

Variance components of repeated measurement analysis including serial correlation of observations

Table 1: Variance components obtained for repeated measurement analysis of stem cutting count (SCC) in TPE I by considering an unstructured variance-covariance structure for serial correlations of observations of T.REP.IB and T.REP.COL; T time effect, T.REP replicate effect, GEN genotype effect, T.GEN genotype time interaction, T.REP.IB row effect, T.REP.COL column effect, T.REP.IB.PAIR residual error			
Effect	<i>l</i>, the time-point of observation	Variance parameter	Estimate
T			2.0746
T.REP			0.1864
GEN			2.4271
T.GEN			0.6684
T.REP.IB	1	VAR 1	0
	2	VAR 2	0.0034
	3	VAR 3	0.0001
		COV 2 - 1	0.0001
		COV 3 - 1	0
		COV 3 - 2	0.0004
T.REP.COL	1	VAR 1	0.3638
	2	VAR 2	0.0834
	3	VAR 3	0.0076
		COV 2 - 1	0.0948
		COV 3 - 1	0.0044
		COV 3 - 2	0.0222
T.REP.IB.PAIR	1	VAR 1	7.2480
	2	VAR 2	10.8184
	3	VAR 3	2.6309
		COV 2 - 1	2.4872
		COV 3 - 1	0.3703
		COV 3 - 2	0.4035

Table 2: Variance components obtained for repeated measurement analysis of rooted stem cutting counts assigned to (S4 + S5) of root formation (RF) in TPE I by considering a compound symmetry variance-covariance structure for serial correlations of observations of observations for T.REP.IB and T.REP.COL; T time effect, T.REP replicate effect, GEN genotype effect, T.GEN genotype time interaction, T.REP.IB row effect, T.REP.COL column effect, RTABLE rooting table effect, RTABLE.TRAY tray effect, T.REP.IB.PAIR residual error

Effect	Variance parameter	Estimate
T		0.4980
T.REP		0.9921
GEN		1.7444
T.GEN		0.7786
T.REP.IB	VAR	0.0341
	COV	0
T.REP.COL	VAR	0.1657
	COV	0.0254
T.REP.IB.COL	VAR	0.5957
T.RTABLE	VAR	0.2608
T.RTABLE.TRAY	VAR	0.6208
T.REP.IB.PAIR	VAR	4.8506

Table 3: Variance components obtained for repeated measurement analysis of flower count (FC) in TPE I by considering an unstructured variance-covariance structure for serial correlations of observations for T.REP.IB and T.REP.COL; T time effect, T.REP replicate effect, GEN genotype effect, T.GEN genotype time interaction, T.REP.IB row effect, T.REP.COL column effect, T.REP.IB.PAIR residual error

Effect	<i>l</i> , the time-point of observation	Variance parameter	Estimate
T			1.9184
T.REP			0
GEN			2.8560
T.GEN			2.5310
T.REP.IB	1	VAR 1	0.0010
	2	VAR 2	0.0002
		COV 2 - 1	0.0004
T.REP.COL	1	VAR 1	0.3454
	2	VAR 2	0.9113
		COV 2 - 1	0.1885
T.REP.IB.PAIR	1	VAR 1	4.3297
	2	VAR 2	8.7000
		COV 2 - 1	1.6435

Table 4: Variance components obtained for repeated measurement analysis of branch count (BC) in TPE I by considering an unstructured variance-covariance structure for serial correlations of observations for T.REP.IB and T.REP.COL; T time effect, T.REP replicate effect, GEN genotype effect, T.GEN genotype time interaction, T.REP.IB row effect, T.REP.COL column effect, T.REP.IB.PAIR residual error

Effect	<i>l</i>, the time-point of observation	Variance parameter	Estimate
T			0
T.REP			0
GEN			5.6121
T.GEN			0
T.REP.IB	1	VAR 1	0.2565
T.REP.IB	2	VAR 2	1.1762
		COV 2 - 1	0.3927
T.REP.COL	1	VAR 1	0.2853
	2	VAR 2	0.3329
		COV 2 - 1	0.1653
T.REP.IB.PAIR	1	VAR 1	6.2738
	2	VAR 2	6.8059
		COV 2 - 1	6.2940

Table 5: Variance components obtained for repeated measurement analysis of stem cutting count (SCC) in TPE II by considering an unstructured variance-covariance structure for serial correlations of observations for T.REP.IB and T.REP.COL; T time effect, T.REP replicate effect, GEN genotype effect, T.GEN genotype time interaction, T.REP.IB row effect, T.REP.COL column effect, T.REP.IB.PAIR residual error

effect	<i>l</i>, the time-point of observation	Variance parameter	Estimate
T			1.1128
T.REP			0.5604
GEN			0.1685
T.GEN			0.0042
T.REP.IB	1	VAR 1	0
	2	VAR 2	0.0013
	3	VAR 3	0.0011
	4	VAR 4	0.0062
		COV 2 - 1	0
		COV 3 - 1	0
		COV 3 - 2	0.0007
		COV 4 - 1	0
		COV 4 - 2	0.0015
		COV 4 - 3	0.0015
T.REP.COL	1	VAR 1	0.0032
	2	VAR 2	0.0254
	3	VAR 3	0.0295
	4	VAR 4	0.0450
		COV 2 - 1	0.0023
		COV 3 - 1	0.0027
		COV 3 - 2	-0.0004
		COV 4 - 1	0.0032
		COV 4 - 2	0.0103
		COV 4 - 3	0.0225
T.REP.IB.PAIR	1	VAR 1	1.0016
	2	VAR 2	2.4652
	3	VAR 3	1.6834
	4	VAR 4	4.1452
		COV 2 - 1	-0.1565
		COV 3 - 1	0.0763
		COV 3 - 2	0.4756
		COV 4 - 1	0.1136
		COV 4 - 2	1.1030
		COV 4 - 3	0.7996

Table 6: Variance components obtained for repeated measurement analysis of rooted stem cutting counts assigned to (*S4 + S5*) of root formation (RF) in TPE II by considering an unstructured variance-covariance structure for serial correlations of observations of observations for T.REP.IB and T.REP.COL; T time effect, T.REP replicate effect, GEN genotype effect, T.GEN genotype time interaction, T.REP.IB row effect, T.REP.COL column effect, RTABLE rooting table effect, RTABLE.TRAY tray effect, T.REP.IB.PAIR residual error

Effect	<i>l</i> , the time-point of observation	Variance parameter	Estimate
T			0.9205
T.REP			0.3616
GEN			0.3579
T.GEN			0.1303
T.REP.IB	1	VAR 1	0
	2	VAR 2	0.0030
	3	VAR 3	0.0023
	4	VAR 4	0.0267
		COV 2 - 1	0
		COV 3 - 1	0
		COV 3 - 2	0.0025
		COV 4 - 1	0
		COV 4 - 2	0.0055
		COV 4 - 3	0.0045
T.REP.COL	1	VAR 1	0.0006
	2	VAR 2	0.0958
	3	VAR 3	0.0172
	4	VAR 4	0.1224
		COV 2 - 1	-0.0002
		COV 3 - 1	0.0007
		COV 3 - 2	0.0201
		COV 4 - 1	0.0020
		COV 4 - 2	0.0555
		COV 4 - 3	0.0213
T.RTABLE			1.4165
T.RTABLE.TRAY			0.0896
T.REP.IB.PAIR	1	VAR 1	1.5231
	2	VAR 2	2.4318
	3	VAR 3	2.9093
	4	VAR 4	3.6675
		COV 2 - 1	0.2605
		COV 3 - 1	0.2819
		COV 3 - 2	0.7530
		COV 4 - 1	0.3815
		COV 4 - 2	0.6271
		COV 4 - 3	0.8815