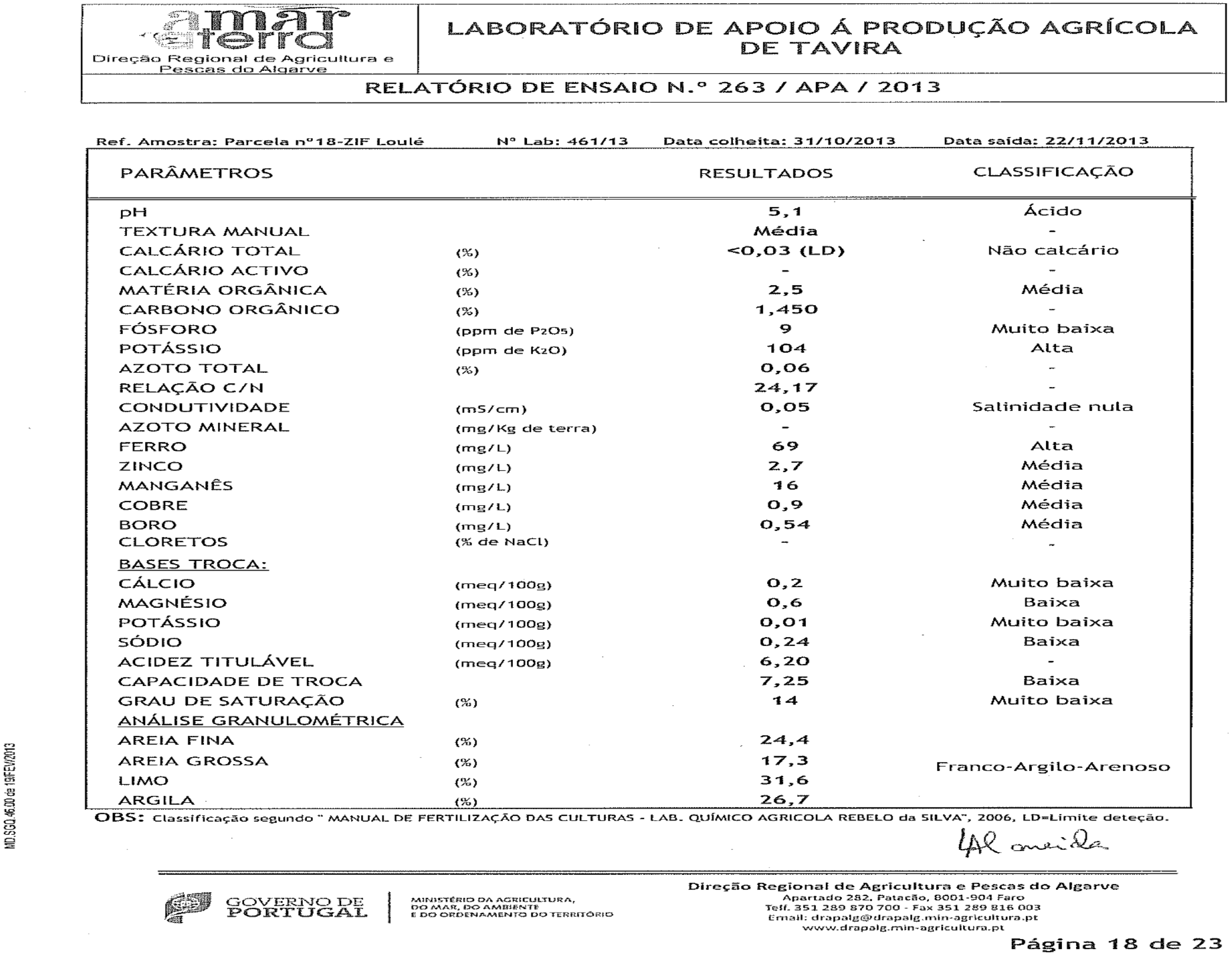
Appendix II. Cited in Chapter 3

Appendix II.I.

Soil analysis from PTS area.

pH	acidic
texture	medium
Limestone	no
Organic matter	medium
Phosphorous	very low
Potassium	high
Conductivity	zero salinity
Iron	high
Zinc	medium
Manganese	medium
Copper	medium
Boron	medium
Base exchange	
Calcium	very low
Magnesium	low
Potassium	very low
Sodium	low
Exchange capacity	low
Degree of saturation.	very low

Soil classification:
Sandy- loamy- clay



Direção Regional de Agricultura e Pescas do Algarve

LABORATÓRIO DE APOIO Á PRODUÇÃO AGRÍCOLA DE TAVIRA

RELATÓRIO DE ENSAIO N.º 263 / APA / 2013

Ref. Amostra: Parcela nº18-ZIF Loulé   Nº Lab: 461/13   Data colheita: 31/10/2013   Data saída: 22/11/2013

PARÂMETROS		RESULTADOS	CLASSIFICAÇÃO
pH		5,1	Ácido
TEXTURA MANUAL		Média	-
CALCÁRIO TOTAL	(%)	<0,03 (LD)	Não calcário
CALCÁRIO ACTIVO	(%)	-	-
MATÉRIA ORGÂNICA	(%)	2,5	Média
CARBONO ORGÂNICO	(%)	1,450	-
FÓSFORO	(ppm de P_2O_5)	9	Muito baixa
POTÁSSIO	(ppm de K_2O)	104	Alta
AZOTO TOTAL	(%)	0,06	-
RELAÇÃO C/N		24,17	-
CONDUTIVIDADE	(mS/cm)	0,05	Salinidade nula
AZOTO MINERAL	(mg/Kg de terra)	-	-
FERRO	(mg/L)	69	Alta
ZINCO	(mg/L)	2,7	Média
MANGANÊS	(mg/L)	16	Média
COBRE	(mg/L)	0,9	Média
BORO	(mg/L)	0,54	Média
CLORETOS	(% de NaCl)	-	-
BASES TROCA:			
CÁLCIO	(meq/100g)	0,2	Muito baixa
MAGNÉSIO	(meq/100g)	0,6	Baixa
POTÁSSIO	(meq/100g)	0,01	Muito baixa
SÓDIO	(meq/100g)	0,24	Baixa
ACIDEZ TITULÁVEL	(meq/100g)	6,20	-
CAPACIDADE DE TROCA		7,25	Baixa
GRAU DE SATURAÇÃO	(%)	14	Muito baixa
ANÁLISE GRANULOMÉTRICA			
AREIA FINA	(%)	24,4	Franco-Argilo-Arenoso
AREIA GROSSA	(%)	17,3	
LIMO	(%)	31,6	
ARGILA	(%)	26,7	

OBS: Classificação segundo " MANUAL DE FERTILIZAÇÃO DAS CULTURAS - LAB. QUÍMICO AGRICOLA REBELO da SILVA", 2006, LD=Limite deteção.

MD.SGQ.46.00 de 19/FEV/2013

GOVERNO DE PORTUGAL | MINISTÉRIO DA AGRICULTURA, DO MAR, DO AMBIENTE E DO ORDENAMENTO DO TERRITÓRIO

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Appendix II.II. Emergence and survival of *Quercus suber* at “Menta” area without *Phlomis purpurea* (control) (A1). Zero, one and two are the number of seeds that emerged during the trial and survived at the end of the trial.

Field Assay - Evaluations	Menta control																			
	18-05-2012	14-06-2012	02-07-2012	03-08-2012	28-08-2012	05-09-2012	19-09-2012	29-10-2012	22-11-2012	25-12-2012	29-01-2013	20-04-2013	30-05-2013	26-06-2013	16-07-2013	05-08-2013	06-11-2013	20-02-2014	Emergence	Survival
1	1	1	1	1	2	2	2	2	2	1	1	1	1	1		1	1	1	2	1
2		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5																			0	0
6																			0	0
7																			0	0
8												1	1						1	0
9														1	1	1	1	1	1	1
10																			0	0
11				1				1	1										1	0
12																			0	0
13																			0	0
14																			0	0
15						1		1	1	1	1	1	1	1	1	1	1	1	1	1
16																			0	0
17																			0	0
18																			0	0
19																			0	0
20																			0	0
21																			0	0
22																			0	0
23																			0	0
24																			0	0
25							1	1	1										1	0
26																			0	0
27							1			1	1		1						1	0
28																			0	0
29																			0	0
30										1	1	1							1	0
31								1	1	1	1								1	0
32																			0	0
33												1	1	1	1	1	1	1	1	1
34																			0	0
35							1	1	1	1	1								1	0
36																			0	0
37																			0	0
38								1	1										1	0
39																			0	0
40																			0	0
41												1	1	1	1	0	0	0	1	0
42								1	1	1	1								1	0
43																			0	0
44												1	1	1	1	1	1	1	1	1
45					1			1	1	1	1								1	0
46								2	2	2	2	1	1	1	1	1	1	1	2	1
47																			0	0
48																			0	0
49																			0	0
50																			0	0
51																			0	0
52																			0	0
53																			0	0
54						1	1					1	1	1	1	0	0	0	1	0
55					1														1	0
56						1		1	1	1	1								1	0
57												1	1	1	1	1	1	1	1	1
58								1	1			1	1	1	1	1	1	1	1	1
59																			0	0
60																			0	0
61								2	2	2	2	1	1						2	0
62																			0	0
63																			0	0
64																			0	0
65																			0	0
66		1	1																1	0
67																			0	0
68																			0	0
69																			0	0
70																			0	0
71		1	1	1	1	1	1					1	1	1	1	1	1	1	1	1
72				1															1	0
73		1	1																1	0
74																			0	0
75								1	1	1	1								1	0
76																			0	0
77				1															1	0
78																			0	0
79																			0	0
80																			0	0
81																			0	0
82																			0	0
83																			0	0
84																			0	0
85								1	1										1	0
86														1	1	0	0	0	1	0
87																			0	0
88																			0	0
89																			0	0
90																			0	0
91					1	1				1	1	1							1	0
92				1															1	0
93			1		1	1	1												1	0
94				2															2	0
95																			0	0
96								1	1										1	0
97																			0	0
98																			0	0
99																			0	0
100																			0	0
Total	1	6	8	11	10	11	11	22	22	18	18	17	16	15	14	12	12	12	43	12
	18-05-2012	14-06-2012	02-07-2012	03-08-2012	28-08-2012	05-09-2012	19-09-2012	29-10-2012	22-11-2012	25-12-2012	29-01-2013	20-04-2013	30-05-2013	26-06-2013	16-07-2013	05-08-2013	06-11-2013	20-02-2014		

Field Assay - Evaluations Menta + P.p

	18-05-2012	14-06-2012	02-07-2012	03-08-2012	28-08-2012	05-09-2012	19-09-2012	21-11-2012	25-12-2012	29-01-2013	20-04-2013	30-05-2013	26-06-2013	16-07-2013	05-08-2013	06-11-2013	20-02-2014	Emergence	Survival Qs	Survival Pp
1	PP	PP	PP	PP	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	QP	QP	QP	QP	QP	1	1	1
2	PP	PP	PP	PQP	PQP	PQP	PQP	PQQP	QQ	Q	Q	Q	Q					2	0	0
3	PP	PP	PP	PP	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PP	PP	PP	1	0	2
4	PP	PP	PP	PP	PP	PP	PQP	PQP	PQQP	PQP	PQP	PQP	PQQP	PQP	PQP	PQP	PP	2	0	2
5	PP	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PP	PP	PP	1	0	2
6	PQP	PQP	PQP	PQQP	PQQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	2	1	2
7	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	P	P	P	P	P	P	0	0	1
8	PP	PP	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
9	PP	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	P	P	P	P	P	0	0	1
10	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
11	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQQP	PQQP	PQP	PQQP	PQQP	PQQP	PQQP	PQQ	PQ	PQQ	2	1	2
12	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PP	PP	PP	PP	PP	PP	PP	1	0	2
13	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
14	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQQP	PQP	2	1	2
15	PP	PP	PP	PP	PP	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PP	PP	PP	1	0	2
16	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
17	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQQP	PQP	PP	PP	PP	2	0	2
18	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PP	PP	PP	PP	1	0	2
19	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	P	0	0	1
20	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	P	1	0	1
21	PP	PP	PP	PP	PP	PQP	PQQP	PP	PP	PP	PP	PP	PP	PP	P	P	P	2	0	1
22	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
23	PP	PP	PP	PP	PP	PP	PQP	PQP	PQP	PQP	PP	PP	Q	PQ	PQ	PQ	P	2	0	1
24	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PQP	PP	PP	PP	PP	PP	1	0	2
25	PQP	PQP	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	P	1	0	1
26	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
27	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
28	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
29	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
30	PP	PP	PP	PP	PP	PP	PQP	P	PQ	PQ	P	P	P	P	P	P	P	2	0	1
31	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PQP	PP	PP	PP	PP	PP	PP	2	0	2
32	PQQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PQ	PP	PP	PP	PP	PP	PP	2	0	2
33	PP	PP	PP	PP	PP	PQP	PP	PQP	PQP	PQP	PP	PQP	PQP	PQP	PQP	PQP	PP	2	0	2
34	PP	PP	PQP	PQP	PQP	PQP	PQP	PQQP	PQP	PQP	PP	PQP	PQP	PQP	PQP	PQP	PQP	2	1	2
35	PP	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQQP	PQP	PQP	PQP	PQP	2	1	2
36	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	1	1	2
37	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
38	PP	PP	PP	PP	PP	PP	PP	P	P	PP	PQP	PP	PP	PP	PP	PP	PP	1	0	2
39	PP	PP	PP	PQP	PQP	PQP	PQP	PQ	PQ	PQ	PP	P	QP	QP	QP	QP	QP	2	1	1
40	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PP	PPQ	PPQQ	PPQ	PPQ	PPQQ	PP	2	0	2
41	PP	PQP	PQP	PQ	PQ	PQ	P	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
42	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
43	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
44	PQP	PQP	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
45	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
46	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	1	1	2
47	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	P	PP	PP	PP	PP	PP	PP	0	0	2
48	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
49	PP	PP	PP	PQP	PQP	PQP	PP	PQP	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	2	1	2
50	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQ	PQ	PQ	1	1	1
51	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	P	PP	PP	PP	PP	PP	0	0	2
52	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	PP	P	P	P	P	P	0	0	1
53	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
54	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
55	PP	PP	PP	PP	PP	PP	PP	PP	PPP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
56	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQQP	PQQP	PQP	PP	PP	PP	PP	PP	PP	PP	2	0	2
57	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
58	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
59	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
60	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
61	PP	PP	PP	P	P	P	P	P	P	P	P	P	P	P	P	P	P	0	0	1
62	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQ	PQQ	PQ	PQ	PQ	2	1	1
63	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
64	PP	PP	PP	PP	PP	PQP	PQP	PQP	PQP	PP	PP	PQP	PQP	PQP	PP	PP	PP	2	0	2
65	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	0	0	1
66	PP	PP	PP	PQP	PQP	PQP	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
67	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	P			P				0	0	0
68	PP	PP	PP	PP	PP	PP	PQQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PP	2	0	2
69	PP	PP	PP	PP	PP	PP	PQP	PQPP	PQPP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	1	1	2
70	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
71	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PP	PP	PP	PP	PP	PP	PP	1	0	2
72	PP	PP	PQP	PQP	PQP	PQP	PQQP	PQQP	PQP	PQP	PQQP	PQP	PQQP	PQQP	PQQP	PQQP	PQP	2	1	2
73	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
74	PQP	PQP	PQP	PQP	PQP	PQP	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	P	PQ	1	1	1
75	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
76	PP	PP	PP	PP	PP	PP												0	0	0
77	PP	PQP	PQP	PQP	PQP	PQP	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
78	PQP	PQP	PQP	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQQP	PQP	2	1	2
79	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
80	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
81	PQP	PQP	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	QP	QP	QP	QP	P	P	P	1	0	1
82	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
83	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	P	P	P	P	P	P	0	0	1
84	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	0	0	1
85	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
86	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
87	PP	PQP	PQP	PQP	PQP	PQP	PP	PP	PPP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
88	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PP	PQP	PQP	PQP	PQP	PQP	1	1	2
89	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
90	PQP	PQP	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
91	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	Q	PQ	Q	Q	Q	Q	Q	1	1	0
92	P	P	P	P	P	P	P	P	P									0	0	0
93	PP	PP	PP	PP	PP	PP	PP	PP	PP	PQP	PQP	PP	PP	PP	PQP	PQP	PQP	2	1	2
94	PP	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQ	PQP	PQP	PQ	PQQ	PQQ	PQ	1	1	1
95	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
96	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
97	PP	PP	PP	PP	PP	PP	P											0	0	0
98	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
99	PP	PP	PP	PQP	PQP	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
100	PP	PP	PP	PP	PP	PP	PP	P	P	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
							40Q										Sum	75	20	168

Appendix II.III. Emergence and survival of *Quercus suber* (Qs) at “Menta” area with *Phlomis purpurea* (A2) and survival of *Phlomis purpurea* (Pp).

P= 1 *Phlomis purpurea* present;

PP= 2 *Phlomis purpurea* present;

Q=1 *Quercus suber* present;

QQ=2 *Quercus suber* present.

The numbers zero, one and two are the number of seeds that emerged during the trial and survived at the end of the trial.

Appendix II.IV. Emergence and survival of *Quercus suber* at PTS area without *Phlomis purpurea* (control) (B1).
Q=1 *Quercus suber* present;
QQ=2 *Quercus suber* present.
The numbers zero, one and two are the number of seeds that emerged during the trial and survived at the end of the trial.

Field Assay - Evaluations	PTS control																				
	18-05-2012	14-06-2012	02-07-2012	03-08-2012	28-08-2012	05-09-2012	19-09-2012	29-10-2012	21-11-2012	25-12-2012	29-01-2013	20-04-2013	30-05-2013	26-06-2013	16-07-2013	05-08-2013	27-08-2013	06-11-2013	20-02-2013	Emergence	Survival
1																				0	0
2		Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	1	1
3		Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	1	1
4																				0	0
5																				0	0
6																				0	0
7																				0	0
8		QQ	QQ	QQ	QQ	QQ	QQ	Q												2	0
9								Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	1	1
10	QQ	QQ	QQ	QQ	QQ	QQ	QQ	QQ	QQ	QQ	QQ	Q	QQ	QQ	QQ					2	0
11																				0	0
12																				0	0
13																				0	0
14																				0	0
15																				0	0
16																				0	0
17																				0	0
18																				0	0
19																				0	0
20																				0	0
21																				0	0
22																				0	0
23																				0	0
24																				0	0
25																				0	0
26																				0	0
27																				0	0
28						Q	Q	Q												1	0
29																				0	0
30																				0	0
31																				0	0
32								Q												1	0
33																				0	0
34																				0	0
35			Q	Q	Q			Q	Q				Q	Q	Q	Q	Q	Q		1	0
36										Q										1	0
37																				0	0
38																				0	0
39																				0	0
40																				0	0
41																				0	0
42																				0	0
43																				0	0
44																				0	0
45																				0	0
46																				0	0
47																				0	0
48																				0	0
49																				0	0
50																				0	0
51																				0	0
52																				0	0
53																				0	0
54																				0	0
55																				0	0
56																				0	0
57																				0	0
58																				0	0
59																				0	0
60												Q	Q	Q	Q					1	0
61																				0	0
62																				0	0
63																				0	0
64																				0	0
65																				0	0
66																				0	0
67																				0	0
68																				0	0
69																				0	0
70																				0	0
71																				0	0
72																				0	0
73							Q					Q								1	0
74																				0	0
75																				0	0
76																				0	0
77																				0	0
78	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						1	0
79																				0	0
80																				0	0
81																				0	0
82																				0	0
83													Q	Q	Q					1	0
84																				0	0
85																				0	0
86																				0	0
87																				0	0
88																				0	0
89																				0	0
90					Q	Q		Q				Q	Q	Q	Q	Q	Q			1	0
91																				0	0
92																				0	0
93																				0	0
94																				0	0
95																				0	0
96																				0	0
97																				0	0
98																				0	0
99																				0	0
100																				0	0
																			Sum=	16	3

Appendix II.V. Emergence and survival of *Quercus suber* at PTS area with *Phlomis purpurea* (B2) and survival of *Phlomis purpurea* (Pp).

P= 1 *Phlomis purpurea* present;

PP= 2 *Phlomis purpurea* present;

Q=1 *Quercus suber* present;

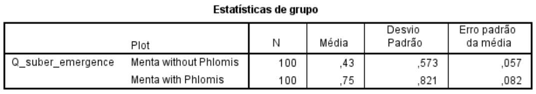
QQ=2 *Quercus suber* present.

The numbers zero, one and two are the number of seeds that emerged during the trial and survived at the end of the trial.

Field Assay - Evaluations PTS + P.p

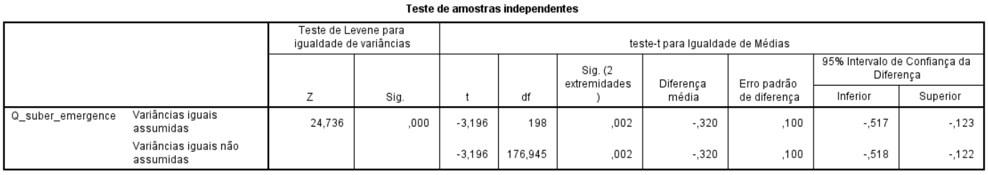
	18-05-2012	14-06-2012	02-07-2012	03-08-2012	28-08-2012	05-09-2012	19-09-2012	29-10-2012	21-11-2012	25-12-2012	29-01-2013	20-04-2013	30-05-2013	26-06-2013	16-07-2013	05-08-2013	06-11-2013	20-02-2014	EMERGENCE	SURVIVAL	SURVIVAL Pp
1	PP	PP	PP	PP	P	P	P	P	P										0	0	0
2	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	P	P	P	P	P	P	P	0	0	1
3	PP	PQP	PQP	PQ	PQ	PQ	PQ	Q	Q	Q	Q	Q	QQ	QQ	QQ	QQ	Q	Q	2	1	0
4	PP	PP	PP	PP	PP	PP	PP	P	PQ	PQQ	PQQ	PQ	PQ	PQ	PQ	P	PQQ	PQQ	2	0	1
5	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	P	P	P	P				0	0	0
6	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ				1	0	0
7	PP	PQP	PQP	PP	P	P	P	P	P	P	P	P	P	P	P				1	0	0
8	PP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQ	PQ	PQ	PQ	P	P	1	0	1
9	PP	PP	PP	PP	PP	PP	PQP	PQP	PQQP	PQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQ	PQQ	PQQ	2	2	1
10																			0	0	0
11	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
12	PP	PP	PP	PP	PP	PQP	PP	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	1	1	1
13	PQP	PP	PP	PP	P	P													0	0	0
14	PP	PP	PP	PP	PP	PP	PP	PP	PP	PPP	PP	P	PP	PP	PP	PP	PP	PP	0	0	2
15	PP	PP	PP	PP	PP	PP	PQP	PQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	2	2	2
16	PQP	PQP	PQP	PP	PP	PP	PP	P	P	P	P	P	P	P	P	P	P	P	1	0	1
17	PP	PP	PP	PP	PQP	PQP	PQP	PQP	PQP	PQQP	PQQP	PQQP	PQQP	PQP	PQP	PP	PQP	PQP	2	1	2
18	PP	PQP	PQQP	PQP	PQP	PQP	PQP	Q	Q	Q	Q	Q	QQ	QQ	QQ	QQ	QQ	Q	2	1	0
19	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
20	PP	PP	PP	PP	PP				Q	QQ	QQ	QQ	QQ	QQ	QQ	QQ			2	0	0
21	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
22	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	1	1	2
23	PQP	PP	PP	PP	PP	PP	PP												0	0	0
24	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	1	1	1
25	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
26	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
27	PQP	PQQP	PQQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PP	PP	PP	PP	PP	PP	PP	2	0	2
28	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	1	1	2
29	PQP	PQP	PQP	PQP	PQP	PQP	PQP	QQ	QQ	QQ	QQ	QQ	QQ	QQ	QQ	QQ	Q	Q	2	1	0
30	PP	PP	PP	PP	PP	PP	P	PQQ	PQQ	PQQP	QQP	PQ	PQ	PQ	PQ	PQ	P	P	2	0	1
31	PP	PP	PP	PP	PP	PP		Q			Q		Q	Q	Q	Q	QQ	Q	1	1	0
32	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PQ	P	PQ	PQ	PQ	P	P	P	1	0	1
33	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	P	P	P	P	P	P	P	0	0	1
34	pp	pp	pp	PQP	PQP	PQP	PQP	P	P	P	PP	PP	PP	PP	P	P	P	P	1	0	1
35	PQP	PQP	PP	PP	PP	PQP	PQP	PQP	PQP	PQP	PQP	PP	PQ	PQ	PQ	PQ	PQ	PQ	1	1	1
36	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQP	PQQP	PQQP	2	2	2
37	PP	PP	PP	PP	PQP	PQP	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
38	PQQP	PQQP	PQP	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	P	PQ	PQ	PQ	PQ	PQ	PQ	2	1	1
39	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
40	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
41	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	P	P	P	P	P	P	P	0	0	1
42	PQQP	PQQP	PQQP	PQQP	PQQ	PQ													2	0	0
43	PQP	PQP	PQP	PQP	PQ	PQ	PQ	PQ	PQ	PQ	PQQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	2	1	1
44	PQP	PQP	PQP	PQP	PQP	PQP	PQ	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	1	1	0
45	PQP	PQP	PQP	PQP	PP	PP	PP												1	0	0
46	PP	PQP	PQP	PQP	PQ	PQ	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	QQ	1	2	0
47	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	QQ	QQ	QQ	QQ	QQ	Q	Q	Q	Q	Q	Q	2	1	0
48	PQP	PQP	PQP	PQQP	PQQP	PQQP	PQP	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	2	1	0
49	PP	PP	PP	PP	PP	PP	PP												0	0	0
50	PP	PP	PP	PP	PP	P	P												0	0	0
51	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
52	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PP	PP	PP	PP	PP	1	0	2
53	PP	PQP	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	P	P	P	1	0	1
54	PP	PQP	PQP	PQP	PQP	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
55	PQQP	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
56	PP	PP	PP	PP					Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	1	1	0
57	PQP	PQP	PQP	PQP	PQ	PQ	PQ	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	1	1	0
58	PQP	PQP	PQP	PQP	PQP	PQQP	PQ	PQ	PQ	Q	PQ	PQQ	PQQ	PQQ	PQQ	PQQ	PQ	PQ	2	1	1
59	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQ	PQQ	PQ	PQ	2	1	1
60	PP	PQP	PQP	PQ	P	P	P	P	P	P	P	P	P	P	P				1	0	0
61	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
62	PQQP	PQQP	PQQP	PQQP	PQQP	PQP	PQP	PP	PP	PP	PP	PP	PP	PQ	PP	PP	PP	PP	2	0	2
63	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQP	PQ	PQ	PQ	PQ	Q	PQ	PQ	PQ	P	P	P	2	0	1
64	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	P	P	P	P	P	PQ	P	0	0	1
65	pQp	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PP	P	PQ	PQ	1	1	1
66	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQ	PQQ	PQQ	PQQ	PQQP	PQQ	PQQP	PQQP	PQQP	PQQ	PQQ	PQQ	2	2	1
67	PQQP	QQ	Q	Q	Q	Q	Q				Q	Q	Q	Q					2	0	0
68	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQP	PQQ	PQ	PQ	PQQ	PQ	PQQ	PQQ	PQ	PQ	PQQ	PQQ	2	2	1
69	PQP	PQP	PQP	PQP	PQP	PQP	PQP	PQ	PQ	PQ	PQP	PQP	PQ	PQ	PQ	PQ	PQ	PQ	1	2	1
70																			0	0	0
71	PP	PP	PP	P	P	P	P				P	P	P	P					0	0	0
72	PP	PP	PP	PP	PP	PP	PP	PQP	PQQP	PQQP	PQQP	PQP	PQP	Q	Q	Q	Q	Q	2	1	0
73	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	P	P	P	P	P	P	P	0	0	1
74	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	P	PP	PP	PP	PP	PP	PP	0	0	2
75	PQP	PQP	PQP	PQQP	PP	PP	PP	PP	P	PP	PP	P	P	P	P	P	P	P	2	0	1
76	PP	PP	PP	PP	PP	PP	PP	P	P	P	PQ	PQ	PQP	PQP	PQP	PQP	PQP	PQP	1	1	2
77	PQP	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
78	PQP	PQP	PQP	PQP	Q	Q													1	0	0
79	PQP	PQP	PQP	PQP	PQ	PQ	PQ	Q	Q	Q	Q	Q	Q	QQ	QQ	QQ	Q	Q	1	1	0
80	PP	PP	PP	PP	PP	PP	P	P	P	P	P	PP	PP	P	P	P	P	P	0	0	1
81	PP	PP	PP	PP	PP	PP	PQP	PQP	PQP	PP	PQP	PQP	PQP	PQP	PQP	PQQP	PQQP	PQP	2	1	2
82	PP	PP	PP	PP	P	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	0	0	2
83	PP	PP	PP	PP	PP	PQP	PQP	PQ	PQQ	PQ	PQQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ	2	1	1
84	pp	pp	pp	pp	pp	PQP	PP	P	P	P	P	PQ	PQ	PQ	PQ	P	P	P	1	0	1
85	PP	PP	PP	PP	P	P	P	P	P	P	P	P	P	P	P	P	P	P	0	0	1
86	PP	PP	PP	PP	PP	PP	P												0	0	0
87	PP	PP	PP	PP	PP	PQP	PP	P	P	P	PQ	PQ	PQ	PQP	PQP	PQP	PQP	PQP	1	1	2
88	PP	PQP	PQP	PQP	PQQP	PQQP	QQ	QQ	QQ	QQ	QQ	Q	QQ	QQ	QQ	QQ	QQ	QQ	2	2	0
89	PP	PP	PP	PP	PP	PP	PP						QQ						0	0	0
90	PP	PP	PP	PP	PQP	PQQP	PQQP	Q				Q							2	0	0
91	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	Q	PQ	PQ	PQ	PQ	PQ	PQ	1	2	1
92	pp	PP	PP	PP	PP	PP	PP	P	P	P	P	P	PP	PP	PP	P	P	P	0	0	1
93	PP	PP	PP	PP	PQP	PQP	PQP	P	P	P	P	P	PP	PP	PP	PP	PP	PP	1	0	2
94	PP	PP	PP	PP	PP	PP	PP	P	P	P	P	PQ	PQ	PQ	P	P	P	P	1	0	1
95	PP																		0	0	0
96	PP	PP	PP	PP	PP	PP	P												0	0	0
97	PP	PP	PP	PP	PP	PQP	PQP				Q	Q		Q	Q	Q	Q	Q	1	2	0
98	PP	PP	PP	PQP	PQ	PQ	PQ	PQ	PQ	PQ	PQ	PQ		PP	PP	P	P	P	1	0	1
99	PP	PP	PP	PP			Q						Q						1	0	0
100	PP	PP	PP	PP	PP	PP	PQP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	1	0	2
																			98	46	92

Appendix II.V. Comparison of means of <u>*Quercus suber* emergence</u> at <u>Menta</u>, under two different conditions: without and with *Phlomis purpurea* using T-test for independent samples.



Estatísticas de grupo

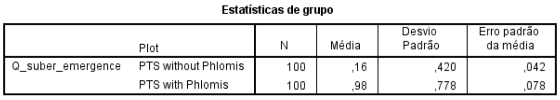
	Plot	N	Média	Desvio Padrão	Erro padrão da média
Q_suber_emergence	Menta without Phlomis	100	,43	,573	,057
	Menta with Phlomis	100	,75	,821	,082



Teste de amostras independentes

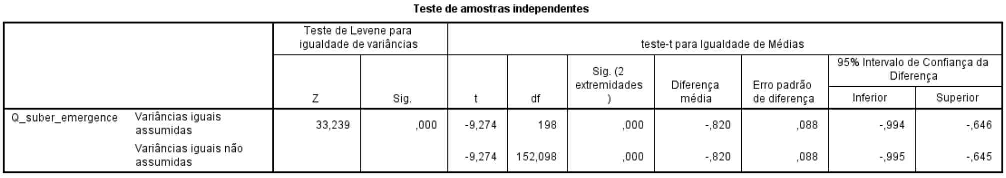
		Teste de Levene para igualdade de variâncias		teste-t para Igualdade de Médias						
									95% Intervalo de Confiança da Diferença	
		Z	Sig.	t	df	Sig. (2 extremidades)	Diferença média	Erro padrão de diferença	Inferior	Superior
Q_suber_emergence	Variâncias iguais assumidas	24,736	,000	-3,196	198	,002	-,320	,100	-,517	-,123
	Variâncias iguais não assumidas			-3,196	176,945	,002	-,320	,100	-,518	-,122

Appendix II.VI. Comparison of means of <u>*Quercus suber* emergence</u> at <u>PTS</u>, under two different conditions: without and with *Phlomis purpurea* using T-test for independent samples.



Estatísticas de grupo

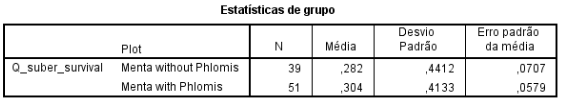
	Plot	N	Média	Desvio Padrão	Erro padrão da média
Q_suber_emergence	PTS without Phlomis	100	,16	,420	,042
	PTS with Phlomis	100	,98	,778	,078



Teste de amostras independentes

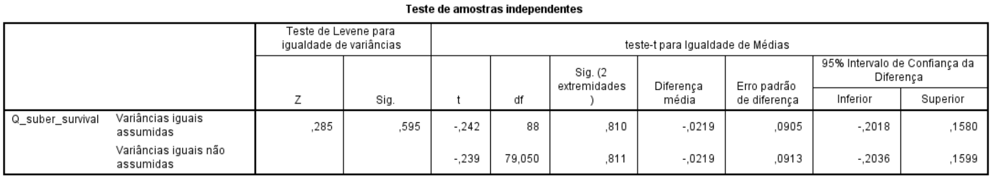
		Teste de Levene para igualdade de variâncias		teste-t para Igualdade de Médias						
									95% Intervalo de Confiança da Diferença	
		Z	Sig.	t	df	Sig. (2 extremidades)	Diferença média	Erro padrão de diferença	Inferior	Superior
Q_suber_emergence	Variâncias iguais assumidas	33,239	,000	-9,274	198	,000	-,820	,088	-,994	-,646
	Variâncias iguais não assumidas			-9,274	152,098	,000	-,820	,088	-,995	-,645

Appendix II.VII. Comparison of means of <u>*Quercus suber* survival</u> after 2 years, at <u>Menta</u>, under two different conditions: without and with *Phlomis purpurea* using T-test for independent samples.



Estatísticas de grupo

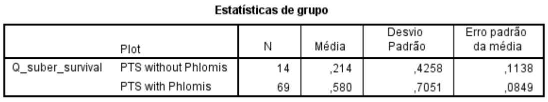
	Plot	N	Média	Desvio Padrão	Erro padrão da média
Q_suber_survival	Menta without Phlomis	39	,282	,4412	,0707
	Menta with Phlomis	51	,304	,4133	,0579



Teste de amostras independentes

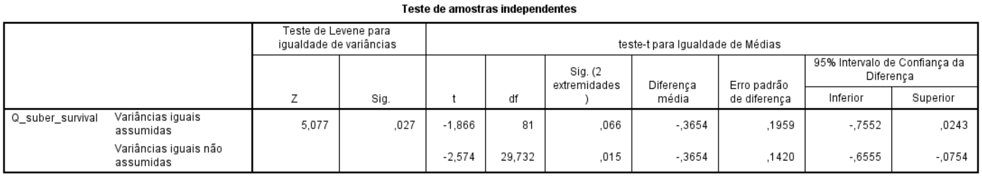
		Teste de Levene para igualdade de variâncias		teste-t para Igualdade de Médias						
									95% Intervalo de Confiança da Diferença	
		Z	Sig.	t	df	Sig. (2 extremidades)	Diferença média	Erro padrão de diferença	Inferior	Superior
Q_suber_survival	Variâncias iguais assumidas	,285	,595	-,242	88	,810	-,0219	,0905	-,2018	,1580
	Variâncias iguais não assumidas			-,239	79,050	,811	-,0219	,0913	-,2036	,1599

Appendix II.VIII. Comparison of means of <u>*Quercus suber* survival</u> after 2 years, at <u>PTS</u>, under two different conditions: without and with *Phlomis purpurea* using T-test for independent samples.



Estatísticas de grupo

	Plot	N	Média	Desvio Padrão	Erro padrão da média
Q_suber_survival	PTS without Phlomis	14	,214	,4258	,1138
	PTS with Phlomis	69	,580	,7051	,0849



Teste de amostras independentes

		Teste de Levene para igualdade de variâncias		teste-t para Igualdade de Médias						
									95% Intervalo de Confiança da Diferença	
		Z	Sig.	t	df	Sig. (2 extremidades)	Diferença média	Erro padrão de diferença	Inferior	Superior
Q_suber_survival	Variâncias iguais assumidas	5,077	,027	-1,866	81	,066	-,3654	,1959	-,7552	,0243
	Variâncias iguais não assumidas			-2,574	29,732	,015	-,3654	,1420	-,6555	-,0754

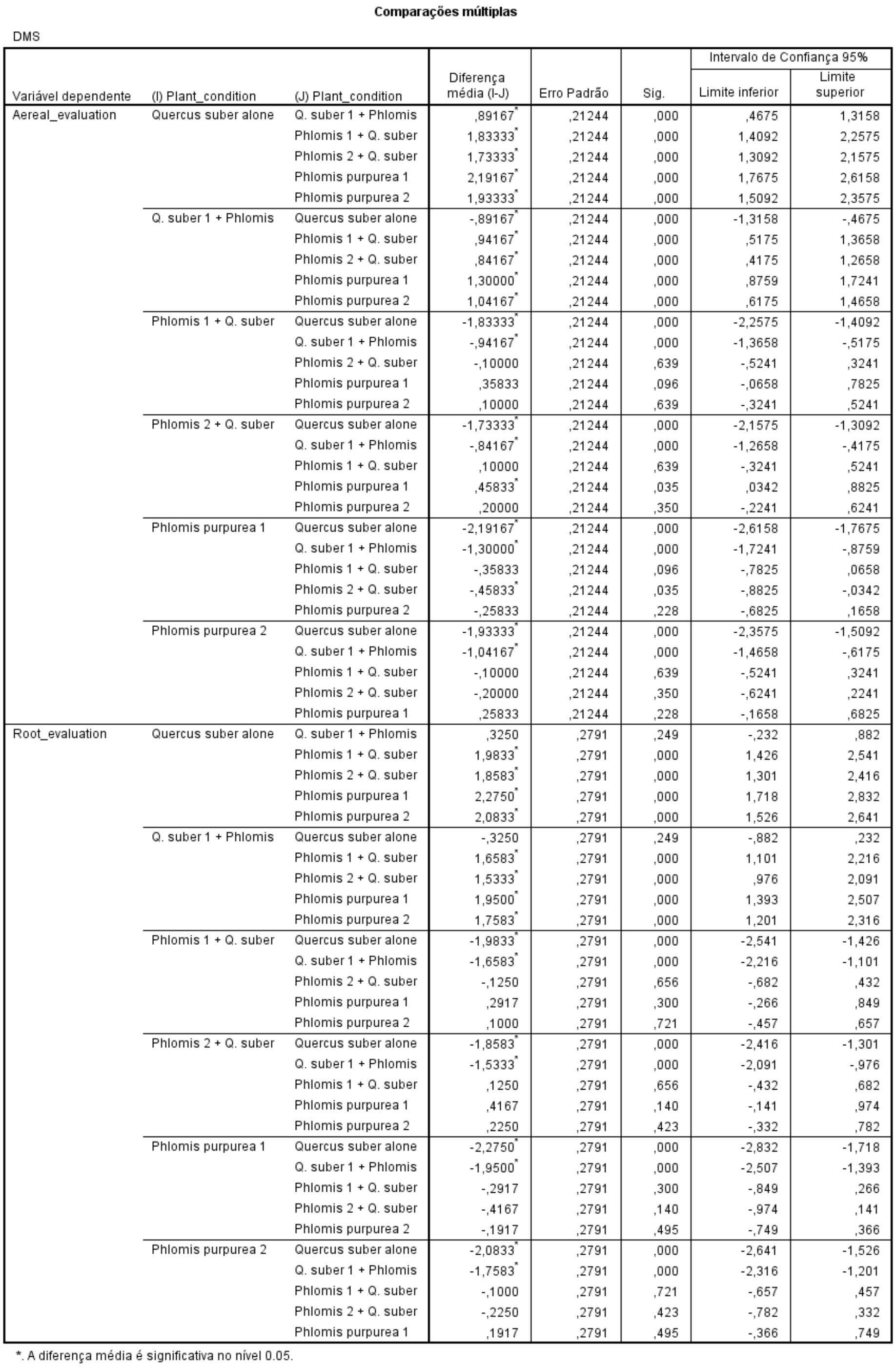
Appendix II.IX. Resume of cases of the aerial and root evaluation, Percentage of *Phytophthora cinnamomi* re-isolation from the roots and inoculum potential [Method 1 -c.f.u. g^{-1} soil and Method 2 (baits)] at <u>Menta</u>.

Resumos de caso[a]

				Aerial_evaluation	Root_evaluation	% P cinnamomi in the roots	Baits	c.f.u. g-1
Plant_condition	Quercus suber alone	1		3,70	3,0	,0	100	0
		2		3,00	,5	,0	100	59
		3		3,50	1,5	71,4	100	23
		4		2,00	3,7	100,0	100	14
		5		1,50	3,0	33,3	100	9
		6		3,00	3,5	100,0	100	5
		7		2,50	,5	57,1	100	74
		8		1,50	3,0	33,3	100	2
		9		1,50	3,0	100,0	100	1
		10		3,00	3,5	100,0	100	0
		11		1,00	3,0	50,0	100	10
		12		1,00	,5	,0	100	0
		Total	Média	2,2667	2,392	53,758	100,00	16,42
			Desvio Padrão	,96703	1,2631	40,8953	,000	24,604
	Q. suber 1 + Phlomis	1		2,50	3,0	33,3	100	14
		2		1,50	2,5	16,7	100	12
		3		1,00	2,3	28,6	100	15
		4		1,00	1,0	100,0	100	29
		5		,50	3,0	,0	100	0
		6		1,50	3,0	33,3	100	3
		7		2,50	3,0	100,0	100	0
		8		1,50	2,0	28,6	100	12
		9		1,00	,5	,0	100	7
		10		,50	1,5	,0	100	0
		11		2,00	2,5	40,0	100	2
		12		1,00	,5	42,9	100	4
		Total	Média	1,3750	2,067	35,283	100,00	8,17
			Desvio Padrão	,67840	,9670	33,8902	,000	8,674
	Phlomis 1 + Q. suber	1		,50	,3	,0	100	14
		2		,70	,7	,0	100	12
		3		,50	,5	,0	100	15
		4		,30	,3	,0	100	29
		5		,50	,7	,0	100	0
		6		,30	,0	,0	100	3
		7		,50	,5	,0	100	0
		8		,70	,7	,0	100	12
		9		,70	,7	,0	100	7
		10		,00	,0	,0	100	0
		11		,50	,5	,0	100	2
		12		,00	,0	,0	100	4
		Total	Média	,4333	,408	,000	100,00	8,17
			Desvio Padrão	,24246	,2843	,0000	,000	8,674
	Phlomis 2 + Q. suber	1		,50	,5	,0	100	14
		2		,70	,7	,0	100	12
		3		,70	,7	,0	100	15
		4		,50	,5	,0	100	29
		5		,70	,7	,0	100	0
		6		,50	,0	,0	100	3
		7		,70	,7	,0	100	0
		8		,70	,7	,0	100	12
		9		,70	,7	,0	100	7
		10		,00	,5	,0	100	0
		11		,70	,7	,0	100	2
		12		,00	,0	,0	100	4
		Total	Média	,5333	,533	,000	100,00	8,17
			Desvio Padrão	,26400	,2640	,0000	,000	8,674
	Phlomis purpurea 1	1		,30	,3	,0	100	0
		2		,00	,0	,0	100	0
		3		,00	,0	,0	No Pcinnamomi	0
		4		,00	,0	,0	No Pcinnamomi	0
		5		,00	,0	,0	100	0
		6		,00	,0	,0	100	0
		7		,00	,3	,0	No Pcinnamomi	0
		8		,00	,0	,0	100	0
		9		,30	,3	,0	100	0
		10		,00	,0	,0	100	0
		11		,30	,5	,0	100	15
		12		,00	,0	,0	100	0
		Total	Média	,0750	,117	,000	75,00	1,25
			Desvio Padrão	,13568	,1801	,0000	45,227	4,330
	Phlomis purpurea 2	1		,30	,3	,0	100	0
		2		,00	,0	,0	100	0
		3		,30	,0	,0	No Pcinnamomi	0
		4		,00	,0	,0	No Pcinnamomi	0
		5		,00	,0	,0	100	0
		6		,50	,5	,0	100	0
		7		,70	,7	,0	No Pcinnamomi	0
		8		,50	,3	,0	100	0
		9		,70	,7	,0	100	0
		10		,70	,7	,0	100	0
		11		,30	,5	,0	100	15
		12		,00	,0	1,0	100	0
		Total	Média	,3333	,308	,083	75,00	1,25
			Desvio Padrão	,28710	,3029	,2887	45,227	4,330
	Total	Média		,8361	,971	14,854	91,67	7,24
		Desvio Padrão		,91117	1,1234	30,2020	27,832	12,703

a. Limitado aos primeiros 100 casos.

Appendix II.X. Analysis of variance of <u>aerial and root evaluation</u> of *Quercus suber* planted alone, *Q. suber* planted together with *Phlomis purpurea*, *P. purpurea* planted with *Q. suber* and *P. purpurea* planted alone at <u>Menta</u>.



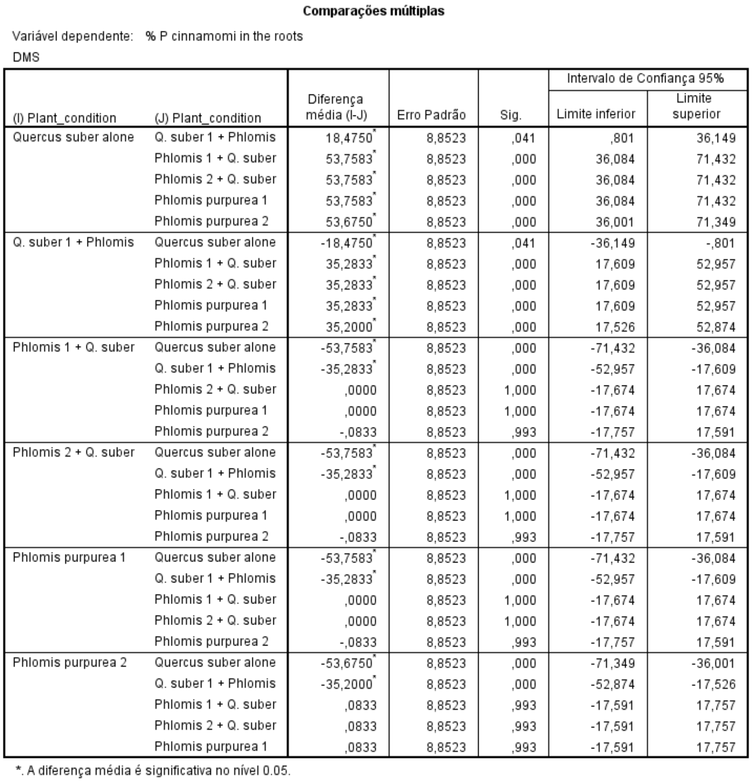
Comparações múltiplas

DMS

Variável dependente	(I) Plant_condition	(J) Plant_condition	Diferença média (I-J)	Erro Padrão	Sig.	Intervalo de Confiança 95%	
						Limite inferior	Limite superior
Aereal_evaluation	Quercus suber alone	Q. suber 1 + Phlomis	,89167*	,21244	,000	,4675	1,3158
		Phlomis 1 + Q. suber	1,83333*	,21244	,000	1,4092	2,2575
		Phlomis 2 + Q. suber	1,73333*	,21244	,000	1,3092	2,1575
		Phlomis purpurea 1	2,19167*	,21244	,000	1,7675	2,6158
		Phlomis purpurea 2	1,93333*	,21244	,000	1,5092	2,3575
	Q. suber 1 + Phlomis	Quercus suber alone	-,89167*	,21244	,000	-1,3158	-,4675
		Phlomis 1 + Q. suber	,94167*	,21244	,000	,5175	1,3658
		Phlomis 2 + Q. suber	,84167*	,21244	,000	,4175	1,2658
		Phlomis purpurea 1	1,30000*	,21244	,000	,8759	1,7241
		Phlomis purpurea 2	1,04167*	,21244	,000	,6175	1,4658
	Phlomis 1 + Q. suber	Quercus suber alone	-1,83333*	,21244	,000	-2,2575	-1,4092
		Q. suber 1 + Phlomis	-,94167*	,21244	,000	-1,3658	-,5175
		Phlomis 2 + Q. suber	-,10000	,21244	,639	-,5241	,3241
		Phlomis purpurea 1	,35833	,21244	,096	-,0658	,7825
		Phlomis purpurea 2	,10000	,21244	,639	-,3241	,5241
	Phlomis 2 + Q. suber	Quercus suber alone	-1,73333*	,21244	,000	-2,1575	-1,3092
		Q. suber 1 + Phlomis	-,84167*	,21244	,000	-1,2658	-,4175
		Phlomis 1 + Q. suber	,10000	,21244	,639	-,3241	,5241
		Phlomis purpurea 1	,45833*	,21244	,035	,0342	,8825
		Phlomis purpurea 2	,20000	,21244	,350	-,2241	,6241
	Phlomis purpurea 1	Quercus suber alone	-2,19167*	,21244	,000	-2,6158	-1,7675
		Q. suber 1 + Phlomis	-1,30000*	,21244	,000	-1,7241	-,8759
		Phlomis 1 + Q. suber	-,35833	,21244	,096	-,7825	,0658
		Phlomis 2 + Q. suber	-,45833*	,21244	,035	-,8825	-,0342
		Phlomis purpurea 2	-,25833	,21244	,228	-,6825	,1658
	Phlomis purpurea 2	Quercus suber alone	-1,93333*	,21244	,000	-2,3575	-1,5092
		Q. suber 1 + Phlomis	-1,04167*	,21244	,000	-1,4658	-,6175
		Phlomis 1 + Q. suber	-,10000	,21244	,639	-,5241	,3241
		Phlomis 2 + Q. suber	-,20000	,21244	,350	-,6241	,2241
		Phlomis purpurea 1	,25833	,21244	,228	-,1658	,6825
Root_evaluation	Quercus suber alone	Q. suber 1 + Phlomis	,3250	,2791	,249	-,232	,882
		Phlomis 1 + Q. suber	1,9833*	,2791	,000	1,426	2,541
		Phlomis 2 + Q. suber	1,8583*	,2791	,000	1,301	2,416
		Phlomis purpurea 1	2,2750*	,2791	,000	1,718	2,832
		Phlomis purpurea 2	2,0833*	,2791	,000	1,526	2,641
	Q. suber 1 + Phlomis	Quercus suber alone	-,3250	,2791	,249	-,882	,232
		Phlomis 1 + Q. suber	1,6583*	,2791	,000	1,101	2,216
		Phlomis 2 + Q. suber	1,5333*	,2791	,000	,976	2,091
		Phlomis purpurea 1	1,9500*	,2791	,000	1,393	2,507
		Phlomis purpurea 2	1,7583*	,2791	,000	1,201	2,316
	Phlomis 1 + Q. suber	Quercus suber alone	-1,9833*	,2791	,000	-2,541	-1,426
		Q. suber 1 + Phlomis	-1,6583*	,2791	,000	-2,216	-1,101
		Phlomis 2 + Q. suber	-,1250	,2791	,656	-,682	,432
		Phlomis purpurea 1	,2917	,2791	,300	-,266	,849
		Phlomis purpurea 2	,1000	,2791	,721	-,457	,657
	Phlomis 2 + Q. suber	Quercus suber alone	-1,8583*	,2791	,000	-2,416	-1,301
		Q. suber 1 + Phlomis	-1,5333*	,2791	,000	-2,091	-,976
		Phlomis 1 + Q. suber	,1250	,2791	,656	-,432	,682
		Phlomis purpurea 1	,4167	,2791	,140	-,141	,974
		Phlomis purpurea 2	,2250	,2791	,423	-,332	,782
	Phlomis purpurea 1	Quercus suber alone	-2,2750*	,2791	,000	-2,832	-1,718
		Q. suber 1 + Phlomis	-1,9500*	,2791	,000	-2,507	-1,393
		Phlomis 1 + Q. suber	-,2917	,2791	,300	-,849	,266
		Phlomis 2 + Q. suber	-,4167	,2791	,140	-,974	,141
		Phlomis purpurea 2	-,1917	,2791	,495	-,749	,366
	Phlomis purpurea 2	Quercus suber alone	-2,0833*	,2791	,000	-2,641	-1,526
		Q. suber 1 + Phlomis	-1,7583*	,2791	,000	-2,316	-1,201
		Phlomis 1 + Q. suber	-,1000	,2791	,721	-,657	,457
		Phlomis 2 + Q. suber	-,2250	,2791	,423	-,782	,332
		Phlomis purpurea 1	,1917	,2791	,495	-,366	,749

*. A diferença média é significativa no nível 0.05.

Appendix II.XI. Analysis of variance of the percentage of *Phytophthora cinnamomi* re-isolation from the roots of *Quercus suber* planted alone, *Q. suber* planted together with *Phlomis purpurea*, *P. purpurea* planted with *Q. suber* and *P. purpurea* planted alone at Menta.



Comparações múltiplas

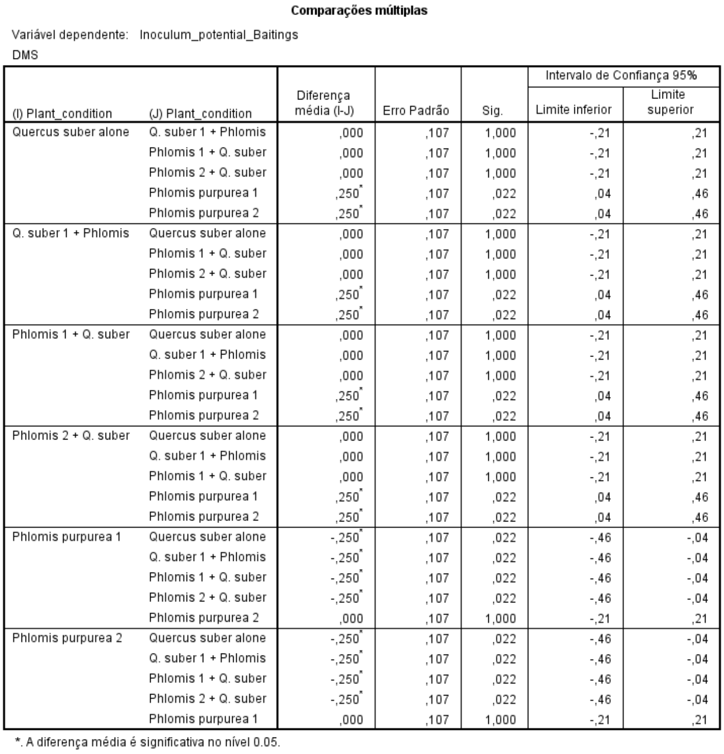
Variável dependente: % P cinnamomi in the roots

DMS

(I) Plant_condition	(J) Plant_condition	Diferença média (I-J)	Erro Padrão	Sig.	Intervalo de Confiança 95%	
					Limite inferior	Limite superior
Quercus suber alone	Q. suber 1 + Phlomis	18,4750*	8,8523	,041	,801	36,149
	Phlomis 1 + Q. suber	53,7583*	8,8523	,000	36,084	71,432
	Phlomis 2 + Q. suber	53,7583*	8,8523	,000	36,084	71,432
	Phlomis purpurea 1	53,7583*	8,8523	,000	36,084	71,432
	Phlomis purpurea 2	53,6750*	8,8523	,000	36,001	71,349
Q. suber 1 + Phlomis	Quercus suber alone	-18,4750*	8,8523	,041	-36,149	-,801
	Phlomis 1 + Q. suber	35,2833*	8,8523	,000	17,609	52,957
	Phlomis 2 + Q. suber	35,2833*	8,8523	,000	17,609	52,957
	Phlomis purpurea 1	35,2833*	8,8523	,000	17,609	52,957
	Phlomis purpurea 2	35,2000*	8,8523	,000	17,526	52,874
Phlomis 1 + Q. suber	Quercus suber alone	-53,7583*	8,8523	,000	-71,432	-36,084
	Q. suber 1 + Phlomis	-35,2833*	8,8523	,000	-52,957	-17,609
	Phlomis 2 + Q. suber	,0000	8,8523	1,000	-17,674	17,674
	Phlomis purpurea 1	,0000	8,8523	1,000	-17,674	17,674
	Phlomis purpurea 2	-,0833	8,8523	,993	-17,757	17,591
Phlomis 2 + Q. suber	Quercus suber alone	-53,7583*	8,8523	,000	-71,432	-36,084
	Q. suber 1 + Phlomis	-35,2833*	8,8523	,000	-52,957	-17,609
	Phlomis 1 + Q. suber	,0000	8,8523	1,000	-17,674	17,674
	Phlomis purpurea 1	,0000	8,8523	1,000	-17,674	17,674
	Phlomis purpurea 2	-,0833	8,8523	,993	-17,757	17,591
Phlomis purpurea 1	Quercus suber alone	-53,7583*	8,8523	,000	-71,432	-36,084
	Q. suber 1 + Phlomis	-35,2833*	8,8523	,000	-52,957	-17,609
	Phlomis 1 + Q. suber	,0000	8,8523	1,000	-17,674	17,674
	Phlomis 2 + Q. suber	,0000	8,8523	1,000	-17,674	17,674
	Phlomis purpurea 2	-,0833	8,8523	,993	-17,757	17,591
Phlomis purpurea 2	Quercus suber alone	-53,6750*	8,8523	,000	-71,349	-36,001
	Q. suber 1 + Phlomis	-35,2000*	8,8523	,000	-52,874	-17,526
	Phlomis 1 + Q. suber	,0833	8,8523	,993	-17,591	17,757
	Phlomis 2 + Q. suber	,0833	8,8523	,993	-17,591	17,757
	Phlomis purpurea 1	,0833	8,8523	,993	-17,591	17,757

*. A diferença média é significativa no nível 0.05.

Appendix II.XII. Analysis of variance of soil inoculum potential (baits) of *Quercus suber* planted alone, *Q. suber* planted together with *Phlomis purpurea*=*P. purpurea* planted with *Q. suber* and *P. purpurea* planted alone at Menta.



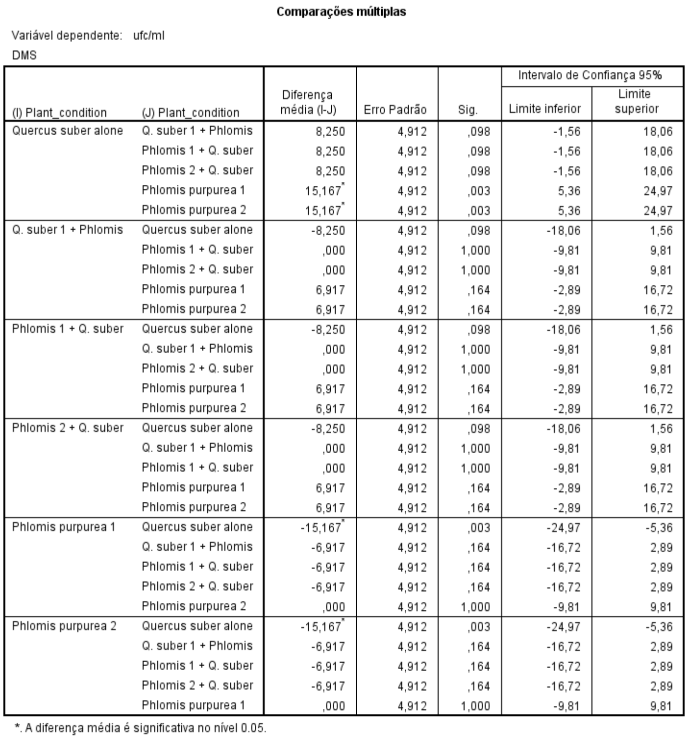
Comparações múltiplas

Variável dependente: Inoculum_potential_Baitings

DMS

(I) Plant_condition	(J) Plant_condition	Diferença média (I-J)	Erro Padrão	Sig.	Intervalo de Confiança 95%	
					Limite inferior	Limite superior
Quercus suber alone	Q. suber 1 + Phlomis	,000	,107	1,000	-,21	,21
	Phlomis 1 + Q. suber	,000	,107	1,000	-,21	,21
	Phlomis 2 + Q. suber	,000	,107	1,000	-,21	,21
	Phlomis purpurea 1	,250*	,107	,022	,04	,46
	Phlomis purpurea 2	,250*	,107	,022	,04	,46
Q. suber 1 + Phlomis	Quercus suber alone	,000	,107	1,000	-,21	,21
	Phlomis 1 + Q. suber	,000	,107	1,000	-,21	,21
	Phlomis 2 + Q. suber	,000	,107	1,000	-,21	,21
	Phlomis purpurea 1	,250*	,107	,022	,04	,46
	Phlomis purpurea 2	,250*	,107	,022	,04	,46
Phlomis 1 + Q. suber	Quercus suber alone	,000	,107	1,000	-,21	,21
	Q. suber 1 + Phlomis	,000	,107	1,000	-,21	,21
	Phlomis 2 + Q. suber	,000	,107	1,000	-,21	,21
	Phlomis purpurea 1	,250*	,107	,022	,04	,46
	Phlomis purpurea 2	,250*	,107	,022	,04	,46
Phlomis 2 + Q. suber	Quercus suber alone	,000	,107	1,000	-,21	,21
	Q. suber 1 + Phlomis	,000	,107	1,000	-,21	,21
	Phlomis 1 + Q. suber	,000	,107	1,000	-,21	,21
	Phlomis purpurea 1	,250*	,107	,022	,04	,46
	Phlomis purpurea 2	,250*	,107	,022	,04	,46
Phlomis purpurea 1	Quercus suber alone	-,250*	,107	,022	-,46	-,04
	Q. suber 1 + Phlomis	-,250*	,107	,022	-,46	-,04
	Phlomis 1 + Q. suber	-,250*	,107	,022	-,46	-,04
	Phlomis 2 + Q. suber	-,250*	,107	,022	-,46	-,04
	Phlomis purpurea 2	,000	,107	1,000	-,21	,21
Phlomis purpurea 2	Quercus suber alone	-,250*	,107	,022	-,46	-,04
	Q. suber 1 + Phlomis	-,250*	,107	,022	-,46	-,04
	Phlomis 1 + Q. suber	-,250*	,107	,022	-,46	-,04
	Phlomis 2 + Q. suber	-,250*	,107	,022	-,46	-,04
	Phlomis purpurea 1	,000	,107	1,000	-,21	,21

*. A diferença média é significativa no nível 0.05.



Comparações múltiplas

Variável dependente: ufc/ml

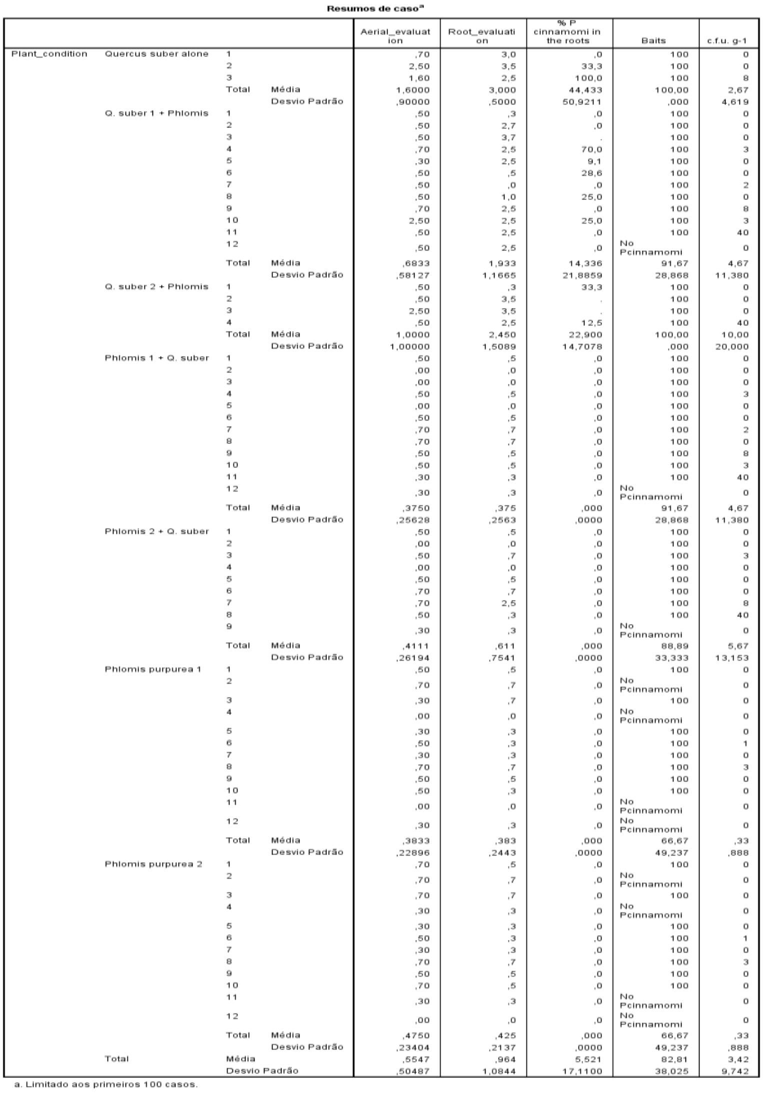
DMS

(I) Plant_condition	(J) Plant_condition	Diferença média (I-J)	Erro Padrão	Sig.	Intervalo de Confiança 95%	
					Limite inferior	Limite superior
Quercus suber alone	Q. suber 1 + Phlomis	8,250	4,912	,098	-1,56	18,06
	Phlomis 1 + Q. suber	8,250	4,912	,098	-1,56	18,06
	Phlomis 2 + Q. suber	8,250	4,912	,098	-1,56	18,06
	Phlomis purpurea 1	15,167*	4,912	,003	5,36	24,97
	Phlomis purpurea 2	15,167*	4,912	,003	5,36	24,97
Q. suber 1 + Phlomis	Quercus suber alone	-8,250	4,912	,098	-18,06	1,56
	Phlomis 1 + Q. suber	,000	4,912	1,000	-9,81	9,81
	Phlomis 2 + Q. suber	,000	4,912	1,000	-9,81	9,81
	Phlomis purpurea 1	6,917	4,912	,164	-2,89	16,72
	Phlomis purpurea 2	6,917	4,912	,164	-2,89	16,72
Phlomis 1 + Q. suber	Quercus suber alone	-8,250	4,912	,098	-18,06	1,56
	Q. suber 1 + Phlomis	,000	4,912	1,000	-9,81	9,81
	Phlomis 2 + Q. suber	,000	4,912	1,000	-9,81	9,81
	Phlomis purpurea 1	6,917	4,912	,164	-2,89	16,72
	Phlomis purpurea 2	6,917	4,912	,164	-2,89	16,72
Phlomis 2 + Q. suber	Quercus suber alone	-8,250	4,912	,098	-18,06	1,56
	Q. suber 1 + Phlomis	,000	4,912	1,000	-9,81	9,81
	Phlomis 1 + Q. suber	,000	4,912	1,000	-9,81	9,81
	Phlomis purpurea 1	6,917	4,912	,164	-2,89	16,72
	Phlomis purpurea 2	6,917	4,912	,164	-2,89	16,72
Phlomis purpurea 1	Quercus suber alone	-15,167*	4,912	,003	-24,97	-5,36
	Q. suber 1 + Phlomis	-6,917	4,912	,164	-16,72	2,89
	Phlomis 1 + Q. suber	-6,917	4,912	,164	-16,72	2,89
	Phlomis 2 + Q. suber	-6,917	4,912	,164	-16,72	2,89
	Phlomis purpurea 2	,000	4,912	1,000	-9,81	9,81
Phlomis purpurea 2	Quercus suber alone	-15,167*	4,912	,003	-24,97	-5,36
	Q. suber 1 + Phlomis	-6,917	4,912	,164	-16,72	2,89
	Phlomis 1 + Q. suber	-6,917	4,912	,164	-16,72	2,89
	Phlomis 2 + Q. suber	-6,917	4,912	,164	-16,72	2,89
	Phlomis purpurea 1	,000	4,912	1,000	-9,81	9,81

*. A diferença média é significativa no nível 0.05.

Appendix II.XIII. Analysis of variance of soil inoculum potential (Method 1 - c.f.u. g^{-1} soil) of *Quercus suber* planted alone, *Q. suber* planted together with *Phlomis purpurea=P. purpurea* planted with *Q. suber* and *P. purpurea* planted alone at Menta.

Note: In the table instead of "ufc/ml" you should read "c.f.u. g^{-1} soil"



Resumos de caso[a]

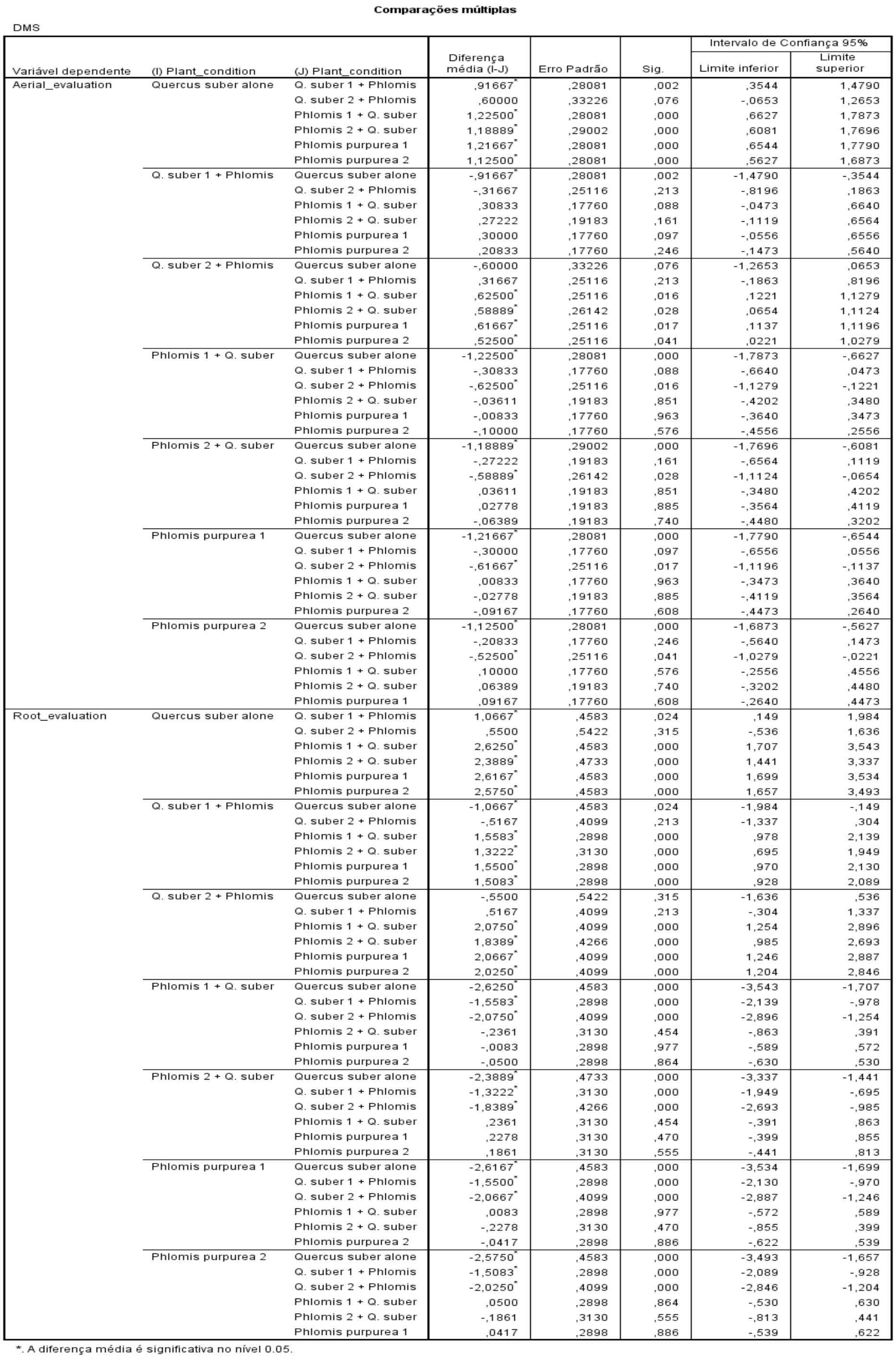
				Aerial_evaluation	Root_evaluation	% P cinnamomi in the roots	Baits	c.f.u. g-1
Plant_condition	Quercus suber alone	1		,70	3,0	,0	100	0
		2		2,50	3,5	33,3	100	0
		3		1,60	2,5	100,0	100	8
		Total	Média	1,6000	3,000	44,433	100,00	2,67
			Desvio Padrão	,90000	,5000	50,9211	,000	4,619
	Q. suber 1 + Phlomis	1		,50	,3	,0	100	0
		2		,50	2,7	,0	100	0
		3		,50	3,7	.	100	0
		4		,70	2,5	70,0	100	3
		5		,30	2,5	9,1	100	0
		6		,50	,5	28,6	100	0
		7		,50	,0	,0	100	2
		8		,50	1,0	25,0	100	0
		9		,70	2,5	,0	100	8
		10		2,50	2,5	25,0	100	3
		11		,50	2,5	,0	100	40
		12		,50	2,5	,0	No Pcinnamomi	0
		Total	Média	,6833	1,933	14,336	91,67	4,67
			Desvio Padrão	,58127	1,1665	21,8859	28,868	11,380
	Q. suber 2 + Phlomis	1		,50	,3	33,3	100	0
		2		,50	3,5	.	100	0
		3		2,50	3,5	.	100	0
		4		,50	2,5	12,5	100	40
		Total	Média	1,0000	2,450	22,900	100,00	10,00
			Desvio Padrão	1,00000	1,5089	14,7078	,000	20,000
	Phlomis 1 + Q. suber	1		,50	,5	,0	100	0
		2		,00	,0	,0	100	0
		3		,00	,0	,0	100	0
		4		,50	,5	,0	100	3
		5		,00	,0	,0	100	0
		6		,50	,5	,0	100	0
		7		,70	,7	,0	100	2
		8		,70	,7	,0	100	0
		9		,50	,5	,0	100	8
		10		,50	,5	,0	100	3
		11		,30	,3	,0	100	40
		12		,30	,3	,0	No Pcinnamomi	0
		Total	Média	,3750	,375	,000	91,67	4,67
			Desvio Padrão	,25628	,2563	,0000	28,868	11,380
	Phlomis 2 + Q. suber	1		,50	,5	,0	100	0
		2		,00	,0	,0	100	0
		3		,50	,7	,0	100	3
		4		,00	,0	,0	100	0
		5		,50	,5	,0	100	0
		6		,70	,7	,0	100	0
		7		,70	2,5	,0	100	8
		8		,50	,3	,0	100	40
		9		,30	,3	,0	No Pcinnamomi	0
		Total	Média	,4111	,611	,000	88,89	5,67
			Desvio Padrão	,26194	,7541	,0000	33,333	13,153
	Phlomis purpurea 1	1		,50	,5	,0	100	0
		2		,70	,7	,0	No Pcinnamomi	0
		3		,30	,7	,0	100	0
		4		,00	,0	,0	No Pcinnamomi	0
		5		,30	,3	,0	100	0
		6		,50	,3	,0	100	1
		7		,30	,3	,0	100	0
		8		,70	,7	,0	100	3
		9		,50	,5	,0	100	0
		10		,50	,3	,0	100	0
		11		,00	,0	,0	No Pcinnamomi	0
		12		,30	,3	,0	No Pcinnamomi	0
		Total	Média	,3833	,383	,000	66,67	,33
			Desvio Padrão	,22896	,2443	,0000	49,237	,888
	Phlomis purpurea 2	1		,70	,5	,0	100	0
		2		,70	,7	,0	No Pcinnamomi	0
		3		,70	,7	,0	100	0
		4		,30	,3	,0	No Pcinnamomi	0
		5		,30	,3	,0	100	0
		6		,50	,3	,0	100	1
		7		,30	,3	,0	100	0
		8		,70	,7	,0	100	3
		9		,50	,5	,0	100	0
		10		,70	,5	,0	100	0
		11		,30	,3	,0	No Pcinnamomi	0
		12		,00	,0	,0	No Pcinnamomi	0
		Total	Média	,4750	,425	,000	66,67	,33
			Desvio Padrão	,23404	,2137	,0000	49,237	,888
	Total	Média		,5547	,964	5,521	82,81	3,42
		Desvio Padrão		,50487	1,0844	17,1100	38,025	9,742

a. Limitado aos primeiros 100 casos.

Appendix II.XIV. Resume of cases of the aerial and root evaluation, Percentage of *Phytophthora cinnamomi* re-isolation from the roots and inoculum potential [Method 1 -c.f.u. g^{-1} soil and Method 2 (baits)] at PTS.

Note: *Quercus suber* 2 + *Phlomis purpurea* (Q. suber 2+ Phlomis) was excluded in all statistics, to simplify the interpretation.

Appendix II.XV. Analysis of variance of aerial and root evaluation of *Quercus suber* planted alone, *Q. suber* planted together with *Phlomis purpurea*, *P. purpurea* planted with *Q. suber* and *P. purpurea* planted alone at PTS.

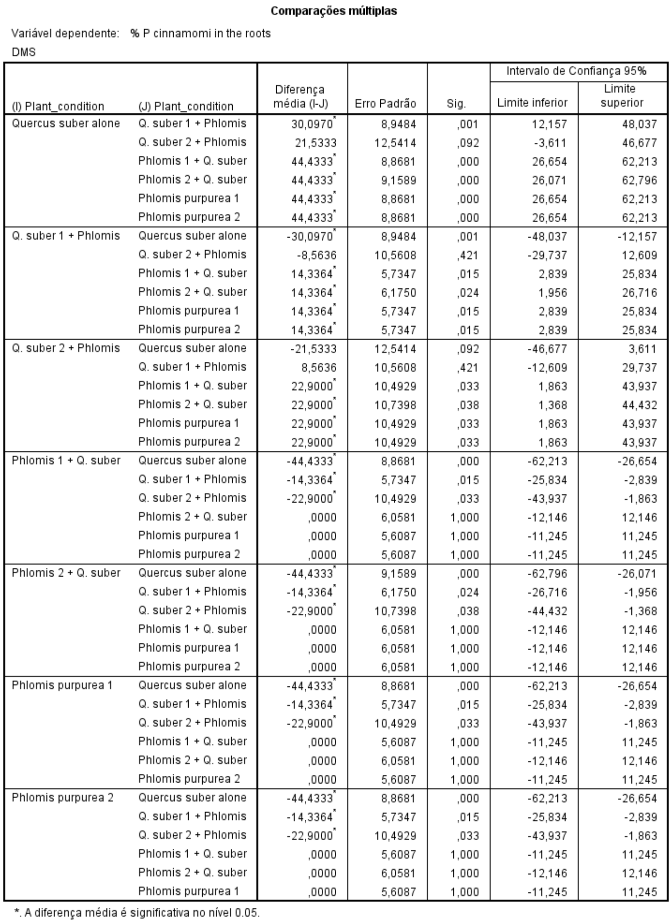


Comparações múltiplas

DMS

Variável dependente	(I) Plant_condition	(J) Plant_condition	Diferença média (I-J)	Erro Padrão	Sig.	Intervalo de Confiança 95%	
						Limite inferior	Limite superior
Aerial_evaluation	Quercus suber alone	Q. suber 1 + Phlomis	,91667*	,28081	,002	,3544	1,4790
		Q. suber 2 + Phlomis	,60000	,33226	,076	-,0653	1,2653
		Phlomis 1 + Q. suber	1,22500*	,28081	,000	,6627	1,7873
		Phlomis 2 + Q. suber	1,18889*	,29002	,000	,6081	1,7696
		Phlomis purpurea 1	1,21667*	,28081	,000	,6544	1,7790
		Phlomis purpurea 2	1,12500*	,28081	,000	,5627	1,6873
	Q. suber 1 + Phlomis	Quercus suber alone	-,91667*	,28081	,002	-1,4790	-,3544
		Q. suber 2 + Phlomis	-,31667	,25116	,213	-,8196	,1863
		Phlomis 1 + Q. suber	,30833	,17760	,088	-,0473	,6640
		Phlomis 2 + Q. suber	,27222	,19183	,161	-,1119	,6564
		Phlomis purpurea 1	,30000	,17760	,097	-,0556	,6556
		Phlomis purpurea 2	,20833	,17760	,246	-,1473	,5640
	Q. suber 2 + Phlomis	Quercus suber alone	-,60000	,33226	,076	-1,2653	,0653
		Q. suber 1 + Phlomis	,31667	,25116	,213	-,1863	,8196
		Phlomis 1 + Q. suber	,62500*	,25116	,016	,1221	1,1279
		Phlomis 2 + Q. suber	,58889*	,26142	,028	,0654	1,1124
		Phlomis purpurea 1	,61667*	,25116	,017	,1137	1,1196
		Phlomis purpurea 2	,52500*	,25116	,041	,0221	1,0279
	Phlomis 1 + Q. suber	Quercus suber alone	-1,22500*	,28081	,000	-1,7873	-,6627
		Q. suber 1 + Phlomis	-,30833	,17760	,088	-,6640	,0473
		Q. suber 2 + Phlomis	-,62500*	,25116	,016	-1,1279	-,1221
		Phlomis 2 + Q. suber	-,03611	,19183	,851	-,4202	,3480
		Phlomis purpurea 1	-,00833	,17760	,963	-,3640	,3473
		Phlomis purpurea 2	-,10000	,17760	,576	-,4556	,2556
	Phlomis 2 + Q. suber	Quercus suber alone	-1,18889*	,29002	,000	-1,7696	-,6081
		Q. suber 1 + Phlomis	-,27222	,19183	,161	-,6564	,1119
		Q. suber 2 + Phlomis	-,58889*	,26142	,028	-1,1124	-,0654
		Phlomis 1 + Q. suber	,03611	,19183	,851	-,3480	,4202
		Phlomis purpurea 1	,02778	,19183	,885	-,3564	,4119
		Phlomis purpurea 2	-,06389	,19183	,740	-,4480	,3202
	Phlomis purpurea 1	Quercus suber alone	-1,21667*	,28081	,000	-1,7790	-,6544
		Q. suber 1 + Phlomis	-,30000	,17760	,097	-,6556	,0556
		Q. suber 2 + Phlomis	-,61667*	,25116	,017	-1,1196	-,1137
		Phlomis 1 + Q. suber	,00833	,17760	,963	-,3473	,3640
		Phlomis 2 + Q. suber	-,02778	,19183	,885	-,4119	,3564
		Phlomis purpurea 2	-,09167	,17760	,608	-,4473	,2640
	Phlomis purpurea 2	Quercus suber alone	-1,12500*	,28081	,000	-1,6873	-,5627
		Q. suber 1 + Phlomis	-,20833	,17760	,246	-,5640	,1473
		Q. suber 2 + Phlomis	-,52500*	,25116	,041	-1,0279	-,0221
		Phlomis 1 + Q. suber	,10000	,17760	,576	-,2556	,4556
		Phlomis 2 + Q. suber	,06389	,19183	,740	-,3202	,4480
		Phlomis purpurea 1	,09167	,17760	,608	-,2640	,4473
Root_evaluation	Quercus suber alone	Q. suber 1 + Phlomis	1,0667*	,4583	,024	,149	1,984
		Q. suber 2 + Phlomis	,5500	,5422	,315	-,536	1,636
		Phlomis 1 + Q. suber	2,6250*	,4583	,000	1,707	3,543
		Phlomis 2 + Q. suber	2,3889*	,4733	,000	1,441	3,337
		Phlomis purpurea 1	2,6167*	,4583	,000	1,699	3,534
		Phlomis purpurea 2	2,5750*	,4583	,000	1,657	3,493
	Q. suber 1 + Phlomis	Quercus suber alone	-1,0667*	,4583	,024	-1,984	-,149
		Q. suber 2 + Phlomis	-,5167	,4099	,213	-1,337	,304
		Phlomis 1 + Q. suber	1,5583*	,2898	,000	,978	2,139
		Phlomis 2 + Q. suber	1,3222*	,3130	,000	,695	1,949
		Phlomis purpurea 1	1,5500*	,2898	,000	,970	2,130
		Phlomis purpurea 2	1,5083*	,2898	,000	,928	2,089
	Q. suber 2 + Phlomis	Quercus suber alone	-,5500	,5422	,315	-1,636	,536
		Q. suber 1 + Phlomis	,5167	,4099	,213	-,304	1,337
		Phlomis 1 + Q. suber	2,0750*	,4099	,000	1,254	2,896
		Phlomis 2 + Q. suber	1,8389*	,4266	,000	,985	2,693
		Phlomis purpurea 1	2,0667*	,4099	,000	1,246	2,887
		Phlomis purpurea 2	2,0250*	,4099	,000	1,204	2,846
	Phlomis 1 + Q. suber	Quercus suber alone	-2,6250*	,4583	,000	-3,543	-1,707
		Q. suber 1 + Phlomis	-1,5583*	,2898	,000	-2,139	-,978
		Q. suber 2 + Phlomis	-2,0750*	,4099	,000	-2,896	-1,254
		Phlomis 2 + Q. suber	-,2361	,3130	,454	-,863	,391
		Phlomis purpurea 1	-,0083	,2898	,977	-,589	,572
		Phlomis purpurea 2	-,0500	,2898	,864	-,630	,530
	Phlomis 2 + Q. suber	Quercus suber alone	-2,3889*	,4733	,000	-3,337	-1,441
		Q. suber 1 + Phlomis	-1,3222*	,3130	,000	-1,949	-,695
		Q. suber 2 + Phlomis	-1,8389*	,4266	,000	-2,693	-,985
		Phlomis 1 + Q. suber	,2361	,3130	,454	-,391	,863
		Phlomis purpurea 1	,2278	,3130	,470	-,399	,855
		Phlomis purpurea 2	,1861	,3130	,555	-,441	,813
	Phlomis purpurea 1	Quercus suber alone	-2,6167*	,4583	,000	-3,534	-1,699
		Q. suber 1 + Phlomis	-1,5500*	,2898	,000	-2,130	-,970
		Q. suber 2 + Phlomis	-2,0667*	,4099	,000	-2,887	-1,246
		Phlomis 1 + Q. suber	,0083	,2898	,977	-,572	,589
		Phlomis 2 + Q. suber	-,2278	,3130	,470	-,855	,399
		Phlomis purpurea 2	-,0417	,2898	,886	-,622	,539
	Phlomis purpurea 2	Quercus suber alone	-2,5750*	,4583	,000	-3,493	-1,657
		Q. suber 1 + Phlomis	-1,5083*	,2898	,000	-2,089	-,928
		Q. suber 2 + Phlomis	-2,0250*	,4099	,000	-2,846	-1,204
		Phlomis 1 + Q. suber	,0500	,2898	,864	-,530	,630
		Phlomis 2 + Q. suber	-,1861	,3130	,555	-,813	,441
		Phlomis purpurea 1	,0417	,2898	,886	-,539	,622

*. A diferença média é significativa no nível 0.05.



Comparações múltiplas

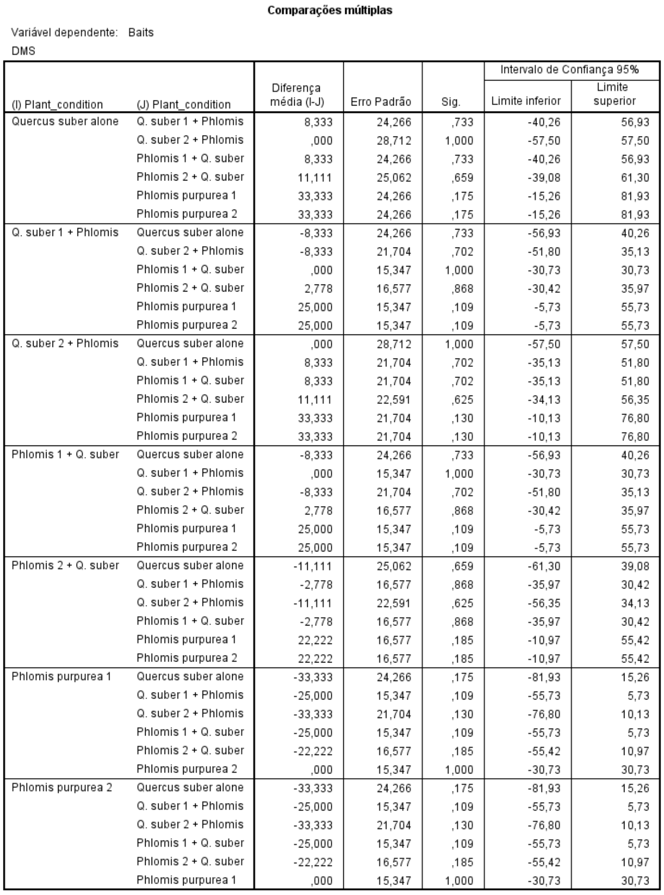
Variável dependente: % P cinnamomi in the roots

DMS

(I) Plant_condition	(J) Plant_condition	Diferença média (I-J)	Erro Padrão	Sig.	Intervalo de Confiança 95%	
					Limite inferior	Limite superior
Quercus suber alone	Q. suber 1 + Phlomis	30,0970[*]	8,9484	,001	12,157	48,037
	Q. suber 2 + Phlomis	21,5333	12,5414	,092	-3,611	46,677
	Phlomis 1 + Q. suber	44,4333[*]	8,8681	,000	26,654	62,213
	Phlomis 2 + Q. suber	44,4333[*]	9,1589	,000	26,071	62,796
	Phlomis purpurea 1	44,4333[*]	8,8681	,000	26,654	62,213
	Phlomis purpurea 2	44,4333[*]	8,8681	,000	26,654	62,213
Q. suber 1 + Phlomis	Quercus suber alone	-30,0970[*]	8,9484	,001	-48,037	-12,157
	Q. suber 2 + Phlomis	-8,5636	10,5608	,421	-29,737	12,609
	Phlomis 1 + Q. suber	14,3364[*]	5,7347	,015	2,839	25,834
	Phlomis 2 + Q. suber	14,3364[*]	6,1750	,024	1,956	26,716
	Phlomis purpurea 1	14,3364[*]	5,7347	,015	2,839	25,834
	Phlomis purpurea 2	14,3364[*]	5,7347	,015	2,839	25,834
Q. suber 2 + Phlomis	Quercus suber alone	-21,5333	12,5414	,092	-46,677	3,611
	Q. suber 1 + Phlomis	8,5636	10,5608	,421	-12,609	29,737
	Phlomis 1 + Q. suber	22,9000[*]	10,4929	,033	1,863	43,937
	Phlomis 2 + Q. suber	22,9000[*]	10,7398	,038	1,368	44,432
	Phlomis purpurea 1	22,9000[*]	10,4929	,033	1,863	43,937
	Phlomis purpurea 2	22,9000[*]	10,4929	,033	1,863	43,937
Phlomis 1 + Q. suber	Quercus suber alone	-44,4333[*]	8,8681	,000	-62,213	-26,654
	Q. suber 1 + Phlomis	-14,3364[*]	5,7347	,015	-25,834	-2,839
	Q. suber 2 + Phlomis	-22,9000[*]	10,4929	,033	-43,937	-1,863
	Phlomis 2 + Q. suber	,0000	6,0581	1,000	-12,146	12,146
	Phlomis purpurea 1	,0000	5,6087	1,000	-11,245	11,245
	Phlomis purpurea 2	,0000	5,6087	1,000	-11,245	11,245
Phlomis 2 + Q. suber	Quercus suber alone	-44,4333[*]	9,1589	,000	-62,796	-26,071
	Q. suber 1 + Phlomis	-14,3364[*]	6,1750	,024	-26,716	-1,956
	Q. suber 2 + Phlomis	-22,9000[*]	10,7398	,038	-44,432	-1,368
	Phlomis 1 + Q. suber	,0000	6,0581	1,000	-12,146	12,146
	Phlomis purpurea 1	,0000	6,0581	1,000	-12,146	12,146
	Phlomis purpurea 2	,0000	6,0581	1,000	-12,146	12,146
Phlomis purpurea 1	Quercus suber alone	-44,4333[*]	8,8681	,000	-62,213	-26,654
	Q. suber 1 + Phlomis	-14,3364[*]	5,7347	,015	-25,834	-2,839
	Q. suber 2 + Phlomis	-22,9000[*]	10,4929	,033	-43,937	-1,863
	Phlomis 1 + Q. suber	,0000	5,6087	1,000	-11,245	11,245
	Phlomis 2 + Q. suber	,0000	6,0581	1,000	-12,146	12,146
	Phlomis purpurea 2	,0000	5,6087	1,000	-11,245	11,245
Phlomis purpurea 2	Quercus suber alone	-44,4333[*]	8,8681	,000	-62,213	-26,654
	Q. suber 1 + Phlomis	-14,3364[*]	5,7347	,015	-25,834	-2,839
	Q. suber 2 + Phlomis	-22,9000[*]	10,4929	,033	-43,937	-1,863
	Phlomis 1 + Q. suber	,0000	5,6087	1,000	-11,245	11,245
	Phlomis 2 + Q. suber	,0000	6,0581	1,000	-12,146	12,146
	Phlomis purpurea 1	,0000	5,6087	1,000	-11,245	11,245

*. A diferença média é significativa no nível 0.05.

Appendix II.XVI. Analysis of variance of the <u>percentage of *Phytophthora cinnamomi* re-isolation from the roots</u> of *Quercus suber* planted alone, *Q. suber* planted together with *Phlomis purpurea*, *P. purpurea* planted with *Q. suber* and *P. purpurea* planted alone at <u>PTS</u>.



Comparações múltiplas

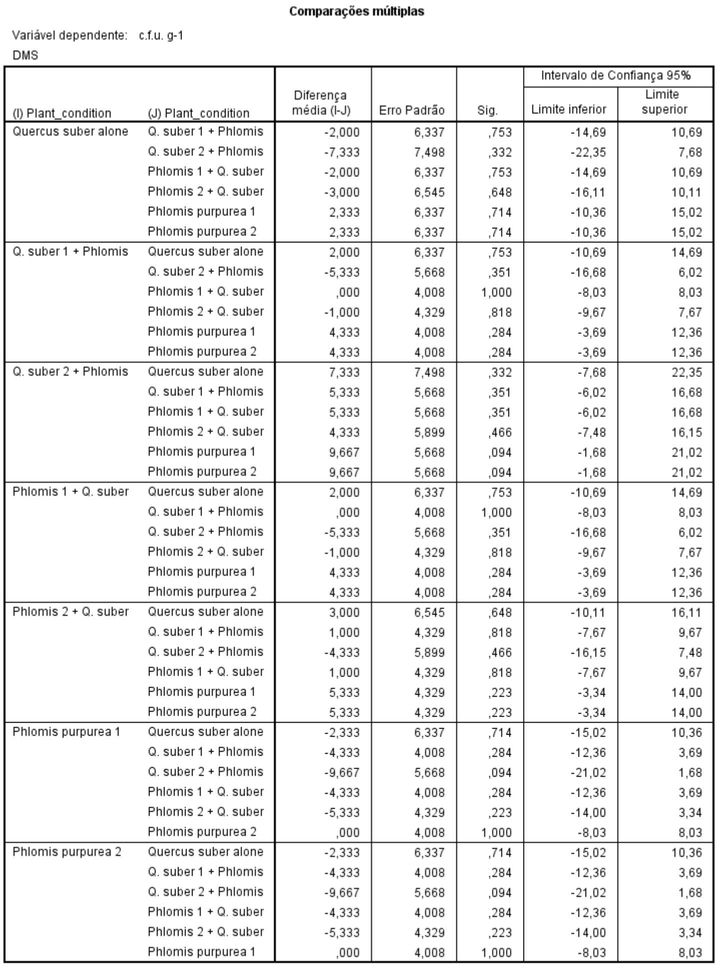
Variável dependente: Baits

DMS

(I) Plant_condition	(J) Plant_condition	Diferença média (I-J)	Erro Padrão	Sig.	Intervalo de Confiança 95%	
					Limite inferior	Limite superior
Quercus suber alone	Q. suber 1 + Phlomis	8,333	24,266	,733	-40,26	56,93
	Q. suber 2 + Phlomis	,000	28,712	1,000	-57,50	57,50
	Phlomis 1 + Q. suber	8,333	24,266	,733	-40,26	56,93
	Phlomis 2 + Q. suber	11,111	25,062	,659	-39,08	61,30
	Phlomis purpurea 1	33,333	24,266	,175	-15,26	81,93
	Phlomis purpurea 2	33,333	24,266	,175	-15,26	81,93
Q. suber 1 + Phlomis	Quercus suber alone	-8,333	24,266	,733	-56,93	40,26
	Q. suber 2 + Phlomis	-8,333	21,704	,702	-51,80	35,13
	Phlomis 1 + Q. suber	,000	15,347	1,000	-30,73	30,73
	Phlomis 2 + Q. suber	2,778	16,577	,868	-30,42	35,97
	Phlomis purpurea 1	25,000	15,347	,109	-5,73	55,73
	Phlomis purpurea 2	25,000	15,347	,109	-5,73	55,73
Q. suber 2 + Phlomis	Quercus suber alone	,000	28,712	1,000	-57,50	57,50
	Q. suber 1 + Phlomis	8,333	21,704	,702	-35,13	51,80
	Phlomis 1 + Q. suber	8,333	21,704	,702	-35,13	51,80
	Phlomis 2 + Q. suber	11,111	22,591	,625	-34,13	56,35
	Phlomis purpurea 1	33,333	21,704	,130	-10,13	76,80
	Phlomis purpurea 2	33,333	21,704	,130	-10,13	76,80
Phlomis 1 + Q. suber	Quercus suber alone	-8,333	24,266	,733	-56,93	40,26
	Q. suber 1 + Phlomis	,000	15,347	1,000	-30,73	30,73
	Q. suber 2 + Phlomis	-8,333	21,704	,702	-51,80	35,13
	Phlomis 2 + Q. suber	2,778	16,577	,868	-30,42	35,97
	Phlomis purpurea 1	25,000	15,347	,109	-5,73	55,73
	Phlomis purpurea 2	25,000	15,347	,109	-5,73	55,73
Phlomis 2 + Q. suber	Quercus suber alone	-11,111	25,062	,659	-61,30	39,08
	Q. suber 1 + Phlomis	-2,778	16,577	,868	-35,97	30,42
	Q. suber 2 + Phlomis	-11,111	22,591	,625	-56,35	34,13
	Phlomis 1 + Q. suber	-2,778	16,577	,868	-35,97	30,42
	Phlomis purpurea 1	22,222	16,577	,185	-10,97	55,42
	Phlomis purpurea 2	22,222	16,577	,185	-10,97	55,42
Phlomis purpurea 1	Quercus suber alone	-33,333	24,266	,175	-81,93	15,26
	Q. suber 1 + Phlomis	-25,000	15,347	,109	-55,73	5,73
	Q. suber 2 + Phlomis	-33,333	21,704	,130	-76,80	10,13
	Phlomis 1 + Q. suber	-25,000	15,347	,109	-55,73	5,73
	Phlomis 2 + Q. suber	-22,222	16,577	,185	-55,42	10,97
	Phlomis purpurea 2	,000	15,347	1,000	-30,73	30,73
Phlomis purpurea 2	Quercus suber alone	-33,333	24,266	,175	-81,93	15,26
	Q. suber 1 + Phlomis	-25,000	15,347	,109	-55,73	5,73
	Q. suber 2 + Phlomis	-33,333	21,704	,130	-76,80	10,13
	Phlomis 1 + Q. suber	-25,000	15,347	,109	-55,73	5,73
	Phlomis 2 + Q. suber	-22,222	16,577	,185	-55,42	10,97
	Phlomis purpurea 1	,000	15,347	1,000	-30,73	30,73

Appendix II.XVII. Analysis of variance of <u>soil inoculum potential (baits)</u> of *Quercus suber* planted alone, *Q. suber* planted together with *Phlomis purpurea=P. purpurea* planted with *Q. suber* and *P. purpurea* planted alone at <u>PTS</u>.

Appendix II.XVIII. Analysis of variance of soil inoculum potential (Method 1 - c.f.u. g^{-1} soil) of *Quercus suber* planted alone, *Q. suber* planted together with *Phlomis purpurea*=*P. purpurea* planted with *Q. suber* and *P. purpurea* planted alone at PTS.



Comparações múltiplas

Variável dependente: c.f.u. g-1

DMS

(I) Plant_condition	(J) Plant_condition	Diferença média (I-J)	Erro Padrão	Sig.	Intervalo de Confiança 95%	
					Limite inferior	Limite superior
Quercus suber alone	Q. suber 1 + Phlomis	-2,000	6,337	,753	-14,69	10,69
	Q. suber 2 + Phlomis	-7,333	7,498	,332	-22,35	7,68
	Phlomis 1 + Q. suber	-2,000	6,337	,753	-14,69	10,69
	Phlomis 2 + Q. suber	-3,000	6,545	,648	-16,11	10,11
	Phlomis purpurea 1	2,333	6,337	,714	-10,36	15,02
	Phlomis purpurea 2	2,333	6,337	,714	-10,36	15,02
Q. suber 1 + Phlomis	Quercus suber alone	2,000	6,337	,753	-10,69	14,69
	Q. suber 2 + Phlomis	-5,333	5,668	,351	-16,68	6,02
	Phlomis 1 + Q. suber	,000	4,008	1,000	-8,03	8,03
	Phlomis 2 + Q. suber	-1,000	4,329	,818	-9,67	7,67
	Phlomis purpurea 1	4,333	4,008	,284	-3,69	12,36
	Phlomis purpurea 2	4,333	4,008	,284	-3,69	12,36
Q. suber 2 + Phlomis	Quercus suber alone	7,333	7,498	,332	-7,68	22,35
	Q. suber 1 + Phlomis	5,333	5,668	,351	-6,02	16,68
	Phlomis 1 + Q. suber	5,333	5,668	,351	-6,02	16,68
	Phlomis 2 + Q. suber	4,333	5,899	,466	-7,48	16,15
	Phlomis purpurea 1	9,667	5,668	,094	-1,68	21,02
	Phlomis purpurea 2	9,667	5,668	,094	-1,68	21,02
Phlomis 1 + Q. suber	Quercus suber alone	2,000	6,337	,753	-10,69	14,69
	Q. suber 1 + Phlomis	,000	4,008	1,000	-8,03	8,03
	Q. suber 2 + Phlomis	-5,333	5,668	,351	-16,68	6,02
	Phlomis 2 + Q. suber	-1,000	4,329	,818	-9,67	7,67
	Phlomis purpurea 1	4,333	4,008	,284	-3,69	12,36
	Phlomis purpurea 2	4,333	4,008	,284	-3,69	12,36
Phlomis 2 + Q. suber	Quercus suber alone	3,000	6,545	,648	-10,11	16,11
	Q. suber 1 + Phlomis	1,000	4,329	,818	-7,67	9,67
	Q. suber 2 + Phlomis	-4,333	5,899	,466	-16,15	7,48
	Phlomis 1 + Q. suber	1,000	4,329	,818	-7,67	9,67
	Phlomis purpurea 1	5,333	4,329	,223	-3,34	14,00
	Phlomis purpurea 2	5,333	4,329	,223	-3,34	14,00
Phlomis purpurea 1	Quercus suber alone	-2,333	6,337	,714	-15,02	10,36
	Q. suber 1 + Phlomis	-4,333	4,008	,284	-12,36	3,69
	Q. suber 2 + Phlomis	-9,667	5,668	,094	-21,02	1,68
	Phlomis 1 + Q. suber	-4,333	4,008	,284	-12,36	3,69
	Phlomis 2 + Q. suber	-5,333	4,329	,223	-14,00	3,34
	Phlomis purpurea 2	,000	4,008	1,000	-8,03	8,03
Phlomis purpurea 2	Quercus suber alone	-2,333	6,337	,714	-15,02	10,36
	Q. suber 1 + Phlomis	-4,333	4,008	,284	-12,36	3,69
	Q. suber 2 + Phlomis	-9,667	5,668	,094	-21,02	1,68
	Phlomis 1 + Q. suber	-4,333	4,008	,284	-12,36	3,69
	Phlomis 2 + Q. suber	-5,333	4,329	,223	-14,00	3,34
	Phlomis purpurea 1	,000	4,008	1,000	-8,03	8,03