

Tab. S1-1: Analysis of variance for height variation of clone F032mg between eight plantations before infection by DED

Analysis of Variance Table

Response: h

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
id_essai	7	1072893	153270	36.652	4.064e-16 ***
Residuals	43	179816	4182		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Study: aov(modele) ~ "id_essai"

HSD Test for h (**height in cm 5 years after planting**)

Mean Square Error: 4181.756

id_essai, means

	h	std	r	Min	Max
#21-banneville	374.4444	48.95434	9	270	430
#35-courlay	631.2500	48.71259	4	590	700
#24-courseulles	230.0000	15.81139	6	215	260
#22-guilberville	500.0000	60.58052	6	425	580
#34-montravers	485.0000	113.46806	5	325	610
#36-noirlieu	609.0000	66.65208	5	515	685
#23-st_gabriel	610.0000	91.37833	5	520	720
#11-toussaint	271.3636	55.90576	11	210	345

Alpha: 0.05 ; DF Error: 43

Critical Value of Studentized Range: 4.503788

Groups according to probability of means differences and alpha level(0.05)
Treatments with the same letter are not significantly different.

	h	groups
#35-courlay	631.2500	a
#23-st_gabriel	610.0000	ab
#36-noirlieu	609.0000	ab
#22-guilberville	500.0000	ab
#34-montravers	485.0000	bc
#21-banneville	374.4444	c
#11-toussaint	271.3636	d
#24-courseulles	230.0000	d

Tab. S1-2: Analysis of variance for height variation of clone F032mg between three site types before infection by DED

Site types (previous land use)

1) crop field : tests #22, 23, 24, 34, 35, 36

2) hayfield : test #21

3) woodland : test #11

Analysis of Variance Table

Response: h (height in cm 5 years after planting)

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
code_type	1	445030	445030	26.999	3.936e-06 ***
Residuals	49	807679	16483		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Study: aov(modele) ~ "code_type"

HSD Test for h

Mean Square Error: 16483.24

code_type, means

	h	std	r	Min	Max
1	497.5806	158.80214	31	215	720
2	374.4444	48.95434	9	270	430
3	271.3636	55.90576	11	210	345

Alpha: 0.05 ; DF Error: 49

Critical Value of Studentized Range: 3.418044

Groups according to probability of means differences and alpha level(0.05)

Treatments with the same letter are not significantly different.

	h	groups
1	497.5806	a
2	374.4444	b
3	271.3636	b

Tab. S1-3: Analysis of variance for height variation between clones before infection by DED in plot-test #31

Response: h.11 (Height in cm four year after planting)

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
clone	19	464835	24465	6.9582	1.286e-12 ***
Residuals	137	481689	3516		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

HSD Test for h.11

Mean Square Error: 3515.978

clone,	means	h.11	std	r	Min	Max
F020	188.3333	66.61456	9	95	300	
F024	247.7778	71.06824	9	130	320	
F028	242.5000	72.11103	8	130	340	
F032mg	383.0000	77.64592	10	225	510	
F034	311.4286	92.76827	7	205	440	
F035	216.8750	54.30979	8	135	290	
F041gm	268.7500	65.23310	8	195	400	
F044	170.8333	35.55512	6	120	220	
F050	298.3333	52.91503	9	215	415	
F056	237.2222	44.58917	9	180	330	
F072	199.0000	31.89828	5	160	240	
F077	206.4286	35.08493	7	165	260	
F083	243.3333	48.92596	9	140	290	
F124mg	242.1429	48.20591	7	165	290	
F140	309.0000	87.96464	10	180	450	
F144	208.5714	32.10845	7	175	260	
F203	174.3750	44.83601	8	135	245	
F350	209.2857	36.90399	7	155	255	
F352*	255.6250	52.94455	8	185	350	
F355	182.5000	35.17812	6	135	210	

Alpha: 0.05 ; DF Error: 137

Critical Value of Studentized Range: 5.111712

Groups according to probability of means differences and alpha level(0.05)

Treatments with the same letter are not significantly different.

h.11 groups

F032mg	383.0000	a
F034	311.4286	ab
F140	309.0000	ab
F050	298.3333	ab
F041gm	268.7500	bc
F352*	255.6250	bc
F024	247.7778	bc
F083	243.3333	bc
F028	242.5000	bc
F124mg	242.1429	bc
F056	237.2222	bc
F035	216.8750	bc
F350	209.2857	bc
F144	208.5714	bc
F077	206.4286	bc
F072	199.0000	bc
F020	188.3333	c
F355	182.5000	c
F203	174.3750	c
F044	170.8333	c

Tab. S1-4: Analysis of variance for the mean height variation of the future diseased trees and of trees that remained asymptomatic in plot-test #31

Future of trees

S : healthy

M : diseased

Analysis of Variance Table

Response: H4 (**Height in cm 4 years after planting**)

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
graphiose	1	45216	45216	7.7758	0.005959 **
Residuals	155	901308	5815		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

HSD Test for H4

Mean Square Error: 3466.83

g, means

	H4	std	r	Min	Max
s	232.9808	69.78302	104	95	450
m	268.8679	87.67642	53	140	510

Alpha: 0.05 ; DF Error: 136

Critical Value of Studentized Range: 2.796693

Groups according to probability of means differences and alpha level(0.05)

Treatments with the same letter are not significantly different.

	H4	groups
m	268.8679	a
s	232.9808	b

Tab. S1-5: Analysis of variance for DED prevalence variation of clone F032mg in eight plantations

Analysis of Variance Table

Response: g (DED prevalence)

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
id_essai	7	4.4598	0.63711	3.3542	0.006097 **
Residuals	43	8.1677	0.18995		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Study: aov(modele) ~ "id_essai"

HSD Test for g (DED prevalence)

Mean Square Error: 0.189946

id_essai, means

	g	std	r	Min	Max
#21-banneville	0.1111111	0.3333333	9	0	1
#35-courlay	1.0000000	0.0000000	4	1	1
#24-courseulles	0.1666667	0.4082483	6	0	1
#22-guilberville	0.5000000	0.5477226	6	0	1
#34-montravers	0.8000000	0.4472136	5	0	1
#36-noirlieu	0.8000000	0.4472136	5	0	1
#23-st_gabriel	0.8000000	0.4472136	5	0	1
#11-toussaint	0.6363636	0.5045250	11	0	1

Alpha: 0.05 ; DF Error: 43

Critical Value of Studentized Range: 4.503788

Groups according to probability of means differences and alpha level(0.05)

Treatments with the same letter are not significantly different.

	g	groups
#35-courlay	1.0000000	a
#34-montravers	0.8000000	ab
#36-noirlieu	0.8000000	ab
#23-st_gabriel	0.8000000	ab
#11-toussaint	0.6363636	ab
#22-guilberville	0.5000000	ab
#24-courseulles	0.1666667	ab
#21-banneville	0.1111111	b

NB : because of the low number of trees of F032mg at Courlay (4 trees, all diseased), the differences in the above table were not considered significantly different

Tab. S1-6: Analysis of variance for DED prevalence variation between clones F083mg and F032mg in the eight tests where they are planted together

Response: g.n (DED prevalence)

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	
clone	1	1.1313	1.13134	7.4222	0.007486	**
id_essai	7	8.2745	1.18207	7.7551	1.279e-07	***
Residuals	111	16.9192	0.15242			

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Mean Square Error: 0.1524249

clone, means

	g.n	std	r	Min	Max
F032mg	0.4237288	0.4983902	59	0	1
F083	0.2295082	0.4240064	61	0	1

Alpha: 0.05 ; DF Error: 111

Critical Value of Studentized Range: 2.802359

Groups according to probability of means differences and alpha level(0.05)

Treatments with the same letter are not significantly different.

	g.n	groups
F032mg	0.4237288	a
F083	0.2295082	b

Tab. S1-7: Analysis of variance for 11 clones planted together plot-tests #21 and #31

Analysis of Variance Table

Response: g.n (DED prevalence)

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
clone	10	6.2004	0.62004	4.7827	4.375e-06 ***
id_essai	1	2.7926	2.79257	21.5406	6.677e-06 ***
Residuals	179	23.2060	0.12964		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Mean Square Error: 0.1296423

clone, means

	g.n	std	r	Min	Max
F020	0.11764706	0.3321056	17	0	1
F024	0.16666667	0.3834825	18	0	1
F028	0.00000000	0.0000000	19	0	0
F032mg	0.31578947	0.4775669	19	0	1
F034	0.29411765	0.4696682	17	0	1
F044	0.00000000	0.0000000	14	0	0
F050	0.16666667	0.3834825	18	0	1
F056	0.56250000	0.5123475	16	0	1
F072	0.14285714	0.3631365	14	0	1
F083	0.05263158	0.2294157	19	0	1
F140	0.50000000	0.5129892	20	0	1

Alpha: 0.05 ; DF Error: 179

Critical Value of Studentized Range: 4.611527

Groups according to probability of means differences and alpha level(0.05)

Treatments with the same letter are not significantly different.

	g.n	groups
F056	0.56250000	a
F140	0.50000000	ab
F032mg	0.31578947	abc
F034	0.29411765	abc
F024	0.16666667	abc
F050	0.16666667	abc
F072	0.14285714	abc
F020	0.11764706	bc
F083	0.05263158	c
F028	0.00000000	c
F044	0.00000000	c

Tab. S1-8: Analysis of variance for 17 clones in plot-test #31

Analysis of Variance Table

Response: g.n (DED prevalence)

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
clone	16	9.1554	0.57221	2.966	0.0003483 ***
Residuals	124	23.9226	0.19292		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Mean Square Error: 0.1929243
clone, means

	g.n	std	r	Min	Max
F020	0.2222222	0.4409586	9	0	1
F024	0.3333333	0.5000000	9	0	1
F028	0.0000000	0.0000000	9	0	0
F032mg	0.5000000	0.5270463	10	0	1
F034	0.7142857	0.4879500	7	0	1
F035	0.2500000	0.4629100	8	0	1
F041gm	0.5000000	0.5345225	8	0	1
F050	0.3333333	0.5000000	9	0	1
F056	0.8888889	0.3333333	9	0	1
F077	0.0000000	0.0000000	7	0	0
F083	0.1111111	0.3333333	9	0	1
F124mg	0.4285714	0.5345225	7	0	1
F140	0.5000000	0.5270463	10	0	1
F144	0.1428571	0.3779645	7	0	1
F203	0.7500000	0.4629100	8	0	1
F350	0.5714286	0.5345225	7	0	1
F352*	0.1250000	0.3535534	8	0	1

Alpha: 0.05 ; DF Error: 124

Critical Value of Studentized Range: 4.994729

Groups according to probability of means differences and alpha level(0.05)
Treatments with the same letter are not significantly different.

	g.n	groups
F056	0.8888889	a
F203	0.7500000	ab
F034	0.7142857	ab
F350	0.5714286	ab
F032mg	0.5000000	ab
F041gm	0.5000000	ab
F140	0.5000000	ab
F124mg	0.4285714	ab
F024	0.3333333	ab
F050	0.3333333	ab
F035	0.2500000	ab
F020	0.2222222	ab
F144	0.1428571	ab
F352*	0.1250000	b
F083	0.1111111	b
F028	0.0000000	b
F077	0.0000000	b