

Table 61 continued (7/8)

Character & crop		Type	Plots	Means			
X	Y		rP	rG	rP	rE	
visnmgPR	vs	nmgyotPR	Re	.736	.897 ± .081	.822 ± .023	.630 ± .089
visnmgPR	vs	nmgyotPR	Be	.656	.843 ± .103	.754 ± .030	.464 ± .116
visnmgPR	vs	nmgyotPR	Se	.610	.911 ± .096	.773 ± .028	.348 ± .130
visnmgPR	vs	nmgyotPR	RBS	.696	.895 ± .048	.803 ± .014	.490 ± .064
stalkP	vs	nmgyotP	Re	.389	.191 ± .407	.314 ± .063	.483 ± .113
stalkP	vs	nmgyotP	Be	.346	.262 ± .265	.304 ± .063	.408 ± .123
stalkP	vs	nmgyotP	Se	.366	-.007 ± .369	.232 ± .066	.574 ± .099
stalkR	vs	nmgyotR	Re	.444	.687 ± .198	.594 ± .045	.469 ± .115
stalkR	vs	nmgyotR	Be	.465	.456 ± .210	.464 ± .055	.548 ± .103
stalkR	vs	nmgyotR	Se	.424	.526 ± .196	.483 ± .053	.413 ± .122
stalkPR	vs	nmgyotP	Re	.332	-.033 ± .318	.170 ± .067	.580 ± .098
stalkPR	vs	nmgyotP	Be	.225	.066 ± .266	.154 ± .068	.446 ± .118
stalkPR	vs	nmgyotP	Se	.319	.165 ± .276	.264 ± .065	.584 ± .097
stalkPR	vs	nmgyotP	RBS	.267	.041 ± .163	.165 ± .038	.510 ± .062
stalkPR	vs	nmgyotR	Re	.441	.764 ± .207	.605 ± .044	.383 ± .126
stalkPR	vs	nmgyotR	Be	.407	.444 ± .222	.438 ± .056	.442 ± .119
stalkPR	vs	nmgyotR	Se	.351	.508 ± .212	.439 ± .056	.257 ± .138
stalkPR	vs	nmgyotR	RBS	.386	.494 ± .130	.453 ± .031	.358 ± .073
stalkPR	vs	nmgyotPR	Re	.458	.315 ± .266	.404 ± .058	.592 ± .096
stalkPR	vs	nmgyotPR	Be	.383	.250 ± .240	.315 ± .063	.549 ± .103
stalkPR	vs	nmgyotPR	Se	.410	.381 ± .224	.402 ± .058	.503 ± .110
stalkPR	vs	nmgyotPR	RBS	.392	.269 ± .143	.333 ± .035	.537 ± .060
brixP	vs	ccsP	Re	.610	.659 ± .211	.628 ± .042	.604 ± .094
brixP	vs	ccsP	Be	.750	.920 ± .111	.804 ± .025	.688 ± .078
brixP	vs	ccsP	Se	.631	.910 ± .140	.736 ± .032	.481 ± .113
brixR	vs	ccsR	Re	.286	1.063 ± 2.408	.366 ± .060	.251 ± .138
brixR	vs	ccsR	Be	.205	.562 ± .235	.386 ± .059	-.066 ± .147
brixR	vs	ccsR	Se	.466	.701 ± .168	.585 ± .046	.257 ± .138
brixPR	vs	ccsP	Re	.661	.827 ± .168	.715 ± .034	.598 ± .095
brixPR	vs	ccsP	Be	.714	.777 ± .122	.738 ± .032	.646 ± .086
brixPR	vs	ccsP	Se	.670	.899 ± .090	.793 ± .026	.493 ± .112
brixPR	vs	ccsP	RBS	.690	.829 ± .067	.753 ± .017	.576 ± .056
brixPR	vs	ccsR	Re	.440	1.381 ± 2.883	.528 ± .050	.403 ± .124
brixPR	vs	ccsR	Be	.404	.821 ± .183	.616 ± .043	.239 ± .139
brixPR	vs	ccsR	Se	.561	.782 ± .145	.675 ± .038	.421 ± .121
brixPR	vs	ccsR	RBS	.493	.837 ± .103	.649 ± .023	.341 ± .074
brixPR	vs	ccsPR	Re	.613	.762 ± .220	.660 ± .039	.559 ± .101
brixPR	vs	ccsPR	Be	.652	.782 ± .126	.714 ± .034	.540 ± .104
brixPR	vs	ccsPR	Se	.684	.841 ± .104	.759 ± .029	.522 ± .107
brixPR	vs	ccsPR	RBS	.665	.818 ± .071	.733 ± .018	.533 ± .060

Table 61 continued (8/8)

Character & crop		Type	Plots	Means			
X	Y		rP	rG	rP	rE	
hardnessP	vs	fibreP	Re	.519	.593 ± .195	.557 ± .048	.471 ± .115
hardnessP	vs	fibreP	Be	.521	.625 ± .187	.569 ± .047	.432 ± .120
hardnessP	vs	fibreP	Se	.559	.781 ± .155	.659 ± .039	.394 ± .125
hardnessR	vs	fibreR	Re	.607	.695 ± .174	.633 ± .042	.508 ± .109
hardnessR	vs	fibreR	Be	.638	.741 ± .128	.687 ± .037	.486 ± .113
hardnessR	vs	fibreR	Se	.585	.978 ± .106	.770 ± .028	.195 ± .142
hardnessPR	vs	fibreP	Re	.585	.697 ± .155	.642 ± .041	.493 ± .112
hardnessPR	vs	fibreP	Be	.617	.691 ± .153	.641 ± .041	.505 ± .110
hardnessPR	vs	fibreP	Se	.591	.922 ± .113	.751 ± .030	.333 ± .131
hardnessPR	vs	fibreP	RBS	.599	.755 ± .085	.671 ± .022	.472 ± .065
hardnessPR	vs	fibreR	Re	.612	.631 ± .171	.617 ± .043	.582 ± .097
hardnessPR	vs	fibreR	Be	.637	.800 ± .112	.724 ± .033	.441 ± .119
hardnessPR	vs	fibreR	Se	.589	.834 ± .118	.717 ± .034	.361 ± .128
hardnessPR	vs	fibreR	RBS	.612	.756 ± .078	.687 ± .021	.481 ± .064
hardnessPR	vs	fibrePR	Re	.664	.656 ± .149	.657 ± .039	.664 ± .082
hardnessPR	vs	fibrePR	Be	.676	.731 ± .123	.700 ± .035	.570 ± .099
hardnessPR	vs	fibrePR	Se	.670	.898 ± .088	.788 ± .026	.420 ± .121
hardnessPR	vs	fibrePR	RBS	.669	.750 ± .072	.711 ± .020	.576 ± .056

For Re, Be, or Se,

Plots, df = 70, r is significantly > 0 at .232 (P.05) or .302 (P.01)

Means, df = 22, t = r/se is significant at 2.074 (P.05) or 2.819(P.01)

For RBS

Plots, df = 214, r is significantly > 0 at .138 (P.05) or .181 (P.01)

Means, df = 70, t = r/se is significant at 1.994 (P.05) or 2.648(P.01)

Correlations could not be computed if variance ratios were less than 1.0 for X or Y.
These cases have blank spaces instead of correlations.

Table 62. Trial Te, Genotypic, phenotypic and environmental correlations between P and R crops for Re, Be and Se types. RBS = Re+Be+Se = 72 families. The crop (P, R) is included in the name of the character.

Character & crop X	Y	Type	Plots rP	Means		rP	rE
				rG	rP		
tchP	vs	tchR	Re	.610	.788 ± .171	.675 ± .038	.503 ± .110
tchP	vs	tchR	Be	.512	.691 ± .201	.587 ± .046	.431 ± .120
tchP	vs	tchR	Se	.567	.750 ± .185	.633 ± .042	.458 ± .117
tchP	vs	tchR	RBS	.591	.767 ± .091	.669 ± .022	.463 ± .066
ccsP	vs	ccsR	Re	.634	2.620 ± 5.916	.851 ± .019	.533 ± .106
ccsP	vs	ccsR	Be	.458	1.083 ± .126	.800 ± .125	.197 ± .142
ccsP	vs	ccsR	Se	.604	.984 ± .071	.848 ± .020	.493 ± .112
ccsP	vs	ccsR	RBS	.573	1.070 ± .066	.828 ± .012	.388 ± .071
tshP	vs	tshR	Re	.545	.800 ± .167	.652 ± .040	.378 ± .126
tshP	vs	tshR	Be	.471	.768 ± .175	.624 ± .042	.345 ± .130
tshP	vs	tshR	Se	.520	.747 ± .177	.626 ± .042	.415 ± .122
tshP	vs	tshR	RBS	.541	.791 ± .087	.666 ± .022	.376 ± .072
nmgyotP	vs	nmgyotR	Re	.434	.887 ± .184	.658 ± .039	.322 ± .132
nmgyotP	vs	nmgyotR	Be	.314	.751 ± .172	.612 ± .043	.304 ± .134
nmgyotP	vs	nmgyotR	Se	.340	.765 ± .192	.607 ± .044	.342 ± .130
nmgyotP	vs	nmgyotR	RBS	.395	.818 ± .091	.657 ± .022	.314 ± .076
fibreP	vs	fibreR	Re	.628	1.043 ± .093	.830 ± .022	.321 ± .132
fibreP	vs	fibreR	Be	.722	1.098 ± .072	.908 ± .012	.383 ± .126
fibreP	vs	fibreR	Se	.545	.885 ± .128	.723 ± .033	.369 ± .127
fibreP	vs	fibreR	RBS	.638	1.030 ± .054	.827 ± .012	.369 ± .073
stalkP	vs	stalkR	Re	.635	.832 ± .216	.684 ± .037	.649 ± .085
stalkP	vs	stalkR	Be	.614	.658 ± .150	.641 ± .041	.625 ± .090
stalkP	vs	stalkR	Se	.502	.689 ± .175	.581 ± .046	.400 ± .124
brixP	vs	brixR	Re	.354	-.023 ± .388	.206 ± .067	.505 ± .110
brixP	vs	brixR	Be	.320	.282 ± .191	.288 ± .064	.367 ± .128
brixP	vs	brixR	Se	.481	.662 ± .208	.559 ± .048	.425 ± .121
hardnessP	vs	hardnessR	Re	.520	.950 ± .133	.730 ± .032	.278 ± .136
hardnessP	vs	hardnessR	Be	.589	.844 ± .107	.746 ± .031	.439 ± .119
hardnessP	vs	hardnessR	Se	.556	.854 ± .116	.732 ± .032	.402 ± .124
visualnmgP	vs	visualnmgR	Re	.384	.573 ± .225	.467 ± .054	.244 ± .139
visualnmgP	vs	visualnmgR	Be	.193	.395 ± .250	.296 ± .063	.029 ± .147
visualnmgP	vs	visualnmgR	Se	.272	.746 ± .191	.531 ± .050	-.038 ± .147
sel7P	vs	sel7R	Re	.349	.319 ± .300	.332 ± .062	.383 ± .126
sel7P	vs	sel7R	Be	.127	.275 ± .315	.198 ± .067	.068 ± .147
sel7P	vs	sel7R	Se	.307	1.050 ± .275	.603 ± .044	.058 ± .147

Table 62 continued (2/2)

Character & crop X	Y	Type	Plots	Means	rP	rE
			rP	rG		
sel8P	vs	sel8R	Re .102	.057 ± .389	.087 ± .069	.125 ± .145
sel8P	vs	sel8R	Be .213	.343 ± .336	.264 ± .065	.159 ± .144
sel8P	vs	sel8R	Se .221	1.296 ± .781	.501 ± .052	.079 ± .147
sel10P	vs	sel10R	Re .010	1.688 ± 3.389	.165 ± .068	-.062 ± .147
sel10P	vs	sel10R	Be .207	.739 ± .309	.405 ± .058	-.029 ± .147
sel10P	vs	sel10R	Se -.075	-.311 ± .479	-.060 ± .069	.162 ± .144

For Re, Be, or Se,

Plots, df = 70, r is significantly > 0 at .232 (P.05) or .302 (P.01)

Means, df = 22, t = r/se is significant at 2.074 (P.05) or 2.819(P.01)

For Re + Be + Se,

Plots, df = 214, r is significantly > 0 at .138 (P.05) or .181 (P.01)

Means, df = 70, t = r/se is significant at 1.994 (P.05) or 2.648(P.01)

Table 63. Phenotypic correlations' between family means in the Te trial.

Factorial AOV of correlations in Tables 50 and 51 using :-

8 selection Characters x

2 crops (P, R) x

3 Te trial types (Re, Be, Se) x

15 replicates = 5 Te trial harvest characters (FIBRE, TCH, CCS, TSH, NMGYOT)
for each type (Re, Be, and Se).

Some data are also included in the AOV table for separate factorial AOV for
characters and crops within each type.

VARIATE: Z	Analysis over all types			AOV of each separate type		
	DF	MS	F	Re F	Be F	Se F
Blocks	14	1.48480	21.4**	13.4**	6.9**	7.6**
Factors						
Char	7	1.83504	26.4**	8.6**	8.1**	13.8**
Type	2	0.03128	0.5			
Crop	1	0.59556	8.6**	8.5**	0.0	6.7*
Char.Type	14	0.09442	1.4			
Char.Crop	7	0.50438	7.3**	4.7**	2.0	3.1**
Type.Crop	2	0.16180	2.3			
Char.Type.Crop	14	0.05906	0.9			
RESIDUAL	658	0.06933		0.05487	0.07529	0.06796
GRAND MEAN		0.3507		0.343	0.346	0.364
Total number of observations		720		240	240	240
Standard error per plot		0.26331		0.2342	0.2744	0.2607
CV% (S.E./plot as %GM)		75.1		68.4	79.3	71.7

***** TABLES OF MEANS *****

Char	SEL7	SEL8	SEL10	STALKS	BRIX	HARDNESS	VisNMG
	0.4959	0.4704	0.3690	0.2625	0.2094	0.1607	0.5490

Char	WS
	0.2889

Type	Re	Be	Se
	0.3425	0.3459	0.3637

Crop	P	R
	0.3220	<< 0.3795

Table 63 continued 2/3

Type	Re	Be	Se
Char			
SEL7	0.4692	0.4864	0.5320
SEL8	0.4285	0.4293	0.5533
SEL10	0.2946	0.3930	0.4194
STALKS	0.3160	0.2189	0.2525
BRIX	0.3007	0.1618	0.1656
HARDNESS	0.1595	0.1908	0.1318
VisNMG	0.5358	0.5462	0.5651
WS	0.2358	0.3407	0.2903

TABLE	Char	Type	Crop	Char Type
Significance	**	ns	**	ns
REP	90	240	360	30
SED	0.03925	0.02404	0.01963	0.06799
LSD.05	0.07732	0.04736	0.03867	0.13394
LSD.01	0.10205	0.06250	0.05104	0.17677

TABLE	Char Crop	Type Crop	Char Type Crop
Significance	**	ns	ns
REP	45	120	15
SED	0.05551	0.03399	0.09615
LSD.05	0.10935	0.06696	0.18942
LSD.01	0.14433	0.08837	0.24999

Crop	P	R
Char		
SEL7	0.4697	0.5220
SEL8	0.4174	0.5233
SEL10	0.2995	< 0.4385
STALKS	0.0973	<< 0.4276
BRIX	0.2403	0.1784
HARDNESS	0.1808	0.1406
VisNMG	0.5008	0.5972
WS	0.3699	>> 0.2080

Crop Type	P	R	NB. Although this interaction was not significant, the crops term was highly significant in the separate analyses of the Re and Se types.
Re	0.2985	<< 0.3865	
Be	0.3471	0.3447	
Se	0.3202	<< 0.4072	

Table 63 continued 3/3

Type	Re		Be		Se	
Crop	P	R	P	R	P	R
Char						
SEL7	0.4337	0.5047	0.5029	0.4698	0.4724	0.5915
SEL8	0.3653	0.4917	0.4104	0.4482	0.4764	0.6301
SEL10	0.1261	0.4631	0.4141	0.3718	0.3582	0.4807
STALKS	0.1433	0.4886	0.0784	0.3595	0.0702	0.4349
BRIX	0.3677	0.2337	0.1731	0.1504	0.1801	0.1512
HARDNESS	0.2221	0.0970	0.2322	0.1494	0.0881	0.1755
VisNMG	0.4745	0.5970	0.5154	0.5771	0.5126	0.6176
WS	0.2553	0.2162	0.4503	0.2311	0.4041	0.1766

* Correlations were transformed to Z before analysis. All results presented are Z values. $Z = (\text{LOGe}(1+r) - \text{LOGe}(1-r))/2$ (Snedecor, 1962, page 175)

Significant differences are shown by > ($P \leq 0.05$) and >> ($P \leq 0.01$). A blank between adjoining values on the same line shows that they do not differ significantly. However, significant differences for other comparisons may not be listed. They can be checked using the LSD values provided in the boxes.

Table 64. Competition analysis (F and CV values from RCB) of weight (KG) in the Te trial.

Crop	Type	Row A		Row B		Row C		A+B+C		A+C		A+C-2B
		F	CV	F								
P	Re	1.1	21	1.3	23	1.4	23	2.4**	13	2.0*	15	0.7
	Be	3.0**	20	1.7	19	1.0	22	3.8**	12	2.5**	16	0.7
	Se	1.1	25	1.9*	18	1.0	20	2.2*	12	1.1	17	0.7
R	Re	1.3	25	1.6	26	1.9*	22	2.8**	15	1.9*	18	0.7
	Be	2.5**	21	1.9*	22	0.8	25	2.2*	16	1.7	20	1.1
	Se	1.5	25	1.4	21	1.9*	24	3.5**	13	2.5**	19	0.9
PR	Re	1.4	19	1.6	21	1.9*	19	2.9**	12	2.2**	14	0.8
	Be	3.2**	17	2.0*	17	1.0	20	3.0**	12	2.4**	15	1.1
	Se	1.4	22	1.6	18	1.5	19	3.3**	11	2.0*	16	0.8
P	Re+Be+Se`	1.8**	22	1.6**	21	1.3	22	3.1**	12	2.0**	16	0.7
R		1.8**	24	1.7**	23	1.6**	24	3.0**	15	2.2**	19	0.9
PR		2.0**	20	1.8**	19	1.7**	19	3.5**	12	2.5**	15	0.8

There were 24 families in each of the Re, Be and Se types
 For Re+Be+Se there were 72 treatments, the three types of the same family being regarded as different treatments. Degrees of freedom were :-

Treatments	Error
23	46 for Re, Be, Se
71	142 for Re+Be+Se

~ Row A is the southern row of the 3-row plot (A+B+C)

Table 65. Competition analysis (F and CV values from RCB) of number of stalks in the Te trial.

Crop	Type	Row A`		Row B		Row C		A+B+C		A+C		A+C-2B
		F	CV	F	CV	F	CV	F	CV	F	CV	F
P	Re	1.1	21	1.0	24	1.4	23	1.5	16	1.4	18	0.7
	Be	1.7	21	1.9*	16	1.1	24	3.3**	12	2.2*	15	0.7
	Se	1.7	23	1.6	17	1.4	20	2.6**	11	1.6	16	0.8
R	Re	1.6	23	1.5	22	3.9**	16	4.0**	13	4.4**	13	1.1
	Be	2.4**	18	3.0**	16	1.7	22	6.7**	9	4.0**	12	0.9
	Se	3.8**	17	1.8*	17	3.0**	20	9.8**	8	6.3**	12	1.1
PR	Re	1.3	20	1.4	21	2.7**	17	2.7**	13	2.8**	14	0.9
	Be	2.0*	18	2.5**	15	1.4	21	4.9**	9	3.1**	12	0.8
	Se	2.8**	18	1.6	15	2.4**	17	6.6**	8	3.9**	12	1.0

Degrees of freedom were 23 for treatments and 46 for error.

* Row A is the southern row of the 3-row plot (A+B+C)

Table 66. Competition analysis (F and CV values from RCB) of weight per stalk in the Te trial.

Crop	Type	Row A`		Row B		Row C		A+B+C		A+C		A+C-2B	
		F	CV	F	CV	F	CV	F	CV	F	CV	F	
P	Re	1.5	20	1.2	29	1.0	19	1.9*	16	2.0*	14	0.7	
	Be	1.8*	18	2.7**	16	1.4	23	2.5**	13	1.6	17	0.9	
	Se	1.2	17	2.0*	17	2.5**	19	3.5**	10	2.2**	14	1.0	
R	Re	1.1	23	1.2	23	2.0*	16	2.3**	12	1.8*	14	0.6	
	Be	0.8	22	1.1	22	1.1	20	1.3	14	1.2	16	0.8	
	Se	1.9*	21	1.5	16	1.7	17	2.7**	12	2.3**	15	1.1	
PR	Re	1.8*	16	1.2	23	1.7	15	2.5**	12	2.8**	11	0.7	
	Be	1.3	17	1.8	16	1.6	18	2.2*	12	1.7	14	0.8	
	Se	1.6	17	1.7	14	2.7**	16	3.3**	9	2.6**	12	1.1	

Degrees of freedom were 23 for treatments and 46 for error.

* Row A is the southern row of the 3-row plot (A+B+C)

Table 67. Competition analysis (F and CV values from Factorial RCB) of weight (KG) in the Te trial, with 3 types (Re, Be, Se) and 24 families as factors.

Item		Row A [~]	Row B	Row C	A+B+C	A+C	A+C-2B
P crop	(CV)	22	21	22	12	16	
Type	(F)	4.7**	5.2**	6.2**	14.9**	9.6**	1.0
Family	(F)	3.1**	2.7**	1.8*	5.7**	3.5**	0.8
Family x type (F)		1.0	0.9	0.8	1.3	1.0	0.6
Means (KG)							
General mean		67.2	70.24	71.9	209.3	139.1	-1.4
Re		63.4 (100)	67.76 (100)	67.0 (100)	198.2 (100)	130.4 (100)	-5.1
Be		71.0 (112)	74.72 (110)	75.9 (113)	221.6 (112)	146.9 (113)	-2.6
Se		67.2 (106)	68.25 (101)	72.7 (109)	208.2 (105)	139.9 (107)	3.4
		Be>>Re	Be>>Re	Be>>Re	Be>>Re	Be>>Re	
			Be>>Se		Be>>Se		
				Se> Re	Se> Re	Se> Re	
R crop	(CV)	24	23	24	15	19	
Type	(F)	4.4*	3.9*	7.7**	12.8**	9.2**	0.6
Family	(F)	3.8**	2.6**	3.3**	6.8**	5.0**	0.8
Family x type (F)		0.7	1.2	0.5	0.7	0.6	0.9
Means (KG)							
General mean		77.1	80.7	79.3	237.1	156.4	-5.0
Re		72.2 (100)	77.5 (100)	73.2 (100)	223.0 (100)	145.4 (100)	-9.6
Be		81.1 (112)	85.6 (110)	85.4 (117)	252.1 (113)	166.5 (115)	-4.7
Se		78.0 (108)	79.0 (102)	79.2 (108)	236.3 (106)	157.2 (108)	-0.8
		Be>>Re	Be>>Re	Be>>Re	Be>>Re	Be>>Re	
			Be> Se	Be> Se	Be>>Se		
				Se> Re	Se> Re	Se> Re	
PR crop	(CV)	20	19	19	12	15	
Type	(F)	6.2**	5.9**	9.3**	18.6**	13.0**	1.0
Family	(F)	4.0**	2.7**	3.1**	7.3**	5.2**	0.8
Family x type (F)		0.8	1.1	0.7	0.9	0.7	0.9
Means (KG)							
General mean		72.16	75.48	75.57	223.2	147.7	-3.2
Re		67.82 (100)	72.64 (100)	70.10 (100)	210.6 (100)	137.9 (100)	-7.4
Be		76.06 (112)	80.16 (110)	80.62 (115)	236.8 (112)	156.7 (114)	-3.6
Se		72.60 (107)	73.63 (101)	75.98 (108)	222.2 (106)	148.6 (108)	1.3
		Be>>Re	Be>>Re	Be>>Re	Be>>Re	Be>>Re	
			Be>>Se		Be>>Se		
				Se> Re	Se>>Re	Se>>Re	

^{*} For the Re, Be and Se types, means are shown in () as per cent of the Re type.

[~] Row A is the southern row of the 3-row plot (A+B+C)

Degrees of freedom were: Type (2), Family (2), Family x type (46), Error (142)

> Significantly greater than, P ≤ 0.05, >> highly significant, P ≤ 0.01

Table 68. Competition analysis (F and CV values from factorial RCB) of number of stalks in the Te trial, with 3 types (Re, Be, Se) and 24 families as factors.

Item		Row A [~]	Row B	Row C	A+B+C	A+C	A+C-2B
P crop	(CV)	22	20	22	13	16	
Type	(F)	1.4	0.5	0.9	1.1	1.8	1.5
Family	(F)	3.1**	2.3**	1.8*	4.8**	3.6**	1.0
Family x type	(F)	0.8	0.8	1.1	1.0	0.8	0.6
Means							
General mean		52.79	51.37	53.00	157.2	105.8	3.1
Re		53.63(100)	52.15 (100)	52.68(100)	158.5 (100)	106.3 (100)	2.0
Be		50.93 (95)	51.49 (99)	51.92(99)	154.3 (97)	102.8 (97)	-0.1
Se		53.82(100)	50.47 (97)	54.42(103)	158.7 (100)	108.2 (102)	7.3
R crop	(CV)	19	19	19	10	12	
Type	(F)	1.0	0.3	1.1	2.6	2.4	0.2
Family	(F)	5.8**	4.4**	6.4**	16.8**	13.0**	1.4
Family x type	(F)	0.7	0.8	1.0	0.8	0.9	0.9
Means							
General mean		70.59	70.97	73.03	214.6	143.6	1.7
Re		70.24(100)	71.07(100)	71.89(100)	213.2 (100)	142.1 (100)	0.0
Be		69.21(99)	70.04(99)	72.14(100)	211.4 (99)	141.3 (99)	1.3
Se		72.32(103)	71.79(101)	75.06(104)	219.2 (103)	147.4 (104)	3.8
PR crop	(CV)	18	17	18	10	13	
Type	(F)	1.3	0.1	1.2	1.9	2.5	0.8
Family	(F)	4.6**	3.5**	4.2**	10.8**	8.3**	1.3
Family x type	(F)	0.7	0.8	1.1	0.9	0.8	0.7
Means							
General mean		61.69	61.17	63.02	185.9	124.7	2.4
Re		61.93 (100)	61.61 (100)	62.28 (100)	185.8 (100)	124.2 (100)	1.0
Be		60.07 (97)	60.76 (99)	62.03 (100)	182.9 (98)	122.1 (98)	0.6
Se		63.07 (102)	61.13 (99)	64.74 (104)	188.9 (102)	127.8 (103)	5.5

[~] For the Re, Be and Se types, means are shown in () as per cent of the Re type.

Degrees of freedom were: Type (2), Family (2), Family x type (46), Error (142)

[~] Row A is the southern row of the 3-row plot (A+B+C).

Table 69. Competition analysis (F and CV values from factorial RCB) of weight per stalk in the Te trial, with 3 types (Re, Be, Se) and 24 families as factors.

Item		Row A`	Row B	Row C	A+B+C	A+C	A+C-2B
P crop	(CV)	18	21	21	13	15	
Type	(F)	13.2**	3.6*	10.4**	19.1**	20.2**	1.2
Family	(F)	2.7**	3.6**	3.1**	6.1**	4.3**	0.9
Family x type	(F)	1.0	0.7	0.9	0.6	0.7	0.8
Means							
General mean		1.298	1.399	1.393	4.090	2.691	-0.107
Re		1.213 (100)	1.349 (100)	1.293 (100)	3.856 (100)	2.507 (100)	-0.191
Be		1.411 (116)	1.473 (109)	1.509 (117)	4.394 (114)	2.921 (117)	-0.026
Se		1.268 (105)	1.374 (102)	1.376 (106)	4.019 (104)	2.645 (106)	-0.104
		Be>>Re	Be>Re	Be>>Re	Be>>Re	Be>>Re	
		Be>>Se	Be>Se	Be>>Se	Be>>Se	Be>>Se	
						Se> Re	
R crop	(CV)	22	21	18	13	15	
Type	(F)	6.5**	7.1**	15.9**	22.0**	17.7**	0.6
Family	(F)	2.4**	2.0**	2.6**	4.5**	3.5**	0.6
Family x type	(F)	0.7	0.8	1.0	0.7	0.8	0.9
Means							
General mean		1.108	1.151	1.101	3.360	2.209	-0.094
Re		1.041 (100)	1.109 (100)	1.028 (100)	3.179 (100)	2.069 (100)	-0.149
Be		1.185 (114)	1.237 (112)	1.204 (117)	3.627 (114)	2.390 (116)	-0.084
Se		1.098 (105)	1.108 (100)	1.070 (104)	3.276 (103)	2.168 (105)	-0.048
		Be>>Re	Be>>Re	Be>>Re	Be>>Re	Be>>Re	
		Be> Se	Be>>Se	Be>>Se	Be>>Se	Be>>Se	
PR crop	(CV)	17	18	16	11	12	
Type	(F)	13.7**	6.8**	17.8**	28.7**	27.6**	1.1
Family	(F)	2.8**	3.2**	3.9**	6.8**	5.1**	0.7
Family x type	(F)	0.9	0.6	1.0	0.5	0.8	0.9
Means							
General mean		1.203	1.275	1.247	3.725	2.450	-0.101
Re		1.127 (100)	1.229 (100)	1.161 (100)	3.517 (100)	2.288 (100)	-0.170
Be		1.298 (115)	1.355 (110)	1.357 (117)	4.011 (114)	2.655 (116)	-0.055
Se		1.183 (105)	1.241 (101)	1.223 (105)	3.647 (104)	2.406 (105)	-0.076
		Be>>Re	Be>>Re	Be>>Re	Be>>Re	Be>>Re	
		Be>>Se	Be>>Se	Be>>Se	Be>>Se	Be>>Se	
						Se> Re	

* Row A is the southern row of the 3-row plot (A+B+C)

~ For the Re, Be and Se types, means are shown in () as per cent of the Re type.

Degrees of freedom were: Type (2), Family (23), Family x type (46), Error (142)

> Significantly greater than, P ≤ 0.05, >> highly significant, P ≤ 0.01

Table 70. Trial Te, genotypic, phenotypic and environmental correlations (\pm standard error) for weight (KG) of rows A, B (middle) and C in the Re, Be and Se types.

X	Character & crop Y	Type	Plots rP	Means		rP	rE
				rG	rG		
Ap	vs	Bp	Re	.379	1.293 \pm 2.047	.470 \pm .054	.340 \pm .130
Ap	vs	Cp	Re	.123	2.840 \pm 5.319	.399 \pm .058	-.091 \pm .146
Bp	vs	Cp	Re	.123	2.310 \pm 1.785	.512 \pm .051	-.149 \pm .144
Ar	vs	Br	Re	.387	1.447 \pm .848	.587 \pm .046	.234 \pm .139
Ar	vs	Cr	Re	.297	1.053 \pm .703	.445 \pm .056	.163 \pm .144
Br	vs	Cr	Re	.096	1.375 \pm .635	.448 \pm .056	-.227 \pm .140
Apr	vs	Bpr	Re	.439	.766 \pm .484	.504 \pm .052	.381 \pm .126
Apr	vs	Cpr	Re	.261	1.103 \pm .596	.452 \pm .055	.072 \pm .147
Bpr	vs	Cpr	Re	.132	1.674 \pm .750	.549 \pm .049	-.250 \pm .138
Ap	vs	Bp	Be	.273	1.117 \pm .345	.582 \pm .046	.008 \pm .147
Ap	vs	Cp	Be	.404	5.478 \pm 59.076	.668 \pm .039	.185 \pm .142
Bp	vs	Cp	Be	.058	7.734 \pm 84.453	.486 \pm .053	-.170 \pm .143
Ar	vs	Br	Be	.262	0.904 \pm .309	.500 \pm .052	.043 \pm .147
Ar	vs	Cr	Be				
Br	vs	Cr	Be				
Apr	vs	Bpr	Be	.302	0.933 \pm .250	.569 \pm .047	.063 \pm .147
Apr	vs	Cpr	Be	.463	4.233 \pm 35.531	.666 \pm .039	.306 \pm .134
Bpr	vs	Cpr	Be	.187	3.313 \pm 27.920	.384 \pm .059	.078 \pm .147
Ap	vs	Bp	Se	.056	1.430 \pm 1.900	.297 \pm .063	-.082 \pm .146
Ap	vs	Cp	Se	.179	.123 \pm 5.672	.182 \pm .067	.190 \pm .142
Bp	vs	Cp	Se	.090	8.246 \pm 103.045	.506 \pm .052	-.239 \pm .139
Ar	vs	Br	Se	.111	1.548 \pm 1.097	.379 \pm .060	-.116 \pm .145
Ar	vs	Cr	Se	.458	1.689 \pm .645	.789 \pm .026	.216 \pm .141
Br	vs	Cr	Se	.093	1.607 \pm .975	.440 \pm .056	-.210 \pm .141
Apr	vs	Bpr	Se	.090	1.375 \pm .949	.359 \pm .061	-.112 \pm .146
Apr	vs	Cpr	Se	.325	1.654 \pm .906	.602 \pm .044	.142 \pm .144
Bpr	vs	Cpr	Se	.080	1.744 \pm .981	.457 \pm .055	-.250 \pm .138

For Plots, df = 70, correlations significantly > 0 at .232 (P.05) or .302 (P.01)
 For Means, df = 22, t = r/se is significant at 2.074 (P.05) or 2.819(P.01)

The name of the character consists of the row name (A, B or C) followed by the crop in lower case (p = P, r = R, pr = PR)

Correlations could not be computed if variance ratios were less than 1.0 for X or Y.
 These cases have blank spaces instead of correlations.

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BUREAU OF SUGAR

23 APR 1990

EXPERIMENT STATIONS

PROJECT REPORT

Volume 4 of 7

PROJECT 409

BUNCH FAMILY SELECTION

Efficiency of bunch-planted and single-
planted seedlings for selecting
superior crosses in sugar cane

by

J.C. Skinner, N. Berding and D.M. Hogarth

1989

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Table 50. Correlation matrix for means, harvest and selection data, in trial Te.
 24 crosses * 3 types (Re, Be, Se). P crop only.

ReFIBREp	1	1.0000						DF = 22
BeFIBREp	2	0.8908	1.0000					
SeFIBREp	3	0.7648	0.7970	1.0000				
ReTCHp	4	0.3343	0.3041	0.2285	1.0000			
BeTCHp	5	0.1696	0.1429	0.1229	0.5258	1.0000		
SeTCHp	6	0.5106	0.5270	0.3781	0.5212	0.5536	1.0000	
ReCCSp	7	-0.4165	-0.4773	-0.3397	0.1920	0.2182	-0.0150	1.0000
BeCCSp	8	-0.6494	-0.6029	-0.4129	-0.2055	0.0388	-0.1021	0.7699
SeCCSp	9	-0.4314	-0.5240	-0.2222	-0.0769	-0.0337	-0.0844	0.7448
ReTSHp	10	0.1442	0.0997	0.0780	0.9374	0.5415	0.4462	0.5201
BeTSHp	11	-0.0501	-0.0645	-0.0235	0.4285	0.9451	0.4823	0.4664
SeTSHp	12	0.3312	0.3067	0.2748	0.4655	0.5150	0.9262	0.2757
ReNMGYP	13	-0.0425	-0.0852	-0.0671	0.8435	0.5004	0.3428	0.6820
BeNMGYP	14	-0.2253	-0.2380	-0.1548	0.3393	0.8618	0.3816	0.5853
SeNMGYP	15	0.1438	0.0979	0.1073	0.4006	0.4552	0.8136	0.4470
ReSEL7	16	0.2096	0.2954	0.1917	0.6414	0.6686	0.5280	0.1897
BeSEL7	17	0.1422	0.2529	0.1565	0.4773	0.8271	0.5320	0.2601
SeSEL7	18	0.1872	0.2752	0.3108	0.5086	0.4754	0.6053	0.2979
ReSEL8	19	0.1441	0.1884	0.0279	0.6163	0.6706	0.4008	0.1632
BeSEL8	20	-0.1457	-0.0252	-0.0601	0.3503	0.7145	0.3663	0.3700
SeSEL8	21	0.0993	0.1767	0.3342	0.5896	0.4150	0.5243	0.3960
ReSEL10	22	-0.0964	-0.0847	-0.1914	0.5114	0.3941	0.0493	0.0489
BeSEL10	23	0.0689	0.0459	0.1535	0.3788	0.7108	0.3071	0.3952
SeSEL10	24	0.1030	0.2274	0.1637	0.5541	0.3543	0.4196	0.2975
ReSTALK	25	0.1313	0.1444	0.0077	0.4331	0.3397	0.2535	-0.0203
BeSTALK	26	0.1428	0.2512	0.0706	0.0918	0.5669	0.2079	-0.1675
SeSTALK	27	0.2438	0.4087	0.2896	-0.0498	0.1431	0.4392	-0.2361
ReBRIX	28	-0.0791	-0.2601	-0.2212	0.2731	0.5138	0.2167	0.6285
BeBRIX	29	-0.4249	-0.3818	-0.2700	-0.2084	0.0984	-0.0670	0.6227
SeBRIX	30	-0.1358	-0.2253	0.1075	-0.0919	0.0275	-0.0850	0.5258
ReHARD	31	0.5568	0.5211	0.6135	0.3822	0.3752	0.3860	-0.2935
BeHARD	32	0.4589	0.5690	0.6166	0.2182	0.3362	0.5308	-0.3256
SeHARD	33	0.4962	0.4394	0.6592	0.0953	0.0577	0.1446	-0.2856
ReVISG	34	0.2896	0.2553	0.1822	0.7933	0.6523	0.4692	0.2406
BeVISG	35	0.0474	0.1212	0.0412	0.4474	0.8624	0.5190	0.3078
SeVISG	36	0.1740	0.2440	0.2568	0.6090	0.4981	0.6177	0.3845
ReWS	37	0.1882	0.1263	0.2015	0.4753	0.1945	0.2544	0.1407
BeWS	38	0.0794	-0.0658	0.1114	0.4776	0.5007	0.4256	0.3798
SeWS	39	0.2973	0.1499	0.1199	0.5588	0.3895	0.5653	0.1922
ReSTVAR	40	-0.2465	-0.1728	-0.1802	-0.0132	0.0086	-0.0692	-0.3191
BeSTVAR	41	0.2037	0.1390	0.3997	-0.1863	0.1299	0.0621	-0.2633
SeSTVAR	42	-0.1725	-0.1461	-0.0809	0.1115	-0.1666	0.1314	0.2400
ReBRVAR	43	0.0695	0.1681	0.1401	-0.3196	-0.2804	-0.1100	-0.4441
BeBRVAR	44	0.0908	-0.1245	-0.0792	0.2007	0.0920	-0.0452	-0.0336
SeBRVAR	45	0.1179	0.0908	-0.0992	0.1968	0.0371	0.1859	-0.0637
ReHVAR	46	0.3343	0.3729	0.5884	0.1215	-0.1057	-0.1155	-0.2936
BeHVAR	47	0.0306	0.1160	0.2307	0.2183	0.0334	0.0751	0.3445
SeHVAR	48	0.2475	0.1966	0.2770	0.1887	-0.1247	-0.2330	-0.0905
ReGVAR	49	-0.3335	-0.1754	-0.3720	-0.2196	0.1215	-0.1749	-0.1892
BeGVAR	50	0.1021	-0.0954	0.1702	-0.1649	0.0882	-0.0053	0.2218
SeGVAR	51	-0.2710	-0.2706	-0.2398	0.3668	0.0300	0.0070	0.2842

Table 50 continued (2/6)

BeCCSp	8	1.0000											
SeCCSp	9	0.6924	1.0000										
ReTSHp	10	0.0936	0.1839	1.0000									
BeTSHp	11	0.3613	0.2015	0.5441	1.0000								
SeTSHp	12	0.1701	0.2946	0.4965	0.5383	1.0000							
ReNMGYp	13	0.2780	0.3388	0.9750	0.5669	0.4572	1.0000						
BeNMGYp	14	0.5341	0.3306	0.5078	0.9782	0.4915	0.5727	1.0000					
SeNMGYp	15	0.3440	0.4995	0.4982	0.5411	0.9694	0.5079	0.5381					
ReSEL7	16	-0.0762	-0.0994	0.6315	0.6087	0.4671	0.5797	0.5239					
BeSEL7	17	0.1262	0.0321	0.5178	0.8103	0.5167	0.4899	0.7430					
SeSEL7	18	0.2055	0.2111	0.5435	0.5133	0.6592	0.5151	0.4725					
ReSEL8	19	-0.0854	-0.1522	0.6045	0.6054	0.3283	0.5569	0.5279					
BeSEL8	20	0.3288	0.1342	0.4496	0.7730	0.3980	0.4761	0.7646					
SeSEL8	21	0.2382	0.2687	0.6462	0.4684	0.6034	0.6396	0.4451					
ReSEL10	22	-0.0689	-0.2819	0.4722	0.3545	-0.0542	0.4383	0.3210					
BeSEL10	23	0.2632	0.0575	0.4839	0.7526	0.3176	0.4953	0.7253					
SeSEL10	24	0.2534	-0.0542	0.5898	0.4129	0.3798	0.5668	0.3939					
ReSTALK	25	-0.3572	-0.1672	0.3621	0.2074	0.1784	0.3144	0.1213					
BeSTALK	26	-0.3553	-0.4127	0.0268	0.4148	0.0376	-0.0194	0.3040					
SeSTALK	27	-0.2784	-0.2278	-0.1299	0.0418	0.3305	-0.1814	-0.0433					
ReBRIX	28	0.3815	0.4141	0.4581	0.6138	0.3667	0.5321	0.6427					
BeBRIX	29	0.8040	0.5037	0.0442	0.3480	0.1353	0.1896	0.4768					
SeBRIX	30	0.3780	0.7363	0.0941	0.1546	0.1959	0.1933	0.2113					
ReHARD	31	-0.3677	-0.1923	0.2246	0.2241	0.2782	0.0959	0.0995					
BeHARD	32	-0.2144	-0.1562	0.0712	0.2383	0.4315	-0.0438	0.1297					
SeHARD	33	-0.2734	-0.0346	-0.0285	-0.0359	0.1141	-0.1247	-0.1230					
ReVISG	34	-0.1248	-0.0694	0.7780	0.5774	0.4205	0.7121	0.4895					
BeVISG	35	0.1953	0.0215	0.5089	0.8681	0.4999	0.5013	0.8150					
SeVISG	36	0.1845	0.1988	0.6615	0.5286	0.6662	0.6404	0.4871					
ReWS	37	0.1413	0.0846	0.4720	0.2240	0.2754	0.4259	0.2216					
BeWS	38	0.3846	0.3744	0.5519	0.5905	0.5531	0.5470	0.6076					
SeWS	39	0.1263	0.1314	0.5549	0.4062	0.5953	0.4985	0.3817					
ReSTVAR	40	-0.1064	-0.2728	-0.1274	-0.0383	-0.1719	-0.1430	-0.0392					
BeSTVAR	41	-0.1863	-0.1767	-0.2529	0.0556	-0.0146	-0.2906	0.0097					
SeSTVAR	42	0.2672	0.1769	0.1821	-0.0641	0.2058	0.2288	-0.0047					
ReBRVAR	43	-0.1475	-0.2371	-0.4227	-0.3129	-0.1804	-0.4689	-0.3287					
BeBRVAR	44	-0.2915	0.0926	0.1569	0.0138	-0.0049	0.1286	-0.0319					
SeBRVAR	45	-0.0374	-0.1885	0.1560	0.0236	0.1065	0.1203	0.0058					
ReHVAR	46	-0.4205	-0.0675	0.0026	-0.2415	-0.1421	-0.0800	-0.3224					
BeHVAR	47	0.2574	0.3913	0.3056	0.1211	0.2192	0.3307	0.1340					
SeHVAR	48	-0.3067	-0.0172	0.1376	-0.2102	-0.2339	0.0825	-0.2587					
ReGVAR	49	0.1289	-0.1965	-0.2419	0.1501	-0.2318	-0.2283	0.1716					
BeGVAR	50	0.2393	0.2564	-0.0540	0.1646	0.1032	-0.0174	0.1958					
SeGVAR	51	0.3676	0.0125	0.4198	0.1461	0.0123	0.4547	0.2164					

Table 50 continued (3/6)

SeNMGYp	15	1.0000						
ReSEL7	16	0.3985	1.0000					
BeSEL7	17	0.4638	0.7776	1.0000				
SeSEL7	18	0.6250	0.4420	0.5452	1.0000			
ReSEL8	19	0.2701	0.9199	0.7469	0.3591	1.0000		
BeSEL8	20	0.3959	0.6852	0.9007	0.4206	0.6944	1.0000	
SeSEL8	21	0.5852	0.4960	0.4524	0.8901	0.3775	0.3708	1.0000
ReSEL10	22	-0.0860	0.5947	0.3386	0.0430	0.6676	0.4023	0.1387
BeSEL10	23	0.2865	0.6046	0.7068	0.2352	0.5996	0.7817	0.3240
SeSEL10	24	0.3316	0.5809	0.4543	0.5333	0.5989	0.4578	0.6508
ReSTALK	25	0.1327	0.5017	0.2450	0.1560	0.4701	0.0467	0.2976
BeSTALK	26	-0.0627	0.5036	0.4878	0.0479	0.4644	0.3495	0.0790
SeSTALK	27	0.2323	0.1657	0.0722	0.1472	0.0310	-0.0764	0.1960
ReBRIX	28	0.4513	0.4701	0.5243	0.2351	0.4162	0.5354	0.2431
BeBRIX	29	0.2557	-0.0602	0.2247	0.1679	-0.0785	0.3669	0.1744
SeBRIX	30	0.3147	-0.0404	0.1506	0.3394	-0.1822	0.0952	0.3848
ReHARD	31	0.1496	0.3962	0.4463	0.3478	0.3117	0.2460	0.3163
BeHARD	32	0.2995	0.2442	0.3787	0.4583	0.1232	0.2809	0.3623
SeHARD	33	0.0232	-0.1120	0.0371	0.2770	-0.2260	-0.1399	0.1946
ReVISG	34	0.3636	0.8909	0.6750	0.4173	0.8477	0.5592	0.4952
BeVISG	35	0.4584	0.7423	0.9238	0.4378	0.7303	0.9148	0.4179
SeVISG	36	0.6371	0.5026	0.5380	0.9260	0.4061	0.4369	0.9397
ReWS	37	0.2554	0.1096	0.2365	0.2780	0.1231	0.3104	0.2034
BeWS	38	0.5810	0.2026	0.3887	0.4982	0.2387	0.4134	0.3973
SeWS	39	0.5746	0.3615	0.4340	0.4600	0.3624	0.4053	0.3393
ReSTVAR	40	-0.2021	-0.1957	-0.1973	-0.0114	-0.0880	-0.2474	0.0685
BeSTVAR	41	-0.0897	0.0966	0.0585	0.0324	-0.0457	-0.0042	0.0678
SeSTVAR	42	0.2505	0.1312	-0.1328	0.1230	0.0473	-0.0704	0.2482
ReBRVAR	43	-0.2385	-0.2942	-0.2828	-0.1773	-0.1924	-0.2187	-0.2265
BeBRVAR	44	0.0231	0.1168	-0.1231	-0.1254	0.0817	-0.0852	-0.0719
SeBRVAR	45	0.0723	0.1768	0.0879	-0.0824	0.3044	0.0286	-0.1554
ReHVAR	46	-0.2197	-0.1441	-0.0560	0.0589	-0.2011	-0.1940	0.1446
BeHVAR	47	0.2539	0.0515	0.1841	0.4223	0.0385	0.2828	0.4810
SeHVAR	48	-0.2536	0.0638	-0.0826	-0.1005	0.0719	-0.2286	-0.1044
ReGVAR	49	-0.2296	0.0429	0.1929	-0.0059	0.2539	0.3344	-0.2020
BeGVAR	50	0.1288	-0.0415	0.1118	-0.1531	-0.0948	0.2390	-0.1653
SeGVAR	51	0.0509	0.1376	-0.0744	0.0487	0.2254	0.0168	0.1649

Table 50 continued (4/6)

ReSEL10	22	1.0000						
BeSEL10	23	0.4006	1.0000					
SeSEL10	24	0.4811	0.5046	1.0000				
ReSTALK	25	0.4151	0.0101	0.2081	1.0000			
BeSTALK	26	0.2671	0.3473	0.0992	0.6297	1.0000		
SeSTALK	27	-0.1938	-0.0263	0.0887	0.5061	0.6058	1.0000	
ReBRIX	28	0.1799	0.5524	0.2112	0.1241	0.1476	-0.1850	1.0000
BeBRIX	29	-0.2399	0.2838	0.1599	-0.3283	-0.2001	-0.1847	0.5070
SeBRIX	30	-0.3614	0.0521	-0.1583	-0.0280	-0.1247	-0.0883	0.4580
ReHARD	31	0.0571	0.3202	0.2481	0.1436	0.1974	0.0785	0.1964
BeHARD	32	-0.0916	0.2770	0.2661	-0.0523	0.1496	0.3281	-0.0148
SeHARD	33	-0.2191	0.0228	-0.0990	-0.0463	-0.0932	0.0435	-0.1220
ReVISG	34	0.6722	0.5714	0.6185	0.5581	0.3870	0.0427	0.5697
BeVISG	35	0.4043	0.8530	0.5197	0.2252	0.5380	0.1353	0.5725
SeVISG	36	0.1206	0.3107	0.6318	0.2731	0.1508	0.2169	0.3359
ReWS	37	0.0810	0.3606	0.2316	-0.5615	-0.5204	-0.5560	0.1373
BeWS	38	0.1129	0.4255	0.2724	-0.3110	-0.4213	-0.4421	0.3773
SeWS	39	0.2084	0.3172	0.3103	-0.2150	-0.3576	-0.4879	0.3647
ReSTVAR	40	0.1893	-0.2901	-0.0181	0.3468	0.1452	0.2151	-0.4185
BeSTVAR	41	-0.1508	0.1858	-0.1133	-0.0728	0.3127	0.2490	0.1099
SeSTVAR	42	0.1054	0.0033	0.2528	0.0808	-0.1770	0.1955	0.1054
ReBRVAR	43	-0.0457	-0.2144	-0.1572	-0.3055	-0.1761	0.0108	-0.7469
BeBRVAR	44	0.4051	0.0571	-0.2076	0.2153	0.0785	-0.1041	0.1038
SeBRVAR	45	0.2690	0.1562	0.2192	0.1051	-0.0574	0.0042	-0.0965
ReHVAR	46	-0.1790	-0.0497	-0.1727	0.0380	0.0097	0.1106	-0.4315
BeHVAR	47	-0.0871	0.2030	0.3549	-0.1204	-0.2303	-0.0928	0.1259
SeHVAR	48	0.1246	-0.0813	-0.1223	0.1007	-0.0844	-0.1593	-0.2583
ReGVAR	49	0.3479	-0.0040	0.0524	-0.1681	0.0508	-0.2061	-0.1407
BeGVAR	50	-0.1696	0.4955	-0.2105	-0.4942	-0.2074	-0.2938	0.3335
SeGVAR	51	0.4159	0.2124	0.5306	-0.0733	-0.3519	-0.2923	0.0300

22 23 24 25 26 27 28

Table 50 continued (5/6)

BeBRIX	29	1.0000						
SeBRIX	30	0.3717	1.0000					
ReHARD	31	-0.1864	0.1554	1.0000				
BeHARD	32	-0.0927	0.0541	0.7811	1.0000			
SeHARD	33	-0.2375	0.3051	0.6951	0.6895	1.0000		
ReVISG	34	-0.0746	-0.0052	0.4257	0.1789	-0.0425	1.0000	
BeVISG	35	0.2628	0.0458	0.4068	0.4068	-0.0214	0.6489	1.0000
SeVISG	36	0.2019	0.3358	0.2988	0.3853	0.1144	0.5349	0.4917
ReWS	37	0.1482	-0.0723	0.2543	0.2650	0.1598	0.1758	0.2266
BeWS	38	0.3122	0.1456	0.2221	0.2490	0.1807	0.2921	0.3813
SeWS	39	0.0734	0.0068	0.3251	0.2219	0.1255	0.4107	0.3664
ReSTVAR	40	-0.2110	-0.2273	-0.0990	-0.0178	0.0286	-0.1654	-0.1566
BeSTVAR	41	-0.0267	0.1501	0.3062	0.1832	0.1388	0.0780	0.0620
SeSTVAR	42	0.1819	0.0011	-0.3816	-0.3200	-0.4078	0.1810	-0.1265
ReBRVAR	43	-0.2652	-0.3934	-0.1822	0.0299	0.0066	-0.4832	-0.2729
BeBRVAR	44	-0.4836	0.0450	0.0068	-0.0672	0.0959	0.2242	-0.0224
SeBRVAR	45	-0.2403	-0.4529	0.0117	-0.1046	-0.0463	0.1867	0.1059
ReHVAR	46	-0.3881	0.2562	0.4175	0.3301	0.5899	-0.1350	-0.1398
BeHVAR	47	0.2876	0.3921	0.1345	0.3857	0.2950	0.0951	0.1857
SeHVAR	48	-0.3907	-0.0212	0.2183	-0.1052	0.2381	0.1167	-0.1980
ReGVAR	49	0.1240	-0.3145	-0.1560	0.0148	-0.2818	-0.0958	0.1810
BeGVAR	50	0.3075	0.2097	0.0448	-0.0277	0.1157	-0.0489	0.1687
SeGVAR	51	0.0674	-0.3565	-0.1467	-0.1983	-0.2221	0.2058	0.0429
	29	30	31	32	33	34	35	
SeVISG	36	1.0000						
ReWS	37	0.2294	1.0000					
BeWS	38	0.4116	0.7864	1.0000				
SeWS	39	0.4025	0.7637	0.8121	1.0000			
ReSTVAR	40	0.0081	-0.3363	-0.1549	-0.2789	1.0000		
BeSTVAR	41	0.0428	-0.0819	-0.1231	-0.1522	-0.1139	1.0000	
SeSTVAR	42	0.1818	0.0040	0.0221	-0.0587	-0.0559	0.2388	1.0000
ReBRVAR	43	-0.3113	0.0839	-0.0696	-0.0888	0.1865	-0.0933	-0.0935
BeBRVAR	44	-0.0913	0.0153	0.0277	0.0874	-0.1344	0.0422	0.0248
SeBRVAR	45	-0.1859	0.1032	0.1016	0.1953	0.1296	-0.1422	0.2081
ReHVAR	46	0.0131	0.1064	-0.0977	-0.1761	0.0530	0.1162	-0.2391
BeHVAR	47	0.4673	0.2522	0.2718	0.1512	-0.1865	-0.3941	-0.1403
SeHVAR	48	-0.2066	0.1106	-0.0332	-0.0284	-0.1555	0.0772	-0.0635
ReGVAR	49	-0.1247	0.0223	0.0604	-0.0074	0.2277	-0.2648	-0.1734
BeGVAR	50	-0.2115	0.4170	0.3625	0.2834	-0.5892	0.3941	0.1354
SeGVAR	51	0.0458	0.3633	0.3662	0.2614	0.1798	-0.2751	0.3718
	36	37	38	39	40	41	42	

Table 50 continued (6/6)

ReBRVAR	43	1.0000						
BeBRVAR	44	0.0961	1.0000					
SeBRVAR	45	0.1189	-0.0419	1.0000				
ReHVAR	46	0.3416	0.1662	-0.1819	1.0000			
BeHVAR	47	-0.1087	-0.0745	-0.4032	0.1997	1.0000		
SeHVAR	48	0.2733	0.3005	0.3516	0.5151	-0.2917	1.0000	
ReGVAR	49	0.4359	-0.0783	-0.0284	-0.2038	0.0137	-0.1751	1.0000
BeGVAR	50	0.0450	0.1680	0.0848	0.0322	-0.0551	0.1147	-0.2209
SeGVAR	51	-0.0532	-0.1093	0.5151	-0.2858	-0.0900	0.0474	0.0127
		43	44	45	46	47	48	49
BeGVAR	50	1.0000						
SeGVAR	51	-0.0857	1.0000					
		50	51					

Correlation is significantly different from zero if > 0.404 (5%), 0.515 (1%).

p = plant crop

NMGY = NMGYOT

VISG = visual net merit grade

SEL7 = number of selections graded 7+

SEL8 = number of selections graded 8+

SEL10 = number of selections graded 10+

WS = weight per stalk

STVAR = within plot variance for number of stalks

BRVAR = within plot variance for BRIX

HVAR = within plot variance for HARDNESS

GVAR = within plot variance for visual net merit grade

Table 51. Correlation matrix for means, harvest and selection data. 24 crosses * 3 types (Re, Be, Se), trial Te, R crop only.

ReFIBREr	1	1.0000					DF = 22	
BeFIBREr	2	0.7567	1.0000					
SeFIBREr	3	0.7927	0.8191	1.0000				
ReTCHr	4	0.6069	0.4317	0.4600	1.0000			
BeTCHr	5	0.3733	0.2203	0.2114	0.6907	1.0000		
SeTCHr	6	0.4458	0.3433	0.2226	0.7779	0.7386	1.0000	
ReCCSr	7	-0.5379	-0.4709	-0.5204	-0.0490	0.0242	0.0363	1.0000
BeCCSr	8	-0.5969	-0.6960	-0.6396	-0.1803	-0.2252	-0.2379	0.7940
SeCCSr	9	-0.4063	-0.4369	-0.3630	0.1104	-0.0341	-0.0658	0.7345
ReTSHr	10	0.4664	0.3074	0.3190	0.9669	0.6766	0.7707	0.2041
BeTSHr	11	0.1349	-0.0592	-0.0521	0.6329	0.9154	0.6581	0.3478
SeTSHr	12	0.2985	0.1863	0.0959	0.7823	0.6968	0.9454	0.2782
ReNMGYr	13	0.2570	0.1541	0.1111	0.8295	0.6624	0.6891	0.4515
BeNMGYr	14	-0.1365	-0.2932	-0.2871	0.3537	0.7011	0.4036	0.5755
SeNMGYr	15	0.0893	0.0192	-0.1069	0.6301	0.5929	0.7898	0.5105
ReSEL7	16	0.2994	0.1142	0.2524	0.7818	0.5179	0.5216	0.1287
BeSEL7	17	0.2779	0.0822	0.1509	0.6740	0.4438	0.5736	0.2435
SeSEL7	18	0.3930	0.3599	0.2866	0.8253	0.5700	0.7785	0.0643
ReSEL8	19	0.3187	0.2216	0.3654	0.7576	0.4366	0.5396	0.1944
BeSEL8	20	0.0665	-0.0240	-0.0165	0.5595	0.4253	0.5353	0.3585
SeSEL8	21	0.3263	0.2638	0.2568	0.8276	0.6409	0.8143	0.1355
ReSEL10	22	0.2397	0.1649	0.2044	0.6672	0.5684	0.5854	0.1391
BeSEL10	23	0.0521	0.0416	0.1407	0.4897	0.5772	0.5647	0.1373
SeSEL10	24	0.1707	0.0166	0.0479	0.6439	0.6525	0.6120	0.1421
ReSTALK	25	0.5211	0.4426	0.3393	0.7369	0.6877	0.7858	-0.1843
BeSTALK	26	0.3277	0.3095	0.2149	0.4763	0.7636	0.6467	-0.1369
SeSTALK	27	0.4400	0.4384	0.2941	0.6053	0.6844	0.7295	-0.0902
ReBRIX	28	0.0265	0.0210	0.2101	0.3688	-0.0219	-0.0106	0.3664
BeBRIX	29	-0.1135	-0.1588	-0.0147	0.1998	-0.0991	0.0322	0.4237
SeBRIX	30	0.0463	-0.0734	0.1663	0.3054	-0.1895	-0.0866	0.2297
ReHARD	31	0.6330	0.6438	0.6008	0.2316	-0.0048	0.1269	-0.2585
BeHARD	32	0.5101	0.6868	0.5981	0.2443	0.1294	0.0501	-0.0724
SeHARD	33	0.5501	0.7113	0.7697	0.3761	0.0977	0.0652	-0.1923
ReVISG	34	0.3696	0.2387	0.3601	0.8772	0.5594	0.6380	0.1043
BeVISG	35	0.2553	0.1466	0.1890	0.7409	0.6185	0.6806	0.2472
SeVISG	36	0.3911	0.3428	0.3340	0.8497	0.5621	0.7755	0.0972
ReWS	37	0.1873	0.0469	0.2181	0.4440	0.0438	0.0800	0.1281
BeWS	38	0.0718	-0.0995	0.0156	0.3030	0.2693	0.1323	0.2172
SeWS	39	0.0047	-0.1166	-0.0763	0.2494	0.0774	0.3839	0.1613
ReSTVAR	40	0.2532	0.3487	0.2647	0.2365	0.5104	0.3788	-0.2982
BeSTVAR	41	0.0953	0.1033	0.1103	0.1063	0.4220	0.4426	-0.2200
SeSTVAR	42	0.3109	0.1341	0.2533	0.4337	0.3624	0.5454	-0.1485
ReBRVAR	43	-0.1094	-0.0499	-0.1272	-0.1713	-0.2502	-0.2181	0.0296
BeBRVAR	44	-0.2082	-0.0701	-0.1038	-0.4778	-0.4101	-0.2839	-0.0401
SeBRVAR	45	-0.3591	-0.2712	-0.3077	-0.5115	-0.4924	-0.3571	0.0322
ReHVAR	46	0.1850	0.3047	0.1295	-0.0720	-0.3826	-0.1438	-0.2970
BeHVAR	47	0.1188	0.0753	0.0547	0.1282	-0.0341	-0.0833	0.1385
SeHVAR	48	0.3605	0.1175	0.3338	-0.1840	-0.3426	-0.2232	-0.3101
ReGVAR	49	0.1231	0.1165	0.1254	0.5237	0.4401	0.4987	0.1132
BeGVAR	50	-0.2310	-0.2537	-0.1557	-0.0414	0.2020	0.1426	0.1354
SeGVAR	51	0.1614	-0.0836	-0.0100	0.2525	0.2781	0.2732	0.0019

Table 51 continued (2/6)

BeCCSr	8	1.0000											
SeCCSr	9	0.7233	1.0000										
ReTSHr	10	0.0278	0.2885	1.0000									
BeTSHr	11	0.1830	0.2609	0.7037	1.0000								
SeTSHr	12	0.0123	0.2598	0.8355	0.7181	1.0000							
ReNMGYr	13	0.2353	0.4817	0.9288	0.7769	0.8234	1.0000						
BeNMGYr	14	0.4666	0.4026	0.4878	0.8964	0.5194	0.6606	1.0000					
SeNMGYr	15	0.2292	0.5126	0.7434	0.7031	0.9307	0.8359	0.6185					
ReSEL7	16	0.1004	0.2679	0.8037	0.5699	0.5952	0.7042	0.3139					
BeSEL7	17	0.1750	0.2555	0.7317	0.5233	0.6386	0.6462	0.2819					
SeSEL7	18	-0.0532	0.1413	0.8226	0.5628	0.7897	0.6964	0.2842					
ReSEL8	19	0.0177	0.2933	0.7919	0.4510	0.6179	0.6728	0.1860					
BeSEL8	20	0.2921	0.3518	0.6503	0.5530	0.6376	0.6491	0.3782					
SeSEL8	21	-0.0116	0.1186	0.8446	0.6466	0.8212	0.7169	0.3963					
ReSEL10	22	-0.0538	0.2508	0.6816	0.5580	0.6419	0.6202	0.2958					
BeSEL10	23	-0.0247	0.1370	0.5123	0.5675	0.5921	0.4878	0.3231					
SeSEL10	24	0.0927	0.1270	0.6717	0.7012	0.6381	0.6255	0.5502					
ReSTALK	25	-0.3772	-0.2330	0.6697	0.5578	0.6736	0.5938	0.3386					
BeSTALK	26	-0.3979	-0.3322	0.4265	0.6187	0.5077	0.4171	0.4642					
SeSTALK	27	-0.3376	-0.2900	0.5703	0.5663	0.6023	0.5362	0.4126					
ReBRIX	28	0.3462	0.5339	0.4593	0.1139	0.1739	0.4373	0.0962					
BeBRIX	29	0.3857	0.4955	0.3026	0.0463	0.1906	0.2222	-0.0080					
SeBRIX	30	0.3755	0.5850	0.3631	-0.0368	0.1053	0.3070	-0.1014					
ReHARD	31	-0.3361	-0.2858	0.1708	-0.1457	0.0292	0.0721	-0.2335					
BeHARD	32	-0.3386	-0.0945	0.2245	-0.0196	0.0060	0.1568	-0.1101					
SeHARD	33	-0.3713	-0.0461	0.3177	-0.0587	0.0357	0.1705	-0.2372					
ReVISG	34	-0.0227	0.2631	0.8850	0.5610	0.7033	0.7622	0.2789					
BeVISG	35	0.1036	0.2374	0.7932	0.6686	0.7350	0.7458	0.4227					
SeVISG	36	-0.0266	0.1744	0.8569	0.5625	0.8017	0.7153	0.3026					
ReWS	37	0.2036	0.4326	0.4745	0.1177	0.2209	0.3515	-0.0115					
BeWS	38	0.2275	0.4325	0.3528	0.3476	0.2724	0.3219	0.2386					
SeWS	39	0.1078	0.2881	0.2830	0.1164	0.4742	0.2020	-0.0320					
ReSTVAR	40	-0.4411	-0.3202	0.1399	0.3313	0.2415	0.0668	0.2102					
BeSTVAR	41	-0.2639	-0.2759	0.0436	0.3149	0.3398	0.0064	0.1033					
SeSTVAR	42	-0.2147	-0.2571	0.3840	0.2884	0.4373	0.2568	0.1330					
ReBRVAR	43	0.2014	0.1234	-0.1547	-0.1674	-0.1683	-0.1401	-0.1914					
BeBRVAR	44	-0.0413	-0.1677	-0.4679	-0.4138	-0.3039	-0.3459	-0.3012					
SeBRVAR	45	-0.0138	-0.1540	-0.5020	-0.5042	-0.3931	-0.4799	-0.3468					
ReHVAR	46	-0.1357	-0.2303	-0.1445	-0.4490	-0.2162	-0.2532	-0.4376					
BeHVAR	47	0.1072	0.1070	0.1599	0.0055	-0.0506	0.1486	0.0357					
SeHVAR	48	-0.1144	-0.1975	-0.2444	-0.3920	-0.2618	-0.3151	-0.3437					
ReGVAR	49	-0.0222	0.2397	0.5298	0.4364	0.5539	0.4291	0.2109					
BeGVAR	50	0.1610	0.1640	-0.0052	0.2596	0.2069	0.0636	0.1514					
SeGVAR	51	0.0435	0.0328	0.2464	0.2905	0.2901	0.1899	0.2131					

Table 51 continued (3/6)

SeNMGYr	15	1.0000							
ReSEL7	16	0.4929	1.0000						
BeSEL7	17	0.5116	0.7840	1.0000					
SeSEL7	18	0.6322	0.6776	0.7738	1.0000				
ReSEL8	19	0.5147	0.9059	0.7725	0.6838	1.0000			
BeSEL8	20	0.5686	0.7032	0.9361	0.7173	0.6496	1.0000		
SeSEL8	21	0.6465	0.7122	0.7888	0.9345	0.7433	0.7391	1.0000	
ReSEL10	22	0.5445	0.6449	0.7161	0.7059	0.7203	0.6633	0.7131	
BeSEL10	23	0.4604	0.5824	0.7032	0.6112	0.6109	0.7727	0.7032	
SeSEL10	24	0.5092	0.6161	0.5750	0.5901	0.5159	0.5452	0.7305	
ReSTALK	25	0.5387	0.4440	0.3041	0.6060	0.4022	0.2117	0.5806	
BeSTALK	26	0.4138	0.2820	0.1434	0.3801	0.2042	0.1189	0.3886	
SeSTALK	27	0.4831	0.3164	0.3078	0.5668	0.2506	0.2849	0.5589	
ReBRIX	28	0.1954	0.6037	0.3988	0.2984	0.6520	0.3663	0.3582	
BeBRIX	29	0.2338	0.5537	0.5474	0.3055	0.6512	0.5000	0.3361	
SeBRIX	30	0.1256	0.5225	0.5120	0.4033	0.5382	0.4584	0.3208	
ReHARD	31	-0.0898	0.0268	0.1444	0.1060	0.0734	-0.0208	0.0199	
BeHARD	32	-0.0256	0.0860	0.1411	0.1435	0.1860	0.0215	0.0534	
SeHARD	33	-0.0598	0.2190	0.2962	0.3621	0.3511	0.1672	0.2451	
ReVISG	34	0.5722	0.9288	0.7716	0.7755	0.9342	0.6814	0.7933	
BeVISG	35	0.6110	0.7994	0.9380	0.8020	0.7726	0.9314	0.8311	
SeVISG	36	0.6309	0.7274	0.8087	0.9651	0.7572	0.7438	0.9634	
ReWS	37	0.1698	0.5333	0.5787	0.4072	0.5587	0.5243	0.4262	
BeWS	38	0.2482	0.3490	0.4658	0.3174	0.3656	0.4648	0.3964	
SeWS	39	0.4109	0.2838	0.3702	0.3202	0.4088	0.3397	0.3844	
ReSTVAR	40	0.1759	0.0089	0.0111	0.1863	-0.0108	-0.0273	0.1489	
BeSTVAR	41	0.1917	0.1697	0.1924	0.3129	0.1751	0.2183	0.3784	
SeSTVAR	42	0.2984	0.3330	0.4168	0.4351	0.3427	0.3627	0.4973	
ReBRVAR	43	-0.1804	-0.1300	0.1344	0.0878	-0.1401	0.1103	-0.0634	
BeBRVAR	44	-0.2475	-0.3618	-0.3471	-0.4557	-0.3653	-0.2095	-0.4598	
SeBRVAR	45	-0.3198	-0.4797	-0.5867	-0.5700	-0.3700	-0.6325	-0.5208	
ReHVAR	46	-0.2986	-0.2276	-0.2216	0.0551	-0.2368	-0.2364	-0.1364	
BeHVAR	47	-0.0385	-0.0189	-0.0834	0.0195	0.0809	-0.1653	0.0522	
SeHVAR	48	-0.3505	-0.2812	-0.1630	-0.2163	-0.2415	-0.2419	-0.2634	
ReGVAR	49	0.4828	0.4625	0.5483	0.5958	0.5782	0.5110	0.6431	
BeGVAR	50	0.1397	0.1991	0.2848	0.1603	0.1728	0.4029	0.2631	
SeGVAR	51	0.1981	0.1919	0.1595	0.1560	0.1652	0.0966	0.2809	

Table 51 continued (4/6)

ReSEL10	22	1.0000						
BeSEL10	23	0.6513	1.0000					
SeSEL10	24	0.4819	0.4633	1.0000				
ReSTALK	25	0.4623	0.2736	0.4828	1.0000			
BeSTALK	26	0.3198	0.2587	0.3405	0.8534	1.0000		
SeSTALK	27	0.4072	0.2647	0.4184	0.8913	0.8945	1.0000	
ReBRIX	28	0.3835	0.1643	0.2891	-0.1144	-0.2765	-0.1294	1.0000
BeBRIX	29	0.4041	0.3458	0.0909	-0.2293	-0.3708	-0.3005	0.6363
SeBRIX	30	0.2760	0.2205	0.1119	-0.1872	-0.4186	-0.2482	0.7284
ReHARD	31	-0.1704	-0.1747	0.0491	0.2039	0.0653	0.1759	-0.0705
BeHARD	32	0.0097	-0.0374	-0.0069	0.1309	0.0619	0.1381	0.0813
SeHARD	33	0.2549	0.1486	0.0005	0.1041	-0.0405	0.1007	0.2627
ReVISG	34	0.7489	0.6170	0.5789	0.5095	0.3145	0.3674	0.5979
BeVISG	35	0.7454	0.8366	0.5752	0.4291	0.3320	0.4388	0.3382
SeVISG	36	0.7254	0.6265	0.6916	0.5551	0.3189	0.5095	0.4178
ReWS	37	0.3299	0.3422	0.2382	-0.2694	-0.4430	-0.3144	0.6437
BeWS	38	0.3465	0.4770	0.4161	-0.2781	-0.4050	-0.3385	0.3963
SeWS	39	0.2544	0.4315	0.2700	-0.1288	-0.3258	-0.3470	0.1683
ReSTVAR	40	0.1171	0.1396	0.1271	0.5077	0.6350	0.4858	-0.5249
BeSTVAR	41	0.2992	0.5969	0.1939	0.3156	0.4221	0.3159	-0.2472
SeSTVAR	42	0.5178	0.3958	0.2033	0.6064	0.5358	0.6677	-0.0633
ReBRVAR	43	-0.0490	-0.1426	-0.0055	-0.3349	-0.3627	-0.3016	-0.0092
BeBRVAR	44	-0.2994	-0.2118	-0.4105	-0.3080	-0.1504	-0.1829	-0.1329
SeBRVAR	45	-0.4699	-0.5313	-0.2372	-0.2189	-0.2768	-0.3518	-0.2108
ReHVAR	46	-0.3247	-0.3003	-0.3289	-0.1067	-0.2898	-0.1773	-0.0379
BeHVAR	47	-0.2093	-0.0433	-0.0634	-0.1301	-0.2745	-0.2684	0.1412
SeHVAR	48	-0.2343	-0.3377	-0.1274	-0.2225	-0.3202	-0.2338	0.0365
ReGVAR	49	0.8255	0.5599	0.4273	0.2479	0.0788	0.1554	0.2694
BeGVAR	50	0.2364	0.6754	0.2384	-0.2329	-0.1524	-0.2231	0.1057
SeGVAR	51	0.1956	0.0542	0.5947	0.0779	-0.0710	-0.0025	0.2223

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Table 51 continued (5/6)

BeBRIX	29	1.0000						
SeBRIX	30	0.6558	1.0000					
ReHARD	31	-0.1591	-0.0031	1.0000				
BeHARD	32	0.1296	0.1073	0.7407	1.0000			
SeHARD	33	0.2638	0.3856	0.5820	0.8423	1.0000		
ReVISG	34	0.4942	0.4884	0.0623	0.1174	0.3158	1.0000	
BeVISG	35	0.4410	0.3781	0.0879	0.1355	0.2736	0.8221	1.0000
SeVISG	36	0.3732	0.4286	0.1471	0.1557	0.3739	0.8304	0.8242
ReWS	37	0.6233	0.7167	0.0683	0.1820	0.4191	0.5779	0.4980
BeWS	38	0.4633	0.4273	-0.1017	0.1170	0.2490	0.3571	0.4217
SeWS	39	0.4681	0.2439	-0.0793	-0.1096	-0.0205	0.3777	0.3392
ReSTVAR	40	-0.2964	-0.5035	0.3220	0.2990	0.1953	0.0722	0.1597
BeSTVAR	41	-0.0891	-0.2075	-0.2060	-0.2728	-0.1935	0.1371	0.3175
SeSTVAR	42	0.0791	-0.0578	-0.0860	-0.1877	-0.0008	0.3536	0.4481
ReBRVAR	43	-0.0378	0.2309	0.1863	0.0866	0.1382	-0.1076	-0.0234
BeBRVAR	44	-0.2825	-0.2350	-0.0883	-0.3297	-0.2717	-0.3671	-0.3253
SeBRVAR	45	-0.1222	-0.3394	-0.0773	-0.1297	-0.3204	-0.4869	-0.6778
ReHVAR	46	-0.0429	0.1152	0.2687	0.2164	0.2134	-0.1289	-0.2441
BeHVAR	47	0.0994	0.2003	0.0387	0.2259	0.1979	0.0336	-0.0726
SeHVAR	48	-0.1741	0.1555	0.3243	0.0761	0.1578	-0.2350	-0.3198
ReGVAR	49	0.4631	0.1681	-0.2560	-0.0072	0.2412	0.5747	0.5533
BeGVAR	50	0.1615	0.1312	-0.3455	-0.3576	-0.2196	0.1511	0.3651
SeGVAR	51	-0.0251	-0.0833	0.0146	-0.1889	-0.1831	0.2128	0.0780
	29	30	31	32	33	34	35	
SeVISG	36	1.0000						
ReWS	37	0.4990	1.0000					
BeWS	38	0.3878	0.7670	1.0000				
SeWS	39	0.3918	0.5465	0.6436	1.0000			
ReSTVAR	40	0.1498	-0.3128	-0.2544	-0.1487	1.0000		
BeSTVAR	41	0.2562	-0.2268	0.0218	0.1970	0.2929	1.0000	
SeSTVAR	42	0.4201	-0.1573	-0.2547	-0.1402	0.2955	0.4087	1.0000
ReBRVAR	43	0.0312	0.1995	0.1770	0.0983	-0.0770	-0.1217	-0.4191
BeBRVAR	44	-0.4284	-0.2788	-0.3693	-0.1703	-0.2872	-0.0466	-0.0629
SeBRVAR	45	-0.5559	-0.4663	-0.3224	-0.0057	-0.1655	-0.2996	-0.2595
ReHVAR	46	-0.0182	0.0678	-0.0954	0.0474	-0.1746	-0.2628	-0.3297
BeHVAR	47	0.0011	0.3429	0.3951	0.2745	-0.3608	-0.2511	-0.4172
SeHVAR	48	-0.1469	0.0233	-0.0230	-0.0092	-0.3320	-0.1984	-0.1293
ReGVAR	49	0.6197	0.4044	0.5194	0.4798	0.1837	0.2803	0.3716
BeGVAR	50	0.1810	0.2442	0.5441	0.5072	-0.2387	0.6435	-0.0721
SeGVAR	51	0.2433	0.1704	0.4365	0.3480	-0.0580	0.0585	-0.0092
	36	37	38	39	40	41	42	

Table 51 continued (6/6)

ReBRVAR	43	1.0000						
BeBRVAR	44	-0.2098	1.0000					
SeBRVAR	45	-0.0133	0.1016	1.0000				
ReHVAR	46	0.2343	-0.0698	0.1365	1.0000			
BeHVAR	47	-0.0776	-0.2372	0.0657	0.3105	1.0000		
SeHVAR	48	0.2160	0.2585	0.0768	0.3269	-0.0167	1.0000	
ReGVAR	49	0.0929	-0.4389	-0.2664	-0.2776	-0.0905	-0.2930	1.0000
BeGVAR	50	0.0336	0.1408	-0.3039	-0.2279	0.0265	-0.1031	0.2325
SeGVAR	51	0.1979	-0.2485	0.2012	-0.1336	-0.0688	0.1400	0.3691
	43		44		45		46	
BeGVAR	50	1.0000						
SeGVAR	51	0.1892	1.0000					
	50		51					

Correlation is significantly different from zero if > 0.404 (5%), 0.515 (1%).

r = ratoon crop

NMGY = NMGYOT

VISG = visual net merit grade

SEL7 = number of selections graded 7+

SEL8 = number of selections graded 8+

SEL10 = number of selections graded 10+

WS = weight per stalk

STVAR = within plot variance for number of stalks

BRVAR = within plot variance for BRIX

HVAR = within plot variance for HARDNESS

GVAR = within plot variance for visual net merit grade.

Table 52. Correlation matrix for means, harvest and selection data. 24 crosses * 3 types (Re, Be, Se), trial Te, PR crop.

	1	2	3	4	5	6	7
ReFIBRpr	1.0000						
BeFIBRpr	0.8660	1.0000					
SeFIBRpr	0.8637	0.8692	1.0000				
ReTCHpr	0.5325	0.4043	0.4391	1.0000			
BeTCHpr	0.2792	0.2415	0.1950	0.6588	1.0000		
SeTCHpr	0.5002	0.4613	0.3394	0.7393	0.7024	1.0000	
ReCCSpr	-0.5291	-0.5228	-0.4863	0.0537	0.1182	0.0309	1.0000
BeCCSpr	-0.7274	-0.7193	-0.6744	-0.2391	-0.1043	-0.2257	0.8493
SeCCSpr	-0.4657	-0.4805	-0.3164	0.0614	-0.0823	-0.1189	0.8200
ReTSHpr	0.3333	0.2155	0.2570	0.9477	0.6561	0.6995	0.3679
BeTSHpr	-0.0130	-0.0491	-0.0800	0.5467	0.9180	0.5831	0.4527
SeTSHpr	0.3183	0.2723	0.2106	0.7368	0.6507	0.9299	0.3393
ReNMGYpr	0.0927	0.0139	0.0388	0.8125	0.6277	0.5859	0.6045
BeNMGYpr	-0.2635	-0.2765	-0.3182	0.3330	0.7623	0.3993	0.6255
SeNMGYpr	0.0947	0.0823	0.0171	0.6035	0.5346	0.7779	0.5678
ReSEL7	0.2403	0.2341	0.2798	0.7633	0.5381	0.5958	0.2216
BeSEL7	-0.0011	-0.0005	0.0288	0.5325	0.6522	0.4940	0.4473
SeSEL7	0.2218	0.2480	0.2541	0.7319	0.5656	0.7195	0.3021
ReSEL8	0.2852	0.2213	0.1932	0.8093	0.5156	0.5170	0.1206
BeSEL8	0.0403	0.0165	0.0566	0.5129	0.7660	0.5761	0.3351
SeSEL8	0.2011	0.1690	0.1874	0.6968	0.4981	0.6506	0.4087
ReSEL10	0.2165	0.0479	0.1311	0.7221	0.6052	0.4194	0.1227
BeSEL10	0.0319	0.0024	0.1145	0.1928	0.5339	0.3063	0.2700
SeSEL10	0.0621	0.0789	0.0486	0.6200	0.4665	0.6320	0.2665
ReSTALK	0.4247	0.3525	0.2665	0.6176	0.5744	0.6315	-0.1722
BeSTALK	0.2674	0.3135	0.1516	0.2967	0.6590	0.4974	-0.2015
SeSTALK	0.3653	0.4451	0.2885	0.3837	0.5284	0.6534	-0.1902
ReBRIX	-0.0531	-0.1216	-0.0228	0.3294	0.2060	0.1905	0.6599
BeBRIX	-0.3553	-0.3220	-0.1961	-0.0277	-0.1371	-0.0321	0.6869
SeBRIX	-0.0831	-0.1574	0.1663	0.1668	-0.1323	-0.1194	0.4819
ReHARD	0.6572	0.6401	0.6695	0.2769	0.1459	0.2435	-0.3718
BeHARD	0.5213	0.7001	0.6638	0.2101	0.1565	0.2183	-0.2617
SeHARD	0.5813	0.6304	0.7879	0.3081	0.0271	0.1098	-0.2740
ReVISG	0.4129	0.3001	0.3627	0.9067	0.6366	0.6557	0.1840
BeVISG	0.1403	0.1450	0.1391	0.6402	0.8189	0.6610	0.3376
SeVISG	0.3138	0.3316	0.3241	0.8105	0.6115	0.7866	0.2807
ReWSpr	0.1862	0.0937	0.2346	0.4265	0.0986	0.1755	0.1791
BeWSpr	0.0577	-0.0499	0.0913	0.4625	0.3764	0.3172	0.3703
SeWSpr	0.2054	0.0610	0.1012	0.4790	0.2372	0.4656	0.2370
ReWSr_p	-0.0971	-0.0779	0.0137	0.1148	-0.0183	-0.1010	0.0204
BeWSr_p	-0.0515	0.0499	0.0785	-0.2275	-0.1684	-0.3681	-0.2686
SeWSr_p	-0.2302	-0.2386	-0.1145	-0.2069	-0.2035	-0.2065	0.0714
ReSTVAR	0.0128	0.1538	0.0591	0.1579	0.2622	0.1934	-0.3257
BeSTVAR	0.1349	0.1337	0.2461	-0.0173	0.2635	0.2527	-0.1337
SeSTVAR	0.0580	-0.0184	0.0450	0.2525	0.0609	0.3608	0.0108
ReBRVAR	0.1488	0.2316	0.1207	-0.0920	-0.2007	-0.0981	-0.4201
BeBRVAR	0.1149	0.0154	-0.0584	-0.1433	-0.2540	-0.2338	-0.1422
SeBRVAR	-0.0779	-0.0169	-0.0717	-0.1713	-0.3092	-0.0544	-0.2070
ReHVAR	0.3859	0.4020	0.4824	0.0381	-0.2485	-0.1166	-0.3668
BeHVAR	0.0936	0.1091	0.0649	0.1565	-0.0630	-0.0888	0.1896
SeHVAR	0.3082	0.1389	0.3218	-0.0687	-0.3496	-0.3997	-0.3373
ReGVAR	-0.1407	-0.0642	-0.1732	0.3329	0.3537	0.1503	0.1212
BeGVAR	-0.1213	-0.1662	0.0123	-0.1529	0.1369	0.0260	0.2056
SeGVAR	0.0067	-0.0998	-0.0965	0.2768	0.2413	0.2105	0.1799

DF = 22

Table 52 continued (2/6)

BeCCSpr	8	1.0000						
SeCCSpr	9	0.7852	1.0000					
ReTSHpr	10	0.0482	0.3104	1.0000				
BeTSHpr	11	0.2943	0.2352	0.6586	1.0000			
SeTSHpr	12	0.0773	0.2520	0.7932	0.6556	1.0000		
ReNMGYpr	13	0.2889	0.5046	0.9497	0.7282	0.7569	1.0000	
BeNMGYpr	14	0.5429	0.4036	0.5136	0.9475	0.5403	0.6593	1.0000
SeNMGYpr	15	0.3252	0.5069	0.7394	0.6432	0.9468	0.7885	0.6137
ReSEL7	16	0.0280	0.2695	0.7798	0.5425	0.6828	0.7425	0.3931
BeSEL7	17	0.3851	0.3542	0.6503	0.7806	0.6141	0.7011	0.7271
SeSEL7	18	0.1687	0.2987	0.7753	0.6132	0.8056	0.7163	0.4912
ReSEL8	19	-0.1359	0.0552	0.7937	0.4602	0.5251	0.7305	0.2849
BeSEL8	20	0.2292	0.2100	0.5943	0.8293	0.6382	0.6517	0.7501
SeSEL8	21	0.2792	0.3301	0.7795	0.5852	0.7548	0.7276	0.5209
ReSEL10	22	-0.0168	0.0332	0.7112	0.5753	0.4180	0.6301	0.4340
BeSEL10	23	0.1834	0.0999	0.2853	0.5886	0.3519	0.3528	0.5333
SeSEL10	24	0.0912	0.2873	0.6546	0.4896	0.7208	0.6471	0.3860
ReSTALK	25	-0.4092	-0.2319	0.5093	0.4013	0.5191	0.4043	0.2305
BeSTALK	26	-0.4405	-0.4151	0.2094	0.4618	0.3232	0.1656	0.3147
SeSTALK	27	-0.4065	-0.3063	0.2929	0.3453	0.5150	0.2066	0.2033
ReBRIX	28	0.4952	0.6003	0.5212	0.4143	0.4198	0.6249	0.4579
BeBRIX	29	0.7139	0.5942	0.1951	0.1377	0.1913	0.3017	0.2532
SeBRIX	30	0.4396	0.7590	0.3041	0.0579	0.1625	0.3630	0.1038
ReHARD	31	-0.4242	-0.2502	0.1428	-0.0173	0.1379	0.0069	-0.1560
BeHARD	32	-0.3550	-0.1589	0.1159	0.0074	0.1433	0.0079	-0.1074
SeHARD	33	-0.3567	-0.0643	0.1983	-0.1120	0.0733	0.0397	-0.2435
ReVISG	34	-0.0963	0.1664	0.9045	0.5870	0.6999	0.8216	0.3929
BeVISG	35	0.1742	0.1771	0.7161	0.8611	0.7104	0.7414	0.7540
SeVISG	36	0.0578	0.2435	0.8422	0.6125	0.8487	0.7628	0.4626
ReWSpr	37	0.1439	0.2462	0.4688	0.1494	0.2678	0.4066	0.0847
BeWSpr	38	0.3756	0.3825	0.5587	0.5054	0.4557	0.5517	0.4771
SeWSpr	39	0.1721	0.1926	0.5278	0.2967	0.5330	0.4750	0.2322
ReWSr_p	40	0.0464	0.2670	0.0982	0.0040	-0.0100	0.0920	0.0216
BeWSr_p	41	-0.2816	-0.1905	-0.3051	-0.2901	-0.4369	-0.2998	-0.3060
SeWSr_p	42	0.0350	0.0532	-0.1773	-0.1931	-0.1870	-0.1297	-0.1854
ReSTVAR	43	-0.3158	-0.3178	0.0276	0.1173	0.0482	-0.0434	0.0505
BeSTVAR	44	-0.1377	-0.2363	-0.0560	0.1889	0.1538	-0.0932	0.0770
SeSTVAR	45	-0.0596	-0.0136	0.2346	0.0290	0.3440	0.1754	-0.0461
ReBRVAR	46	-0.2126	-0.2114	-0.2118	-0.2745	-0.1691	-0.2788	-0.3106
BeBRVAR	47	-0.1863	-0.1711	-0.1623	-0.2825	-0.2689	-0.1355	-0.2739
SeBRVAR	48	-0.0665	-0.2379	-0.2253	-0.3301	-0.1312	-0.2710	-0.2902
ReHVAR	49	-0.2880	-0.1288	-0.0777	-0.3510	-0.1611	-0.1901	-0.4208
BeHVAR	50	0.0916	0.1893	0.2086	-0.0179	-0.0209	0.2271	0.0206
SeHVAR	51	-0.2122	-0.1285	-0.1635	-0.4157	-0.4305	-0.2784	-0.4408
ReGVAR	52	0.2041	0.0171	0.3482	0.4136	0.1487	0.3465	0.3924
BeGVAR	53	0.2865	0.1406	-0.0584	0.2399	0.0926	0.0063	0.2558
SeGVAR	54	0.1580	0.0923	0.3132	0.2928	0.2484	0.3295	0.2548

Table 52 continued (3/6)

SeNMGYpr	15	1.0000						
ReSEL7	16	0.6349	1.0000					
BeSEL7	17	0.6154	0.5771	1.0000				
SeSEL7	18	0.7497	0.7425	0.7524	1.0000			
ReSEL8	19	0.4373	0.7652	0.4418	0.5343	1.0000		
BeSEL8	20	0.5935	0.5895	0.8825	0.6247	0.4702	1.0000	
SeSEL8	21	0.7259	0.6288	0.6590	0.8408	0.4795	0.4991	1.0000
ReSEL10	22	0.3164	0.4748	0.4313	0.4869	0.7468	0.4122	0.5211
BeSEL10	23	0.2990	0.3949	0.5586	0.2171	0.2760	0.7228	0.2737
SeSEL10	24	0.6987	0.6076	0.4213	0.6282	0.5538	0.4536	0.5547
ReSTALK	25	0.3980	0.4708	0.1114	0.4264	0.5152	0.2657	0.2272
BeSTALK	26	0.2083	0.2113	0.1118	0.1825	0.2399	0.3064	-0.0388
SeSTALK	27	0.4019	0.2362	0.1399	0.3796	0.2280	0.2737	0.1504
ReBRIX	28	0.5195	0.5832	0.4455	0.4254	0.4049	0.4442	0.4634
BeBRIX	29	0.3193	0.1374	0.4685	0.4120	0.0045	0.2244	0.4359
SeBRIX	30	0.2987	0.3607	0.3378	0.4025	0.0375	0.1645	0.3348
ReHARD	31	0.0091	0.1771	0.0805	0.1608	-0.0055	0.1641	0.1796
BeHARD	32	0.0656	0.0325	0.1258	0.2036	-0.0725	0.0865	0.2218
SeHARD	33	-0.0220	0.0890	0.0679	0.2681	-0.0313	-0.0382	0.2938
ReVISG	34	0.6020	0.9067	0.5956	0.7243	0.8908	0.6091	0.6556
BeVISG	35	0.6459	0.6666	0.9003	0.7123	0.5487	0.9504	0.6397
SeVISG	36	0.7734	0.7496	0.7320	0.9661	0.6031	0.6252	0.8597
ReWSpr	37	0.2164	0.3025	0.5007	0.3713	0.2921	0.3186	0.5156
BeWSpr	38	0.4323	0.3965	0.6722	0.5368	0.3333	0.5566	0.6894
SeWSpr	39	0.4665	0.4612	0.4383	0.4579	0.3649	0.3830	0.6284
ReWSr_p	40	0.0761	0.2321	-0.1295	0.1045	0.1196	-0.2178	0.0778
BeWSr_p	41	-0.4123	-0.2265	-0.4535	-0.4454	-0.2153	-0.4334	-0.4446
SeWSr_p	42	-0.1575	-0.2116	-0.2263	-0.2119	-0.0614	-0.2174	-0.2111
ReSTVAR	43	-0.0225	-0.0266	-0.0252	0.0976	0.0931	0.0324	0.0793
BeSTVAR	44	0.0295	0.2263	0.2450	0.2088	0.0587	0.4425	0.0037
SeSTVAR	45	0.2932	0.2431	0.1900	0.3074	0.3473	0.2152	0.1352
ReBRVAR	46	-0.2487	-0.1448	-0.1632	-0.0800	-0.1042	-0.1992	-0.1408
BeBRVAR	47	-0.2596	-0.1446	-0.1402	-0.4299	0.0435	-0.1247	-0.4657
SeBRVAR	48	-0.1799	-0.0806	-0.4280	-0.2794	-0.0498	-0.3493	-0.0114
ReHVAR	49	-0.2380	-0.0789	-0.1260	0.0604	-0.2001	-0.2554	-0.0005
BeHVAR	50	0.0296	-0.0922	0.0196	0.0232	0.1249	-0.0853	0.2444
SeHVAR	51	-0.5137	-0.1335	-0.3607	-0.3108	-0.1126	-0.3909	-0.2290
ReGVAR	52	0.1230	0.1609	0.3852	0.3995	0.4270	0.2527	0.4223
BeGVAR	53	0.0673	0.1125	0.3604	0.0317	-0.0825	0.4709	0.0741
SeGVAR	54	0.2245	0.3059	0.0879	0.1381	0.3232	0.1737	0.3105

Table 52 continued (4/6)

Table 52 continued (5/6)

BeBRIX	29	1.0000						
SeBRIX	30	0.5465	1.0000					
ReHARD	31	-0.2543	0.0871	1.0000				
BeHARD	32	-0.1139	0.0748	0.7994	1.0000			
SeHARD	33	-0.0054	0.3531	0.7299	0.8343	1.0000		
ReVISG	34	0.1030	0.2757	0.2047	0.0595	0.1360	1.0000	
BeVISG	35	0.2064	0.1533	0.2412	0.2129	0.0713	0.7045	1.0000
SeVISG	36	0.3437	0.3401	0.2204	0.2677	0.3021	0.7836	0.7318
ReWSpr	37	0.3777	0.3530	0.1952	0.2016	0.3247	0.4010	0.3985
BeWSpr	38	0.4442	0.3519	0.1239	0.1549	0.2344	0.4533	0.5935
SeWSpr	39	0.2941	0.1539	0.1818	0.0224	0.0984	0.4717	0.4286
ReWSr_p	40	-0.0957	0.2769	-0.1842	-0.0973	0.0325	0.1230	-0.1571
BeWSr_p	41	-0.3078	-0.2062	-0.1754	-0.0193	0.0060	-0.3028	-0.4393
SeWSr_p	42	0.1117	-0.0684	-0.3638	-0.2318	-0.1288	-0.2141	-0.2555
ReSTVAR	43	-0.3425	-0.4155	0.1230	0.2262	0.1926	-0.0223	0.0448
BeSTVAR	44	0.1490	-0.0024	0.1190	-0.0601	-0.0830	0.1909	0.3219
SeSTVAR	45	0.2407	0.0455	-0.2823	-0.3206	-0.1878	0.3244	0.1405
ReBRVAR	46	-0.2967	-0.2188	0.1583	0.1894	0.1016	-0.1864	-0.1224
BeBRVAR	47	-0.2898	-0.0940	0.0367	-0.1514	-0.1748	-0.0895	-0.1419
SeBRVAR	48	-0.1363	-0.3940	-0.0433	-0.0887	-0.0727	-0.1849	-0.2764
ReHVAR	49	-0.0883	0.2330	0.4327	0.4702	0.5557	-0.1178	-0.1601
BeHVAR	50	0.0704	0.1376	0.0996	0.2536	0.2487	0.0084	-0.0227
SeHVAR	51	-0.1017	0.1278	0.2281	0.0228	0.2405	-0.0470	-0.3344
ReGVAR	52	0.1896	-0.1788	-0.3021	-0.0865	-0.0396	0.2378	0.2831
BeGVAR	53	0.2994	0.1951	-0.0351	-0.1183	-0.1282	0.0479	0.3762
SeGVAR	54	0.0040	-0.1324	0.0225	-0.0880	-0.0570	0.3060	0.2044
	29	30	31	32	33	34	35	
SeVISG	36	1.0000						
ReWSpr	37	0.4440	1.0000					
BeWSpr	38	0.5583	0.8488	1.0000				
SeWSpr	39	0.5403	0.7629	0.7989	1.0000			
ReWSr_p	40	0.0190	-0.4357	-0.3389	-0.4303	1.0000		
BeWSr_p	41	-0.4661	-0.4316	-0.5215	-0.5015	0.4525	1.0000	
SeWSr_p	42	-0.2469	-0.2736	-0.2558	-0.2119	0.3399	0.5305	1.0000
ReSTVAR	43	0.1259	-0.3201	-0.2083	-0.2032	0.2405	0.1954	0.2286
BeSTVAR	44	0.1811	-0.1477	-0.0682	0.0125	-0.0893	-0.0270	0.2202
SeSTVAR	45	0.2834	-0.0751	-0.1325	-0.0899	0.1136	-0.1361	0.1725
ReBRVAR	46	-0.1504	0.1312	0.0346	0.0073	-0.0039	0.0300	0.1149
BeBRVAR	47	-0.3639	0.0455	-0.2164	-0.0549	-0.2834	-0.1658	-0.2221
SeBRVAR	48	-0.2983	-0.0609	-0.0891	0.0954	0.0931	0.1704	0.2852
ReHVAR	49	-0.0005	0.1177	-0.0112	-0.0814	0.1687	0.1372	0.0582
BeHVAR	50	0.1033	0.2784	0.2985	0.2499	-0.0279	-0.0363	-0.0448
SeHVAR	51	-0.3377	0.2598	0.0445	0.0172	0.0126	0.1147	-0.0866
ReGVAR	52	0.3360	0.1941	0.4112	0.1574	0.0452	-0.0190	0.0601
BeGVAR	53	0.0157	0.4307	0.5031	0.4159	-0.4176	-0.2572	-0.0053
SeGVAR	54	0.1276	0.2849	0.4512	0.4734	-0.2009	-0.0255	0.0282

Table 52 continued (6/6)

ReSTVAR	43	1.0000						
BeSTVAR	44	0.0050	1.0000					
SeSTVAR	45	0.1296	0.3841	1.0000				
ReBRVAR	46	0.0187	-0.1798	-0.3165	1.0000			
BeBRVAR	47	-0.3315	-0.2419	-0.0682	0.0316	1.0000		
SeBRVAR	48	0.1929	-0.1145	0.0239	0.3268	-0.1185	1.0000	
ReHVAR	49	-0.0998	-0.1398	-0.3610	0.6180	0.0159	-0.0113	1.0000
BeHVAR	50	-0.1248	-0.3982	-0.5114	0.1089	0.0325	-0.1696	0.3553
SeHVAR	51	-0.4380	-0.1295	-0.2672	0.3970	0.1685	0.2353	0.4263
ReGVAR	52	0.3428	-0.1628	0.0686	0.1431	-0.4169	0.0333	-0.0871
BeGVAR	53	-0.4891	0.5092	-0.0295	-0.0128	0.0103	0.0293	-0.1753
SeGVAR	54	0.0032	-0.1255	-0.0583	0.0564	-0.2935	0.4046	-0.2952
		43	44	45	46	47	48	49
BeHVAR	50	1.0000						
SeHVAR	51	0.0471	1.0000					
ReGVAR	52	0.2653	-0.1932	1.0000				
BeGVAR	53	-0.1332	0.1112	-0.1406	1.0000			
SeGVAR	54	-0.1150	0.0609	0.3768	0.1758	1.0000		
		50	51	52	53	54		

Correlation is significantly different from zero if > 0.404 (5%), 0.515 (1%).

pr = (p+r)/2 crop

r_p = (r-p)/2 crop

NMGY = NMGYOT

VISG = visual net merit grade

SEL7 = number of selections graded 7+

SEL8 = number of selections graded 8+

SEL10 = number of selections graded 10+

WS = weight per stalk

STVAR = within plot variance for number of stalks

BRVAR = within plot variance for BRIX

HVAR = within plot variance for HARDNESS

GVAR = within plot variance for visual net merit grade

Table 53. Correlation matrix for means, harvest and selection data. 24 crosses, 3 crop classes (P, R, PR), trial Te, type Re.

		DF = 22						
	1	2	3	4	5	6	7	
ReFIBRep	1	1.0000						
ReFIBREr	2	0.8296	1.0000					
ReFIBRpr	3	0.9514	0.9612	1.0000				
ReTCHp	4	0.3343	0.4110	0.3918	1.0000			
ReTCHR	5	0.4542	0.6069	0.5591	0.6750	1.0000		
ReTCHpr	6	0.4400	0.5714	0.5325	0.8853	0.9406	1.0000	
ReCCSp	7	-0.4165	-0.5535	-0.5109	0.1920	0.0030	0.0903	1.0000
ReCCSr	8	-0.4273	-0.5379	-0.5076	0.0655	-0.0490	-0.0007	0.8510
ReCCSpr	9	-0.4373	-0.5679	-0.5291	0.1438	-0.0198	0.0537	0.9727
ReTSHp	10	0.1442	0.1627	0.1610	0.9374	0.5826	0.7983	0.5201
ReTSHr	11	0.3449	0.4664	0.4277	0.6689	0.9669	0.9170	0.2158
ReTSHpr	12	0.2762	0.3569	0.3333	0.8738	0.8660	0.9477	0.3938
ReNMGYp	13	-0.0425	-0.0360	-0.0408	0.8435	0.4776	0.6890	0.6820
ReNMGYr	14	0.1869	0.2570	0.2342	0.6065	0.8295	0.8018	0.4300
ReNMGYpr	15	0.0680	0.1069	0.0927	0.8072	0.7000	0.8125	0.6225
ReSEL7p	16	0.2096	0.2044	0.2163	0.6414	0.4046	0.5500	0.1897
ReSEL7r	17	0.2027	0.2994	0.2652	0.5157	0.7818	0.7299	0.2858
ReSEL7pr	18	0.2585	0.2041	0.2403	0.7107	0.6924	0.7633	0.3268
ReSEL8p	19	0.1441	0.1568	0.1577	0.6163	0.3163	0.4829	0.1632
ReSEL8r	20	0.3373	0.3187	0.3423	0.5626	0.7576	0.7362	0.3175
ReSEL8pr	21	0.2493	0.2938	0.2852	0.8044	0.6970	0.8093	0.2205
ReSEL10p	22	-0.0964	0.1156	0.0162	0.5114	0.2180	0.3727	0.0489
ReSEL10r	23	0.1414	0.2397	0.2021	0.6048	0.6672	0.6987	0.2231
ReSL10pr	24	0.0927	0.3093	0.2165	0.6236	0.6907	0.7221	0.1625
ReSTp	25	0.1313	0.2709	0.2143	0.4331	0.5365	0.5374	-0.0203
ReSTR	26	0.4080	0.5211	0.4890	0.2877	0.7369	0.5968	-0.2186
ReSTpr	27	0.3367	0.4684	0.4247	0.3659	0.7129	0.6176	-0.1631
ReBRIXp	28	-0.0791	-0.1938	-0.1459	0.2731	0.0622	0.1649	0.6285
ReBRIXr	29	0.1085	0.0265	0.0682	0.3466	0.3688	0.3918	0.4994
ReBRIXpr	30	0.0190	-0.1134	-0.0531	0.3810	0.2447	0.3294	0.7149
ReHARDp	31	0.5568	0.5167	0.5599	0.3822	0.1678	0.2814	-0.2935
ReHARDr	32	0.6375	0.6330	0.6639	0.1905	0.2316	0.2335	-0.4807
ReHARDpr	33	0.6423	0.6165	0.6572	0.3095	0.2136	0.2769	-0.4134
ReVISGp	34	0.2896	0.3307	0.3255	0.7933	0.5161	0.6902	0.2406
ReVISGr	35	0.3294	0.3696	0.3665	0.6654	0.8772	0.8589	0.2429
ReVISGpr	36	0.3723	0.4152	0.4129	0.8380	0.8271	0.9067	0.2778
ReSTVp	37	-0.2465	-0.1497	-0.2044	-0.0132	0.0583	0.0307	-0.3191
ReSTVr	38	0.1905	0.2532	0.2337	0.1190	0.2365	0.2038	-0.3938
ReSTVpr	39	-0.0169	0.0384	0.0128	0.1138	0.1674	0.1579	-0.3844
ReBRVp	40	0.0695	0.0908	0.0844	-0.3196	-0.1612	-0.2486	-0.4441
ReBRVr	41	-0.1028	-0.1094	-0.1111	0.0741	-0.1713	-0.0739	0.1220
ReBRVpr	42	0.1500	0.1354	0.1488	-0.0372	-0.1188	-0.0920	-0.3965
ReHVp	43	0.3343	0.4437	0.4098	0.1215	0.1606	0.1570	-0.2936
ReHVR	44	0.2413	0.1850	0.2212	-0.0605	-0.0720	-0.0732	-0.3590
ReHVpr	45	0.3385	0.3965	0.3859	-0.0085	0.0668	0.0381	-0.4011
ReGVp	46	-0.3335	-0.1591	-0.2524	-0.2196	-0.3321	-0.3103	-0.1892
ReGVR	47	0.0966	0.1231	0.1156	0.5845	0.5237	0.5989	0.2494
ReGVpr	48	-0.2333	-0.0465	-0.1407	0.3711	0.2573	0.3329	0.1439
ReWSp	49	0.1882	0.1617	0.1821	0.4753	0.1191	0.2936	0.1407
ReWSr	50	0.1084	0.1873	0.1568	0.5503	0.4440	0.5328	0.2557
ReWSpr	51	0.1683	0.1869	0.1862	0.5501	0.2755	0.4265	0.2048
ReWSr_p	52	-0.1525	-0.0395	-0.0971	-0.1179	0.2681	0.1148	0.0551

Table 53 continued (2/6)

ReCCSr	8	1.0000											
ReCCSpr	9	0.9497	1.0000										
ReTSHp	10	0.3519	0.4660	1.0000									
ReTSHr	11	0.2041	0.2190	0.6516	1.0000								
ReTSHpr	12	0.3005	0.3679	0.8958	0.9208	1.0000							
ReNMGYp	13	0.5044	0.6300	0.9750	0.5866	0.8449	1.0000						
ReNMGYr	14	0.4515	0.4562	0.6723	0.9288	0.8897	0.6580	1.0000					
ReNMGYpr	15	0.5271	0.6045	0.9187	0.8148	0.9497	0.9265	0.8930					
ReSEL7p	16	-0.1036	0.0675	0.6315	0.3681	0.5403	0.5797	0.4091					
ReSEL7r	17	0.1287	0.2274	0.5477	0.8037	0.7524	0.5167	0.7042					
ReSEL7pr	18	0.0599	0.2216	0.7306	0.6901	0.7798	0.6894	0.6612					
ReSEL8p	19	-0.1615	0.0261	0.6045	0.2655	0.4664	0.5569	0.2979					
ReSEL8r	20	0.1944	0.2754	0.5988	0.7919	0.7717	0.5563	0.6728					
ReSEL8pr	21	-0.0251	0.1206	0.7801	0.6702	0.7937	0.7150	0.6065					
ReSEL10p	22	-0.1992	-0.0587	0.4722	0.1597	0.3363	0.4383	0.1338					
ReSEL10r	23	0.1391	0.1948	0.6036	0.6816	0.7096	0.5677	0.6202					
ReSL10pr	24	0.0580	0.1227	0.6017	0.6860	0.7112	0.5519	0.6007					
ReSTp	25	-0.0960	-0.0545	0.3621	0.4886	0.4723	0.3144	0.5099					
ReSTR	26	-0.1843	-0.2119	0.1661	0.6697	0.4777	0.0741	0.5938					
ReSTpr	27	-0.1695	-0.1722	0.2533	0.6472	0.5093	0.1704	0.6054					
ReBRIXp	28	0.4705	0.5828	0.4581	0.1802	0.3411	0.5321	0.3460					
ReBRIXr	29	0.3664	0.4598	0.4773	0.4593	0.5145	0.5011	0.4373					
ReBRIXpr	30	0.5284	0.6599	0.5833	0.3777	0.5212	0.6463	0.4773					
ReHARDp	31	-0.2704	-0.2944	0.2246	0.0979	0.1729	0.0959	0.0303					
ReHARDr	32	-0.2585	-0.4010	-0.0170	0.1708	0.0914	-0.1639	0.0721					
ReHARDpr	33	-0.2833	-0.3718	0.1140	0.1436	0.1428	-0.0339	0.0541					
ReVISGp	34	-0.0418	0.1252	0.7780	0.4895	0.6867	0.7121	0.4958					
ReVISGr	35	0.1043	0.1911	0.6609	0.8850	0.8582	0.6015	0.7622					
ReVISGpr	36	0.0410	0.1840	0.8269	0.8183	0.9045	0.7529	0.7435					
ReSTVp	37	-0.1624	-0.2619	-0.1274	-0.0006	-0.0659	-0.1430	-0.0514					
ReSTVr	38	-0.2982	-0.3666	-0.0450	0.1399	0.0588	-0.1291	0.0668					
ReSTVpr	39	-0.2186	-0.3257	-0.0482	0.0894	0.0276	-0.1059	0.0399					
ReBRVp	40	-0.3701	-0.4286	-0.4227	-0.2321	-0.3533	-0.4689	-0.3300					
ReBRVr	41	0.0296	0.0859	0.1005	-0.1547	-0.0389	0.1247	-0.1401					
ReBRVpr	42	-0.4156	-0.4201	-0.1719	-0.2108	-0.2118	-0.2365	-0.2750					
ReHVP	43	-0.1827	-0.2558	0.0026	0.1196	0.0714	-0.0800	0.0653					
ReHVR	44	-0.2970	-0.3454	-0.1860	-0.1445	-0.1803	-0.2504	-0.2532					
ReHVpr	45	-0.2886	-0.3668	-0.1514	0.0003	-0.0777	-0.2362	-0.0979					
ReGVp	46	-0.1778	-0.1915	-0.2419	-0.3624	-0.3366	-0.2283	-0.3272					
ReGVR	47	0.1132	0.1990	0.5962	0.5298	0.6169	0.5708	0.4291					
ReGVpr	48	0.0796	0.1212	0.3782	0.2624	0.3482	0.3826	0.2359					
ReWSp	49	0.1111	0.1332	0.4720	0.1536	0.3327	0.4259	0.0628					
ReWSr	50	0.1281	0.2093	0.5703	0.4745	0.5712	0.5407	0.3515					
ReWSpr	51	0.1284	0.1791	0.5570	0.3112	0.4688	0.5145	0.1981					
ReWSr_p	52	-0.0281	0.0204	-0.0940	0.2503	0.0982	-0.0597	0.2556					

Table 53 continued (3/6)

ReNMGYpr	15	1.0000
ReSEL7p	16	0.5508
ReSEL7r	17	0.6608
ReSEL7pr	18	0.7425
ReSEL8p	19	0.4816
ReSEL8r	20	0.6688
ReSEL8pr	21	0.7305
ReSEL10p	22	0.3288
ReSEL10r	23	0.6493
ReSL10pr	24	0.6301
ReSTp	25	0.4427
ReSTr	26	0.3410
ReSTpr	27	0.4043
ReBRIXp	28	0.4909
ReBRIXr	29	0.5180
ReBRIXpr	30	0.6249
ReHARDp	31	0.0725
ReHARDr	32	-0.0619
ReHARDpr	33	0.0069
ReVISGp	34	0.6734
ReVISGr	35	0.7405
ReVISGpr	36	0.8216
ReSTVp	37	-0.1111
ReSTVr	38	-0.0438
ReSTVpr	39	-0.0434
ReBRVp	40	-0.4452
ReBRVr	41	0.0046
ReBRVpr	42	-0.2788
ReHVp	43	-0.0151
ReHVR	44	-0.2761
ReHVpr	45	-0.1901
ReGVp	46	-0.3002
ReGVr	47	0.5556
ReGVpr	48	0.3465
ReWSp	49	0.2860
ReWSr	50	0.4989
ReWSpr	51	0.4066
ReWSr_p	52	0.0920

Table 53 continued (4/6)

ReSEL10p	22	1.0000
ReSEL10r	23	0.1652
ReSL10pr	24	0.5475
ReSTp	25	0.4151
ReSTR	26	0.0730
ReSTpr	27	0.2190
ReBRIXp	28	0.1799
ReBRIXr	29	-0.0052
ReBRIXpr	30	0.1149
ReHARDp	31	0.0571
ReHARDr	32	-0.2134
ReHARDpr	33	-0.0850
ReVISGp	34	0.6722
ReVISGr	35	0.1302
ReVISGpr	36	0.4348
ReSTVp	37	0.1893
ReSTVr	38	-0.0547
ReSTVpr	39	0.0683
ReBRVp	40	-0.0457
ReBRVr	41	-0.1075
ReBRVpr	42	-0.0714
ReHVp	43	-0.1790
ReHVR	44	-0.1876
ReHVpr	45	-0.2728
ReGVp	46	0.3479
ReGVr	47	0.2636
ReGVpr	48	0.4703
ReWSp	49	0.0810
ReWSr	50	0.1789
ReWSpr	51	0.1323
ReWSr_p	52	0.0618
	22	1.0000
	23	0.1652
	24	0.5475
	25	0.4151
	26	0.0730
	27	0.2190
	28	0.1799

22 23 24 25 26 27 28

Table 53 continued (5/6)

ReBRIXr	29	1.0000						
ReBRIXpr	30	0.7467	1.0000					
ReHARDp	31	-0.0066	0.1427	1.0000				
ReHARDr	32	-0.0705	-0.0434	0.7299	1.0000			
ReHARDpr	33	-0.0400	0.0538	0.9320	0.9278	1.0000		
ReVISGp	34	0.2357	0.5214	0.4257	0.1115	0.2903	1.0000	
ReVISGr	35	0.5979	0.4357	0.0533	0.0623	0.0629	0.4669	1.0000
ReVISGpr	36	0.5170	0.5707	0.2710	0.1077	0.2047	0.8255	0.8829
ReSTVp	37	-0.3440	-0.4994	-0.0990	-0.1894	-0.1532	-0.1654	-0.0315
ReSTVr	38	-0.5249	-0.4151	0.1784	0.3220	0.2711	0.1268	0.0722
ReSTVpr	39	-0.5204	-0.5173	0.0820	0.1431	0.1230	0.0032	-0.0061
ReBRVp	40	-0.0449	-0.5151	-0.1822	-0.0775	-0.1396	-0.4832	-0.1799
ReBRVr	41	-0.0092	0.1404	0.3221	0.1863	0.2778	0.0709	-0.1076
ReBRVpr	42	-0.1440	-0.4007	0.1477	0.1377	0.1583	-0.1530	-0.1683
ReHVp	43	0.1132	-0.2188	0.4175	0.3691	0.4234	-0.1350	0.1195
ReHVr	44	-0.0379	-0.2716	0.3021	0.2687	0.3118	-0.1648	-0.1289
ReHVpr	45	0.0473	-0.3053	0.4368	0.3595	0.4327	-0.2132	-0.0078
ReGVp	46	-0.2948	-0.2560	-0.1560	-0.2767	-0.2326	-0.0958	-0.4304
ReGVr	47	0.2694	0.1862	-0.0170	-0.2560	-0.1419	0.3836	0.5747
ReGVpr	48	0.0061	-0.0554	-0.1392	-0.4319	-0.3021	0.2597	0.1764
ReWSp	49	0.3252	0.3004	0.2543	0.1624	0.2206	0.1758	0.2520
ReWSr	50	0.6437	0.3511	0.1595	0.0683	0.1220	0.2606	0.5779
ReWSpr	51	0.4967	0.3493	0.2337	0.1339	0.1952	0.2292	0.4205
ReWSr_p	52	0.1791	-0.0715	-0.1943	-0.1561	-0.1842	0.0116	0.2156

	29		30		31		32		33		34		35
ReVISGpr	36	1.0000											
ReSTVp	37	-0.1189	1.0000										
ReSTVr	38	0.0940	0.3499	1.0000									
ReSTVpr	39	-0.0223	0.7545	0.8140	1.0000								
ReBRVp	40	-0.3621	0.1865	-0.3720	-0.1788	1.0000							
ReBRVr	41	-0.0299	-0.3525	-0.0770	-0.0777	-0.1469	1.0000						
ReBRVpr	42	-0.1864	0.0585	-0.1447	0.0187	0.6180	0.4709	1.0000					
ReHVp	43	0.0054	0.0530	-0.0837	-0.0275	0.3416	0.0019	0.2135					
ReHVr	44	-0.1714	0.0869	-0.1746	-0.0790	0.4833	0.2343	0.7184					
ReHVpr	45	-0.1178	0.0874	-0.1914	-0.0998	0.5494	0.1750	0.6180					
ReGVp	46	-0.3159	0.2277	-0.1357	0.0029	0.4359	0.0261	0.2913					
ReGVr	47	0.5579	0.2121	0.1837	0.3091	-0.2693	0.0929	-0.1118					
ReGVpr	48	0.2378	0.4263	0.0719	0.3428	0.0170	0.1226	0.1431					
ReWSp	49	0.2704	-0.3363	-0.3319	-0.3393	0.0839	0.2812	0.1043					
ReWSr	50	0.5087	-0.1536	-0.3128	-0.2318	0.1558	0.1995	0.1437					
ReWSpr	51	0.4010	-0.2829	-0.3521	-0.3201	0.1234	0.2691	0.1312					
ReWSr_p	52	0.1230	0.3119	0.1522	0.2405	0.0363	-0.1929	-0.0039					

36 37 38 39 40 41 42

Table 53 continued (6/6)

ReHVp	43	1.0000						
ReHVR	44	0.1683	1.0000					
ReHVpr	45	0.7310	0.7657	1.0000				
ReGVp	46	-0.2038	0.1777	0.0397	1.0000			
ReGVR	47	-0.0748	-0.2776	-0.2074	-0.2463	1.0000		
ReGVpr	48	-0.2041	-0.0317	-0.0871	0.4253	0.7165	1.0000	
ReWSp	49	0.1064	0.0057	0.0312	0.0223	0.2878	0.1356	1.0000
ReWSr	50	0.3397	0.0678	0.2176	-0.0995	0.4044	0.2389	0.6854
ReWSpr	51	0.2205	0.0341	0.1177	-0.0307	0.3655	0.1941	0.9447
ReWSr_p	52	0.1842	0.0579	0.1687	-0.1272	-0.0028	0.0452	-0.7068
		43	44	45	46	47	48	49
ReWSr	50	1.0000						
ReWSpr	51	0.8863	1.0000					
ReWSr_p	52	0.0306	-0.4357	1.0000				
		50	51	52				

Correlation is significantly different from zero if > 0.404 (5%), 0.515 (1%).

p = plant crop

r = ratoon crop

pr = (p+r)/2 crop

r_p = (r-p)/2 crop

NMGY = NMGYOT

VISG = visual net merit grade

SEL7 = number of selections graded 7+

SEL8 = number of selections graded 8+

SEL10 = number of selections graded 10+

ST = number of stalks

WS = weight per stalk

STV = within plot variance for number of stalks

BRV = within plot variance for BRIX

HV = within plot variance for HARDNESS

GV = within plot variance for visual net merit grade

Table 54. Correlation matrix for means of harvest and selection characters. 24 crosses, 3 crop classes (P, R, PR), trial Te, type Be.

	DF = 22						
	1	2	3	4	5	6	7
BeFIBRe _p	1.0000						
BeFIBR _r	0.9078	1.0000					
BeFIBR _{pr}	0.9751	0.9782	1.0000				
BeTCH _p	0.1429	0.1878	0.1700	1.0000			
BeTCH _r	0.2790	0.2203	0.2546	0.5871	1.0000		
BeTCH _{pr}	0.2421	0.2302	0.2415	0.8735	0.9069	1.0000	
BeCCSp	-0.6029	-0.6757	-0.6558	0.0388	-0.2210	-0.1126	1.0000
BeCCSr	-0.6891	-0.6960	-0.7091	0.0968	-0.2252	-0.0850	0.7998
BeCCSpr	-0.6808	-0.7230	-0.7193	0.0712	-0.2352	-0.1043	0.9493
BeTSH _p	-0.0645	-0.0425	-0.0544	0.9451	0.4696	0.7743	0.3613
BeTSH _r	-0.0043	-0.0592	-0.0334	0.6386	0.9154	0.8829	0.0968
BeTSH _{pr}	-0.0390	-0.0563	-0.0491	0.8829	0.7624	0.9180	0.2579
BeNMGY _p	-0.2380	-0.2236	-0.2361	0.8618	0.3866	0.6810	0.5341
BeNMGY _r	-0.2187	-0.2932	-0.2633	0.5163	0.7011	0.6903	0.3268
BeNMGY _{pr}	-0.2552	-0.2839	-0.2765	0.7847	0.5886	0.7623	0.4899
BeSEL7 _p	0.2529	0.2280	0.2458	0.8271	0.4240	0.6853	0.1262
BeSEL7 _r	0.0020	0.0822	0.0444	0.4332	0.4438	0.4924	0.1162
BeSEL7 _{pr}	-0.0150	0.0131	-0.0005	0.7124	0.4680	0.6522	0.3699
BeSEL8 _p	-0.0252	-0.0278	-0.0271	0.7145	0.2828	0.5419	0.3288
BeSEL8 _r	-0.0705	-0.0240	-0.0476	0.4938	0.4253	0.5128	0.3217
BeSEL8 _{pr}	-0.0074	0.0382	0.0165	0.8461	0.5416	0.7660	0.2369
BeSEL10 _p	0.0459	-0.0125	0.0162	0.7108	0.1895	0.4839	0.2632
BeSEL10 _r	0.0290	0.0416	0.0363	0.5604	0.5772	0.6389	0.1461
BeSL10 _{pr}	0.0579	-0.0497	0.0024	0.6941	0.2871	0.5339	0.2629
BeST _p	0.2512	0.2948	0.2802	0.5669	0.4667	0.5755	-0.3553
BeST _r	0.2559	0.3095	0.2903	0.2971	0.7636	0.6137	-0.4332
BeST _{pr}	0.2781	0.3325	0.3135	0.4360	0.7188	0.6590	-0.4448
BeBRIX _p	-0.3818	-0.3864	-0.3934	0.0984	-0.1632	-0.0470	0.8040
BeBRIX _r	-0.1313	-0.1588	-0.1489	-0.1967	-0.0991	-0.1619	0.4223
BeBRIX _{pr}	-0.3035	-0.3249	-0.3220	-0.0802	-0.1585	-0.1371	0.7380
BeHARD _p	0.5690	0.6663	0.6340	0.3362	0.0309	0.1935	-0.2144
BeHARD _r	0.6293	0.6868	0.6747	0.0402	0.1294	0.0988	-0.4108
BeHARD _{pr}	0.6410	0.7239	0.7001	0.2010	0.0863	0.1565	-0.3344
BeVISG _p	0.1212	0.1205	0.1237	0.8624	0.3339	0.6495	0.1953
BeVISGr	0.0726	0.1466	0.1134	0.5671	0.6185	0.6671	0.0649
BeVISG _r	0.1181	0.1637	0.1450	0.8838	0.5969	0.8189	0.1610
BeSTV _p	0.1390	0.2434	0.1974	0.1299	0.0283	0.0845	-0.1863
BeSTV _r	0.1304	0.1033	0.1191	0.4087	0.4220	0.4664	-0.0218
BeSTV _{pr}	0.1208	0.1400	0.1337	0.2552	0.2174	0.2635	-0.0162
BeBRV _p	-0.1245	0.0147	-0.0538	0.0920	-0.1482	-0.0413	-0.2915
BeBRV _r	-0.0094	-0.0701	-0.0417	-0.1258	-0.4101	-0.3123	0.0320
BeBRV _{pr}	-0.0008	0.0298	0.0154	-0.0522	-0.3769	-0.2540	-0.2669
BeHV _p	0.1160	0.1374	0.1302	0.0334	-0.0504	-0.0128	0.2574
BeHV _r	0.0116	0.0753	0.0457	0.1073	-0.0341	0.0355	-0.0425
BeHV _{pr}	0.0755	0.1354	0.1091	0.0033	-0.1078	-0.0630	0.0283
BeGV _p	-0.0954	-0.1493	-0.1262	0.0882	-0.1961	-0.0720	0.2393
BeGV _r	-0.1351	-0.2537	-0.2010	0.4997	0.2020	0.3815	0.3902
BeGV _{pr}	-0.0983	-0.2222	-0.1662	0.3238	-0.0526	0.1369	0.4084
BeWSp	-0.0658	-0.0443	-0.0560	0.5007	0.1478	0.3495	0.3846
BeWSr	0.0418	-0.0995	-0.0318	0.3623	0.2693	0.3507	0.3216
BeWSpr	-0.0247	-0.0713	-0.0499	0.4793	0.2109	0.3764	0.3869
BeWSr _p	0.1334	-0.0307	0.0499	-0.3731	0.0429	-0.1684	-0.2462

Table 54 continued (2/6)

	8	1.0000										
BeCCSr	9	0.9480	1.0000									
BeCCSpr	10	0.3548	0.3774	1.0000								
BeTSHp	11	0.1830	0.1472	0.6238	1.0000							
BeTSHr	12	0.3008	0.2943	0.9061	0.8958	1.0000						
BeNMGYp	13	0.5015	0.5459	0.9782	0.5984	0.8800	1.0000					
BeNMGYr	14	0.4666	0.4177	0.5841	0.8964	0.8173	0.6121	1.0000				
BeNMGYpr	15	0.5405	0.5429	0.8897	0.8160	0.9475	0.9171	0.8766				
BeSEL7p	16	0.1325	0.1362	0.8103	0.4806	0.7208	0.7430	0.4462				
BeSEL7r	17	0.1750	0.1533	0.4390	0.5233	0.5328	0.4257	0.2819				
BeSEL7pr	18	0.3608	0.3851	0.7795	0.6235	0.7806	0.7753	0.5065				
BeSEL8p	19	0.2591	0.3101	0.7730	0.3885	0.6497	0.7646	0.4139				
BeSEL8r	20	0.2921	0.3236	0.5597	0.5530	0.6175	0.5726	0.3782				
BeSEL8pr	21	0.1977	0.2292	0.8587	0.6304	0.8293	0.8308	0.4852				
BeSEL10p	22	0.1463	0.2160	0.7526	0.2541	0.5654	0.7253	0.1772				
BeSEL10r	23	-0.0247	0.0645	0.5589	0.5675	0.6249	0.5414	0.3231				
BeSL10pr	24	0.0842	0.1834	0.7311	0.3195	0.5886	0.7084	0.2029				
BeSTp	25	-0.2806	-0.3355	0.4148	0.3688	0.4354	0.3040	0.2928				
BeSTR	26	-0.3979	-0.4381	0.1347	0.6187	0.4114	0.0450	0.4642				
BeSTpr	27	-0.3905	-0.4405	0.2616	0.5786	0.4618	0.1546	0.4379				
BeBRIXp	28	0.6300	0.7564	0.3480	0.0903	0.2468	0.4768	0.2845				
BeBRIXr	29	0.3857	0.4260	-0.0443	0.0463	-0.0001	0.0336	-0.0080				
BeBRIXpr	30	0.6157	0.7139	0.1635	0.0825	0.1377	0.2888	0.1533				
BeHARDp	31	-0.2945	-0.2680	0.2383	-0.0997	0.0815	0.1297	-0.1848				
BeHARDr	32	-0.3386	-0.3952	-0.1003	-0.0196	-0.0677	-0.2138	-0.1101				
BeHARDpr	33	-0.3392	-0.3550	0.0734	-0.0635	0.0074	-0.0453	-0.1582				
BeVISGp	34	0.1714	0.1932	0.8681	0.4075	0.7140	0.8150	0.3926				
BeVISGr	35	0.1036	0.0887	0.5449	0.6686	0.6717	0.5097	0.4227				
BeVISGpr	36	0.1696	0.1742	0.8735	0.6736	0.8611	0.8194	0.5065				
BeSTVp	37	-0.3523	-0.2832	0.0556	-0.1082	-0.0270	0.0097	-0.3388				
BeSTVr	38	-0.2639	-0.1498	0.3639	0.3149	0.3773	0.3307	0.1033				
BeSTVpr	39	-0.2466	-0.1377	0.2219	0.1160	0.1889	0.1970	-0.0850				
BeBRVp	40	0.0397	-0.1338	0.0138	-0.1084	-0.0509	-0.0319	-0.1704				
BeBRVr	41	-0.0413	-0.0047	-0.1064	-0.4138	-0.2845	-0.0955	-0.3012				
BeBRVpr	42	-0.0853	-0.1863	-0.1243	-0.3914	-0.2825	-0.1629	-0.3466				
BeHvp	43	0.2646	0.2751	0.1211	0.0588	0.1007	0.1340	0.1618				
BeHvr	44	0.1072	0.0336	0.0960	0.0055	0.0576	0.0738	0.0357				
BeHvpr	45	0.1463	0.0916	0.0202	-0.0543	-0.0179	0.0101	0.0286				
BeGVp	46	0.1420	0.2011	0.1646	-0.1343	0.0210	0.1958	-0.1685				
BeGvr	47	0.1610	0.2912	0.5823	0.2596	0.4716	0.6154	0.1514				
BeGVpr	48	0.1337	0.2865	0.4290	-0.0075	0.2399	0.4691	-0.0589				
BeWSp	49	0.3520	0.3883	0.5905	0.2879	0.4916	0.6076	0.2093				
BeWSr	50	0.2275	0.2897	0.4373	0.3476	0.4368	0.4519	0.2386				
BeWSpr	51	0.3255	0.3756	0.5696	0.3353	0.5054	0.5870	0.2377				
BeWSr_p	52	-0.2884	-0.2816	-0.4308	-0.0835	-0.2901	-0.4415	-0.0740				

Table 54 continued (3/6)

Table 54 continued (4/6)

BeSEL10p	22	1.0000						
BeSEL10r	23	0.4050	1.0000					
BeSL10pr	24	0.8920	0.6126	1.0000				
BeSTp	25	0.3473	0.1205	0.2695	1.0000			
BeSTR	26	-0.0986	0.2587	-0.0428	0.6401	1.0000		
BeSTpr	27	0.0743	0.2244	0.0781	0.8450	0.9512	1.0000	
BeBRIXp	28	0.2838	0.1927	0.2494	-0.2001	-0.1871	-0.2108	1.0000
BeBRIXr	29	-0.1112	0.3458	0.0023	-0.5749	-0.3708	-0.4967	0.2877
BeBRIXpr	30	0.0819	0.3441	0.1401	-0.5069	-0.3582	-0.4582	0.7556
BeHARDp	31	0.2770	0.0522	0.1953	0.1496	-0.0989	-0.0041	-0.0927
BeHARDr	32	-0.1272	-0.0374	-0.1618	0.0945	0.0619	0.0771	-0.2910
BeHARDpr	33	0.0798	0.0074	0.0171	0.1285	-0.0198	0.0384	-0.2050
BeVISGp	34	0.8530	0.3305	0.7337	0.5380	0.0940	0.2842	0.2628
BeVISGr	35	0.2695	0.8366	0.4004	0.0659	0.3320	0.2554	0.1265
BeVISGpr	36	0.6914	0.7264	0.6984	0.3623	0.2677	0.3330	0.2426
BeSTVp	37	0.1858	0.3460	0.3131	0.3127	0.2320	0.2843	-0.0267
BeSTVr	38	0.4365	0.5969	0.5292	0.4186	0.4221	0.4604	0.2488
BeSTVpr	39	0.3417	0.5272	0.4652	0.3461	0.3229	0.3597	0.2533
BeBRVp	40	0.0571	-0.2364	-0.0413	0.0785	-0.0785	-0.0245	-0.4836
BeBRVr	41	0.0734	-0.2118	0.0806	-0.0166	-0.1504	-0.1104	0.1752
BeBRVpr	42	0.0925	-0.3190	0.0101	0.0647	-0.1319	-0.0663	-0.1793
BeHVP	43	0.2030	-0.0771	-0.0350	-0.2303	-0.2440	-0.2592	0.2876
BeHVR	44	0.1682	-0.0433	0.0651	-0.1556	-0.2745	-0.2549	-0.1485
BeHVR	45	0.1216	-0.1547	-0.0873	-0.2331	-0.3025	-0.3035	0.0239
BeGVp	46	0.4955	0.1583	0.5783	-0.2074	-0.2505	-0.2597	0.3075
BeGVR	47	0.6849	0.6754	0.8104	0.0551	-0.1524	-0.0832	0.3884
BeGVpr	48	0.6872	0.4379	0.8431	-0.0930	-0.3105	-0.2546	0.4010
BeWSp	49	0.4255	0.5168	0.4950	-0.4213	-0.3281	-0.3938	0.3122
BeWSr	50	0.4400	0.4770	0.4955	-0.3213	-0.4050	-0.4091	0.0686
BeWSp	51	0.4638	0.5389	0.5325	-0.4105	-0.3859	-0.4303	0.2318
BeWSr_p	52	-0.1921	-0.2880	-0.2390	0.2988	0.0864	0.1765	-0.3815

22 23 24 25 26 27 28

Table 54 continued (5/6)

BeBRIXr	29	1.0000						
BeBRIXpr	30	0.8447	1.0000					
BeHARDp	31	-0.1249	-0.1372	1.0000				
BeHARDr	32	0.1296	-0.0747	0.7456	1.0000			
BeHARDpr	33	0.0015	-0.1139	0.9352	0.9333	1.0000		
BeVISGp	34	-0.2758	-0.0428	0.4068	-0.0127	0.2103	1.0000	
BeVISGr	35	0.4410	0.3728	0.1188	0.1355	0.1364	0.2957	1.0000
BeVISGpr	36	0.1037	0.2064	0.3258	0.0718	0.2129	0.7970	0.8118
BeSTVp	37	-0.0013	-0.0166	0.1832	0.1203	0.1615	0.0620	0.2691
BeSTVr	38	-0.0891	0.0777	-0.1152	-0.2728	-0.2083	0.3577	0.3175
BeSTVpr	39	0.0121	0.1490	-0.0030	-0.1070	-0.0601	0.2201	0.3052
BeBRVp	40	-0.0469	-0.3029	-0.0672	0.0027	-0.0355	-0.0224	0.0425
BeBRVr	41	-0.2825	-0.0957	-0.1355	-0.3297	-0.2493	0.0644	-0.3253
BeBRVpr	42	-0.2763	-0.2898	-0.1174	-0.1636	-0.1514	0.0298	-0.2498
BeHVp	43	0.1474	0.2620	0.3857	0.3710	0.4060	0.1857	0.0200
BeHVR	44	0.0994	-0.0152	0.1793	0.2259	0.2163	0.1072	-0.0726
BeHVpr	45	0.0831	0.0704	0.2288	0.2447	0.2536	0.1056	-0.1403
BeGVp	46	0.1356	0.2642	-0.0277	-0.1744	-0.1085	0.1687	0.1310
BeGVR	47	0.1615	0.3273	-0.0725	-0.3576	-0.2306	0.5500	0.3651
BeGVpr	48	0.1110	0.2994	0.0447	-0.2647	-0.1183	0.4357	0.1769
BeWSp	49	0.4017	0.4505	0.2490	-0.0160	0.1264	0.3813	0.5892
BeWSr	50	0.4633	0.3558	0.2011	0.1170	0.1709	0.3151	0.4217
BeWSpr	51	0.4584	0.4442	0.2473	0.0396	0.1549	0.3818	0.5622
BeWSr_p	52	-0.1365	-0.3078	-0.1658	0.1333	-0.0193	-0.2472	-0.4438

	29	30	31	32	33	34	35	
BeVISGpr	36	1.0000						
BeSTVp	37	0.2022	1.0000					
BeSTVr	38	0.4172	0.5242	1.0000				
BeSTVpr	39	0.3219	0.8008	0.8978	1.0000			
BeBRVp	40	0.0088	0.0422	-0.4269	-0.3494	1.0000		
BeBRVr	41	-0.1653	0.0598	-0.0466	-0.0438	0.0651	1.0000	
BeBRVpr	42	-0.1419	0.0036	-0.2499	-0.2419	0.6054	0.7723	1.0000
BeHVp	43	0.1306	-0.3941	-0.3451	-0.3573	-0.0745	-0.0905	-0.0524
BeHVR	44	0.0177	-0.4255	-0.2511	-0.3548	0.2369	-0.2372	0.1002
BeHVpr	45	-0.0227	-0.5526	-0.2755	-0.3982	0.0479	-0.2044	0.0325
BeGVp	46	0.1848	0.3941	0.2026	0.3578	0.1680	0.2113	0.2171
BeGVR	47	0.5661	0.2099	0.6435	0.5140	-0.3031	0.1408	-0.0845
BeGVpr	48	0.3762	0.3755	0.4710	0.5092	-0.1714	0.2009	0.0103
BeWSp	49	0.6119	-0.1231	0.0276	-0.0431	0.0277	-0.1134	-0.1090
BeWSr	50	0.4608	-0.2224	0.0218	-0.0940	-0.0914	-0.3693	-0.3409
BeWSpr	51	0.5935	-0.1749	0.0272	-0.0682	-0.0214	-0.2312	-0.2164
BeWSr_p	52	-0.4393	-0.0341	-0.0186	-0.0270	-0.1254	-0.1868	-0.1658

Table 54 continued (6/6)

BeHVp	43	1.0000						
BeHVR	44	0.5318	1.0000					
BeHVpr	45	0.7554	0.9034	1.0000				
BeGVp	46	-0.0551	-0.0371	-0.1521	1.0000			
BeGVR	47	-0.1050	0.0265	-0.0687	0.3882	1.0000		
BeGVpr	48	-0.0875	-0.0095	-0.1332	0.7929	0.8057	1.0000	
BeWSp	49	0.2718	0.2852	0.2431	0.3625	0.4922	0.4785	1.0000
BeWSr	50	0.3238	0.3951	0.3295	0.1890	0.5441	0.4514	0.7162
BeWSpr	51	0.3148	0.3537	0.2985	0.3156	0.5518	0.5031	0.9543
BeWSr_p	52	-0.0833	-0.0343	-0.0363	-0.3391	-0.1894	-0.2572	-0.7526
	43		44		45		46	
BeWSr	50	1.0000						
BeWSpr	51	0.8920	1.0000					
BeWSr_p	52	-0.0795	-0.5215	1.0000				
	50		51		52			

Correlation is significantly different from zero if > 0.404 (5%), 0.515 (1%).

Ra = random

p = plant crop

r = ratoon crop

pr = (p+r)/2 crop

r_p = (r-p)/2 crop

NMGY = NMGYOT

VISG = visual net merit grade

SEL7 = number of selections graded 7+

SEL8 = number of selections graded 8+

SEL10 = number of selections graded 10+

ST = number of stalks

WS = weight per stalk

STV = within plot variance for number of stalks

BRV = within plot variance for BRIX

HV = within plot variance for HARDNESS

GV = within plot variance for visual net merit grade

Table 55. Correlation matrix for means of harvest and selection characters. 24 crosses, 3 crops classes (P, R, PR), trial Te, type Se.

DF = 22

	1	2	3	4	5	6	7	
SeFIBREP	1	1.0000						
SeFIBRER	2	0.7235	1.0000					
SeFIBRpr	3	0.9116	0.9433	1.0000				
SeTCHp	4	0.3781	0.2988	0.3596	1.0000			
SeTCHr	5	0.2992	0.2226	0.2762	0.6331	1.0000		
SeTCHpr	6	0.3628	0.2773	0.3394	0.8523	0.9444	1.0000	
SeCCSp	7	-0.2222	-0.3913	-0.3399	-0.0844	-0.2164	-0.1821	1.0000
SeCCSr	8	-0.1189	-0.3630	-0.2733	-0.0267	-0.0658	-0.0558	0.8478
SeCCSpr	9	-0.1733	-0.3913	-0.3164	-0.0556	-0.1410	-0.1189	0.9550
SeTSHp	10	0.2748	0.1312	0.2101	0.9262	0.5373	0.7563	0.2946
SeTSHr	11	0.2518	0.0959	0.1779	0.6141	0.9454	0.8995	0.0689
SeTSHpr	12	0.2881	0.1214	0.2106	0.8150	0.8642	0.9299	0.1752
SeNMGYp	13	0.1073	-0.0352	0.0305	0.8136	0.4359	0.6399	0.4995
SeNMGYr	14	0.1388	-0.1069	0.0029	0.4990	0.7898	0.7455	0.2797
SeNMGYpr	15	0.1389	-0.0832	0.0171	0.7133	0.7030	0.7779	0.4216
SeSEL7p	16	0.3108	0.1054	0.2122	0.6053	0.4023	0.5288	0.2111
SeSEL7r	17	0.3763	0.2866	0.3514	0.5222	0.7785	0.7476	0.0885
SeSEL7pr	18	0.3256	0.1641	0.2541	0.6055	0.6844	0.7195	0.2477
SeSEL8p	19	0.3342	0.0118	0.1677	0.5243	0.4266	0.5109	0.2687
SeSEL8r	20	0.2803	0.2568	0.2874	0.5485	0.8143	0.7830	0.0706
SeSEL8pr	21	0.2300	0.1293	0.1874	0.6055	0.5826	0.6506	0.2691
SeSEL10p	22	0.1637	-0.1511	-0.0111	0.4196	0.2331	0.3357	-0.0542
SeSEL10r	23	0.0933	0.0479	0.0731	0.4936	0.6120	0.6229	0.0712
SeSEL10pr	24	0.1838	-0.0667	0.0486	0.5740	0.5748	0.6320	0.1528
SeSTp	25	0.2896	0.2109	0.2648	0.4392	0.2937	0.3851	-0.2278
SeSTR	26	0.1751	0.2941	0.2591	0.4646	0.7295	0.6902	-0.3030
SeSTpr	27	0.2350	0.2951	0.2885	0.5050	0.6496	0.6534	-0.3076
SeBRIXp	28	0.1075	-0.0354	0.0305	-0.0850	-0.1340	-0.1267	0.7363
SeBRIXr	29	0.2810	0.1663	0.2341	-0.0866	-0.0866	-0.0953	0.6770
SeBRIXpr	30	0.2342	0.0904	0.1663	-0.0938	-0.1178	-0.1194	0.7928
SeHARDp	31	0.6592	0.5585	0.6495	0.1446	0.0034	0.0637	-0.0346
SeHARDr	32	0.7331	0.7697	0.8108	0.2086	0.0652	0.1327	-0.0902
SeHARDpr	33	0.7512	0.7167	0.7879	0.1932	0.0412	0.1098	-0.0695
SeVISGp	34	0.2568	0.0646	0.1619	0.6177	0.4692	0.5793	0.1988
SeVISGr	35	0.3598	0.3340	0.3717	0.5768	0.7755	0.7688	0.1250
SeVISGpr	36	0.3593	0.2544	0.3241	0.6726	0.7417	0.7866	0.1786
SeSTVp	37	-0.0809	-0.2082	-0.1628	0.1314	0.2524	0.2263	0.1769
SeSTVr	38	0.0353	0.2533	0.1676	0.0785	0.5454	0.4018	-0.2681
SeSTVpr	39	0.0141	0.0643	0.0450	0.1134	0.4628	0.3608	-0.0430
SeBRVp	40	-0.0992	0.1206	0.0241	0.1859	0.0441	0.1087	-0.1885
SeBRVr	41	-0.2886	-0.3077	-0.3218	-0.3075	-0.3571	-0.3719	-0.0692
SeBRVpr	42	-0.1148	-0.0279	-0.0717	0.0829	-0.1326	-0.0544	-0.2374
SeHvp	43	0.2770	0.4709	0.4136	-0.2330	-0.2470	-0.2658	-0.0172
SeHvr	44	0.2308	0.3338	0.3098	-0.1895	-0.2232	-0.2313	-0.0566
SeHvpr	45	0.1647	0.4073	0.3218	-0.2929	-0.4075	-0.3997	-0.0663
SeGVp	46	-0.2398	-0.3683	-0.3345	0.0070	0.0343	0.0261	0.0125
SeGVr	47	0.0071	-0.0100	-0.0025	0.3685	0.2732	0.3409	-0.0993
SeGVpr	48	-0.0154	-0.1498	-0.0965	0.2432	0.1589	0.2105	-0.0424
SeWSp	49	0.1199	0.1236	0.1312	0.5653	0.3397	0.4694	0.1314
SeWSr	50	0.1804	-0.0763	0.0413	0.2163	0.3839	0.3512	0.1119
SeWSpr	51	0.1654	0.0364	0.1012	0.4549	0.4034	0.4656	0.1368
SeWSr_p	52	0.0370	-0.2224	-0.1145	-0.4536	-0.0207	-0.2065	-0.0434

Table 55 continued (2/6)

SeCCSr	8	1.0000							
SeCCSpr	9	0.9669	1.0000						
SeTSHp	10	0.2902	0.3038	1.0000					
SeTSHr	11	0.2598	0.1783	0.6260	1.0000				
SeTSHpr	12	0.3002	0.2520	0.8554	0.9394	1.0000			
SeNMGYp	13	0.4591	0.4968	0.9694	0.5822	0.8129	1.0000		
SeNMGYr	14	0.5126	0.4210	0.5951	0.9307	0.8798	0.6071	1.0000	
SeNMGYpr	15	0.5442	0.5069	0.8502	0.8627	0.9468	0.8729	0.9176	
SeSEL7p	16	0.3040	0.2716	0.6592	0.4870	0.6134	0.6250	0.5076	
SeSEL7r	17	0.1413	0.1215	0.5401	0.7897	0.7620	0.4912	0.6322	
SeSEL7pr	18	0.3212	0.2987	0.6793	0.7631	0.8056	0.6570	0.6859	
SeSEL8p	19	0.4541	0.3832	0.6034	0.5568	0.6352	0.5852	0.6183	
SeSEL8r	20	0.1186	0.1002	0.5619	0.8212	0.7925	0.5171	0.6465	
SeSEL8pr	21	0.3591	0.3301	0.6875	0.6814	0.7548	0.6749	0.6325	
SeSEL10p	22	0.2616	0.1204	0.3798	0.3130	0.3749	0.3316	0.3706	
SeSEL10r	23	0.1270	0.1051	0.5036	0.6381	0.6452	0.4828	0.5092	
SeSL10pr	24	0.3825	0.2873	0.6113	0.6806	0.7208	0.5958	0.6527	
SeSTp	25	-0.1852	-0.2133	0.3305	0.2215	0.2925	0.2323	0.2195	
SeSTR	26	-0.2900	-0.3081	0.3392	0.6023	0.5492	0.2410	0.4831	
SeSTpr	27	-0.2827	-0.3063	0.3725	0.5289	0.5150	0.2639	0.4395	
SeBRIXp	28	0.6148	0.6980	0.1959	0.0730	0.1346	0.3147	0.2722	
SeBRIXr	29	0.5850	0.6527	0.1719	0.1053	0.1455	0.2697	0.1256	
SeBRIXpr	30	0.6753	0.7590	0.2088	0.1064	0.1625	0.3290	0.2185	
SeHARDp	31	-0.0547	-0.0472	0.1141	-0.0158	0.0397	0.0232	-0.0674	
SeHARDr	32	-0.0461	-0.0692	0.1499	0.0357	0.0897	0.0416	-0.0598	
SeHARDpr	33	-0.0553	-0.0643	0.1444	0.0146	0.0733	0.0364	-0.0654	
SeVISGp	34	0.3559	0.2946	0.6662	0.5672	0.6697	0.6371	0.6184	
SeVISGr	35	0.1744	0.1575	0.6053	0.8017	0.7986	0.5620	0.6309	
SeVISGpr	36	0.2821	0.2435	0.7151	0.8044	0.8487	0.6733	0.7111	
SeSTVp	37	0.2562	0.2283	0.2058	0.3294	0.3093	0.2505	0.3614	
SeSTVr	38	-0.2571	-0.2729	-0.0111	0.4373	0.2856	-0.0617	0.2984	
SeSTVpr	39	0.0129	-0.0136	0.1053	0.4481	0.3440	0.1017	0.3946	
SeBRVp	40	-0.1363	-0.1668	0.1065	0.0105	0.0537	0.0723	-0.1187	
SeBRVr	41	-0.1540	-0.1193	-0.3192	-0.3931	-0.4015	-0.2768	-0.3198	
SeBRVpr	42	-0.2213	-0.2379	-0.0113	-0.1899	-0.1312	-0.0441	-0.2572	
SeHVP	43	-0.0243	-0.0218	-0.2339	-0.2402	-0.2624	-0.2536	-0.3534	
SeHVR	44	-0.1975	-0.1378	-0.1999	-0.2618	-0.2618	-0.2271	-0.3505	
SeHVPr	45	-0.1728	-0.1285	-0.3115	-0.4420	-0.4305	-0.3242	-0.5726	
SeGVp	46	0.2410	0.1408	0.0123	0.1159	0.0824	0.0509	0.0942	
SeGVR	47	0.0328	-0.0295	0.3193	0.2901	0.3330	0.2878	0.1981	
SeGVpr	48	0.2014	0.0923	0.2151	0.2316	0.2484	0.2065	0.1976	
SeWSp	49	0.1306	0.1362	0.5953	0.3840	0.5167	0.5746	0.2647	
SeWSr	50	0.2881	0.2151	0.2545	0.4742	0.4268	0.2487	0.4109	
SeWSpr	51	0.2267	0.1926	0.4925	0.4765	0.5330	0.4769	0.3714	
SeWSr_p	52	0.1322	0.0532	-0.4508	0.0167	-0.1870	-0.4318	0.0951	

Table 55 continued (3/6)

SeNMGYpr	15	1.0000						
SeSEL7p	16	0.6242	1.0000					
SeSEL7r	17	0.6339	0.6031	1.0000				
SeSEL7pr	18	0.7497	0.8030	0.9220	1.0000			
SeSEL8p	19	0.6722	0.8901	0.5996	0.7865	1.0000		
SeSEL8r	20	0.6557	0.5452	0.9345	0.8713	0.5009	1.0000	
SeSEL8pr	21	0.7259	0.8255	0.7217	0.8408	0.7336	0.7777	1.0000
SeSEL10p	22	0.3933	0.5333	0.1911	0.3413	0.6508	0.1441	0.4461
SeSEL10r	23	0.5542	0.3166	0.5901	0.5835	0.2112	0.7305	0.5364
SeSL10pr	24	0.6987	0.4611	0.6062	0.6282	0.5763	0.5960	0.5547
SeSTp	25	0.2511	0.1472	0.0960	0.1390	0.1960	0.0467	-0.0164
SeSTR	26	0.4172	0.1870	0.5668	0.4418	0.1352	0.5589	0.2100
SeSTpr	27	0.4019	0.1924	0.4571	0.3796	0.1715	0.4333	0.1504
SeBRIXp	28	0.3245	0.3394	0.1137	0.2763	0.3848	0.0506	0.2359
SeBRIXr	29	0.2120	0.2285	0.4033	0.4144	0.3031	0.3208	0.3405
SeBRIXpr	30	0.2987	0.3173	0.3140	0.4025	0.3857	0.2302	0.3348
SeHARDp	31	-0.0298	0.2770	0.1331	0.1596	0.1946	0.0997	0.2824
SeHARDr	32	-0.0159	0.3790	0.3621	0.3328	0.3208	0.2451	0.2598
SeHARDpr	33	-0.0220	0.3551	0.2701	0.2681	0.2783	0.1891	0.2938
SeVISGp	34	0.6982	0.9260	0.5709	0.7602	0.9397	0.5107	0.7407
SeVISGr	35	0.6685	0.5827	0.9651	0.9102	0.5357	0.9634	0.7669
SeVISGpr	36	0.7734	0.8161	0.9177	0.9661	0.7913	0.8898	0.8597
SeSTVp	37	0.3471	0.1230	0.2851	0.3082	0.2482	0.2476	0.1760
SeSTVr	38	0.1525	-0.0860	0.4351	0.3007	-0.0509	0.4973	0.1455
SeSTVpr	39	0.2932	-0.0333	0.3790	0.3074	0.0653	0.4127	0.1352
SeBRVp	40	-0.0367	-0.0824	-0.0759	-0.0636	-0.1554	0.0639	0.1972
SeBRVr	41	-0.3347	-0.5114	-0.5700	-0.5973	-0.4164	-0.5208	-0.4138
SeBRVpr	42	-0.1799	-0.2266	-0.3309	-0.2794	-0.2224	-0.2064	-0.0114
SeHVp	43	-0.3438	-0.1005	-0.0070	-0.0373	-0.1044	-0.0184	0.0129
SeHVR	44	-0.3288	-0.4389	-0.2163	-0.3285	-0.5557	-0.2634	-0.3008
SeHVpr	45	-0.5137	-0.4077	-0.2075	-0.3108	-0.4989	-0.2084	-0.2290
SeGVp	46	0.0833	0.0487	0.0661	0.1118	0.1649	0.1077	0.2628
SeGVR	47	0.2656	0.0610	0.1560	0.1418	-0.0266	0.2809	0.3746
SeGVpr	48	0.2245	0.0924	0.1043	0.1381	0.1237	0.1633	0.3105
SeWSp	49	0.4498	0.4600	0.4276	0.4658	0.3393	0.4887	0.6053
SeWSr	50	0.3767	0.2786	0.3202	0.3409	0.3930	0.3844	0.5079
SeWSpr	51	0.4665	0.4224	0.4241	0.4579	0.4075	0.4943	0.6284
SeWSr_p	52	-0.1575	-0.2667	-0.1874	-0.2119	-0.0106	-0.1960	-0.2111

Table 55 continued (4/6)

SeSEL10p	22	1.0000						
SeSEL10r	23	-0.0598	1.0000					
SeSL10pr	24	0.3921	0.6148	1.0000				
SeSTp	25	0.0887	0.0140	0.0827	1.0000			
SeSTR	26	-0.1465	0.4184	0.2042	0.5816	1.0000		
SeSTpr	27	-0.0775	0.3170	0.1822	0.7951	0.9558	1.0000	
SeBRIXp	28	-0.1583	0.0136	0.0309	-0.0883	-0.0867	-0.0961	1.0000
SeBRIXr	29	-0.0986	0.1119	0.1627	-0.3180	-0.2482	-0.2998	0.5591
SeBRIXpr	30	-0.1400	0.0787	0.1185	-0.2424	-0.1953	-0.2329	0.8526
SeHARDp	31	-0.0990	0.1022	0.0587	0.0435	-0.0518	-0.0229	0.3051
SeHARDr	32	-0.0754	0.0005	0.0944	0.1193	0.1007	0.1181	0.2065
SeHARDpr	33	-0.0916	0.0570	0.0831	0.0887	0.0305	0.0547	0.2724
SeVISGp	34	0.6318	0.2150	0.4885	0.2169	0.2423	0.2588	0.3358
SeVISGr	35	0.1314	0.6916	0.6240	0.0354	0.5095	0.3924	0.0983
SeVISGpr	36	0.3741	0.5715	0.6494	0.1211	0.4561	0.3836	0.2215
SeSTVp	37	0.2528	-0.0366	0.2778	0.1955	0.1549	0.1861	0.0011
SeSTVr	38	-0.2313	0.2033	0.0339	0.2068	0.6677	0.5726	-0.0780
SeSTVpr	39	-0.0381	0.1054	0.1754	0.2596	0.4751	0.4480	-0.0208
SeBRVp	40	0.2192	0.0901	0.0796	0.0042	-0.2171	-0.1609	-0.4529
SeBRVr	41	-0.1881	-0.2372	-0.0988	-0.0522	-0.3518	-0.2811	-0.1286
SeBRVpr	42	0.1341	-0.0769	0.0190	0.1548	-0.3053	-0.1719	-0.4461
SeHvp	43	-0.1223	-0.0625	-0.3003	-0.1593	-0.3188	-0.2956	-0.0212
SeHvr	44	-0.3866	-0.1274	-0.3068	-0.2769	-0.2338	-0.2743	-0.0836
SeHvpr	45	-0.2977	-0.1169	-0.4220	-0.3275	-0.3840	-0.4048	-0.2084
SeGVp	46	0.5306	0.1018	0.4619	-0.2923	-0.4244	-0.4223	-0.3565
SeGvr	47	0.2145	0.5947	0.4929	-0.1591	-0.0025	-0.0595	-0.2172
SeGVpr	48	0.4217	0.4426	0.5977	-0.1718	-0.2165	-0.2236	-0.2106
SeWSp	49	0.3103	0.4526	0.4733	-0.4879	-0.0973	-0.2492	0.0068
SeWSr	50	0.4859	0.2700	0.5062	-0.3961	-0.3470	-0.4025	-0.0730
SeWSpr	51	0.4377	0.4137	0.5472	-0.4999	-0.2368	-0.3577	-0.0337
SeWSr_p	52	0.1155	-0.2669	-0.0569	0.1834	-0.2297	-0.1053	-0.0799

Table 55 continued (5/6)

SeBRIXr	29	1.0000						
SeBRIXpr	30	0.9099	1.0000					
SeHARDp	31	0.2485	0.3098	1.0000				
SeHARDr	32	0.3856	0.3479	0.7326	1.0000			
SeHARDpr	33	0.3421	0.3531	0.9299	0.9315	1.0000		
SeVISGp	34	0.1458	0.2629	0.1144	0.2974	0.2232	1.0000	
SeVISGr	35	0.4286	0.3221	0.1677	0.3739	0.2950	0.5312	1.0000
SeVISGpr	36	0.3587	0.3401	0.1668	0.3890	0.3021	0.8150	0.9238
SeSTVp	37	0.2302	0.1485	-0.4078	-0.2625	-0.3553	0.1818	0.2549
SeSTVr	38	-0.0578	-0.0727	-0.0804	-0.0008	-0.0405	-0.0219	0.4201
SeSTVpr	39	0.0841	0.0455	-0.2392	-0.1175	-0.1878	0.0622	0.3759
SeBRVp	40	-0.0915	-0.2846	-0.0463	-0.1954	-0.1281	-0.1859	0.0364
SeBRVr	41	-0.3394	-0.2842	0.0489	-0.3204	-0.1531	-0.4709	-0.5559
SeBRVpr	42	-0.2665	-0.3940	0.0781	-0.2096	-0.0727	-0.3018	-0.2389
SeHVp	43	0.5200	0.3176	0.2381	0.3362	0.3110	-0.2066	0.0516
SeHVR	44	0.1555	0.0567	0.2885	0.1578	0.2415	-0.5807	-0.1469
SeHVpr	45	0.3692	0.1278	0.2180	0.2265	0.2405	-0.5578	-0.1212
SeGVp	46	0.0310	-0.1616	-0.2221	-0.2842	-0.2729	0.0458	0.0912
SeGVR	47	-0.0833	-0.1614	0.1283	-0.1831	-0.0288	-0.0436	0.2433
SeGVpr	48	-0.0406	-0.1324	0.0692	-0.1742	-0.0570	0.0408	0.1570
SeWSp	49	0.2401	0.1560	0.1255	0.1214	0.1349	0.4025	0.5357
SeWSr	50	0.2439	0.1160	0.0790	-0.0205	0.0314	0.2967	0.3918
SeWSpr	51	0.2706	0.1539	0.1170	0.0635	0.0984	0.3968	0.5266
SeWSr_p	52	-0.0409	-0.0684	-0.0705	-0.1643	-0.1288	-0.1810	-0.2441

	29	30	31	32	33	34	35	
SeVISGpr	36	1.0000						
SeSTVp	37	0.2533	1.0000					
SeSTVr	38	0.2763	0.4509	1.0000				
SeSTVpr	39	0.2834	0.8178	0.8466	1.0000			
SeBRVp	40	-0.0603	0.2081	0.0022	0.0855	1.0000		
SeBRVr	41	-0.5873	-0.2361	-0.2595	-0.2239	0.1014	1.0000	
SeBRVpr	42	-0.2983	0.1175	-0.0740	0.0239	0.8361	0.5267	1.0000
SeHVp	43	-0.0612	-0.0635	-0.0963	-0.1214	0.3516	-0.1659	0.1890
SeHVR	44	-0.3655	-0.3025	-0.1293	-0.2414	0.1604	0.0768	0.0937
SeHVpr	45	-0.3377	-0.2505	-0.1888	-0.2672	0.3557	0.0234	0.2353
SeGVp	46	0.0849	0.3718	-0.0716	0.1282	0.5151	0.1511	0.4851
SeGVR	47	0.1477	-0.0096	-0.0092	-0.0293	0.4498	0.2012	0.3797
SeGVpr	48	0.1276	0.0818	-0.1585	-0.0583	0.4296	0.2353	0.4046
SeWSp	49	0.5482	-0.0587	-0.1350	-0.1470	0.1953	-0.2405	-0.0424
SeWSr	50	0.4038	0.1304	-0.1402	-0.0011	0.3577	-0.0057	0.2369
SeWSpr	51	0.5403	0.0308	-0.1536	-0.0899	0.3020	-0.1493	0.0954
SeWSr_p	52	-0.2469	0.1994	0.0197	0.1725	0.1242	0.2788	0.2852

Table 55 continued (6/6)

SeHVp	43	1.0000						
SeHVR	44	0.3543	1.0000					
SeHVpr	45	0.8242	0.7088	1.0000				
SeGVp	46	0.0474	-0.1306	0.0092	1.0000			
SeGVR	47	0.0007	0.1400	0.1324	0.5220	1.0000		
SeGVpr	48	0.0185	0.0336	0.0609	0.7590	0.8977	1.0000	
SeWSp	49	-0.0284	0.0890	0.0507	0.2614	0.4826	0.3763	1.0000
SeWSr	50	0.1082	-0.0092	-0.0268	0.6068	0.3480	0.4769	0.5891
SeWSpr	51	0.0380	0.0498	0.0172	0.4699	0.4721	0.4734	0.9104
SeWSr_p	52	0.1413	-0.1151	-0.0866	0.2931	-0.2252	0.0282	-0.5971
		43	44	45	46	47	48	49
SeWSr	50	1.0000						
SeWSpr	51	0.8706	1.0000					
SeWSr_p	52	0.2964	-0.2119	1.0000				
		50	51	52				

Correlation is significantly different from zero if > 0.404 (5%), 0.515 (1%).

Ra = random

p = plant crop

r = ratoon crop

pr = (p+r)/2 crop

r_p = (r-p)/2 crop

NMGY = NMGYOT

VISG = visual net merit grade

SEL7 = number of selections graded 7+

SEL8 = number of selections graded 8+

SEL10 = number of selections graded 10+

ST = number of stalks

WS = weight per stalk

STV = within plot variance for number of stalks

BRV = within plot variance for BRIX

HV = within plot variance for HARDNESS

GV = within plot variance for visual net merit grade

Table 56. Correlation matrix for means, trial Te harvest data. P, R and PR crops for Re, Be and Se (= S) types.

ReFIBRpr	1	1.0000					DF = 22	
BeFIBRpr	2	0.8660	1.0000					
SFIBREpr	3	0.8637	0.8692	1.0000				
ReFIBREp	4	0.9514	0.8863	0.8533	1.0000			
BeFIBREp	5	0.8591	0.9751	0.8488	0.8908	1.0000		
SFIBREp	6	0.7563	0.7922	0.9116	0.7648	0.7970	1.0000	
ReFIBRER	7	0.9612	0.7764	0.8020	0.8296	0.7600	0.6864	1.0000
BeFIBRER	8	0.8333	0.9782	0.8492	0.8421	0.9078	0.7519	0.7567
SFIBRER	9	0.8398	0.8201	0.9433	0.8154	0.7818	0.7235	0.7927
ReTCHpr	10	0.5325	0.4043	0.4391	0.4400	0.3638	0.3594	0.5714
BeTCHpr	11	0.2792	0.2415	0.1950	0.2201	0.2421	0.1889	0.3090
STCHpr	12	0.5002	0.4613	0.3394	0.5087	0.4435	0.3628	0.4513
ReTCHp	13	0.3918	0.3253	0.3139	0.3343	0.3041	0.2285	0.4110
BeTCHp	14	0.1734	0.1700	0.1141	0.1696	0.1429	0.1229	0.1623
STCHp	15	0.4472	0.5413	0.3596	0.5106	0.5270	0.3781	0.3534
ReTCHR	16	0.5591	0.4042	0.4678	0.4542	0.3554	0.4036	0.6069
BeTCHR	17	0.3143	0.2546	0.2254	0.2193	0.2790	0.2076	0.3733
STCHR	18	0.4593	0.3425	0.2762	0.4319	0.3250	0.2992	0.4458
ReCCSpr	19	-0.5291	-0.5228	-0.4863	-0.4373	-0.4842	-0.3492	-0.5679
BeCCSpr	20	-0.7274	-0.7193	-0.6744	-0.6696	-0.6808	-0.4948	-0.7194
SCCSpr	21	-0.4657	-0.4805	-0.3164	-0.4128	-0.4564	-0.1733	-0.4748
ReCCSp	22	-0.5109	-0.5265	-0.4673	-0.4165	-0.4773	-0.3397	-0.5535
BeCCSp	23	-0.7436	-0.6558	-0.6453	-0.6494	-0.6029	-0.4129	-0.7669
SCCSp	24	-0.4967	-0.5202	-0.3399	-0.4314	-0.5240	-0.2222	-0.5145
ReCCSr	25	-0.5076	-0.4725	-0.4695	-0.4273	-0.4515	-0.3318	-0.5379
BeCCSr	26	-0.6357	-0.7091	-0.6341	-0.6207	-0.6891	-0.5265	-0.5969
SCCSr	27	-0.4053	-0.4118	-0.2733	-0.3670	-0.3654	-0.1189	-0.4063
ReTSHpr	28	0.3333	0.2155	0.2570	0.2762	0.1917	0.2274	0.3569
BeTSHpr	29	-0.0130	-0.0491	-0.0800	-0.0443	-0.0390	-0.0190	0.0160
STSHpr	30	0.3183	0.2723	0.2106	0.3514	0.2683	0.2881	0.2623
ReTSHp	31	0.1610	0.0987	0.1085	0.1442	0.0997	0.0780	0.1627
BeTSHp	32	-0.0799	-0.0544	-0.1062	-0.0501	-0.0645	-0.0235	-0.1002
STSHp	33	0.2439	0.3202	0.2101	0.3312	0.3067	0.2748	0.1455
ReTSHr	34	0.4277	0.2812	0.3434	0.3449	0.2396	0.3195	0.4664
BeTSHr	35	0.0601	-0.0334	-0.0363	-0.0292	-0.0043	-0.0104	0.1349
STSHr	36	0.3177	0.1980	0.1779	0.3098	0.2008	0.2518	0.2985
ReNMGYpr	37	0.0927	0.0139	0.0388	0.0680	0.0064	0.0576	0.1069
BeNMGYpr	38	-0.2635	-0.2765	-0.3182	-0.2719	-0.2552	-0.2359	-0.2346
SNMGYpr	39	0.0947	0.0823	0.0171	0.1519	0.0903	0.1389	0.0353
ReNMGYp	40	-0.0408	-0.0924	-0.0688	-0.0425	-0.0852	-0.0671	-0.0360
BeNMGYp	41	-0.2613	-0.2361	-0.2690	-0.2253	-0.2380	-0.1548	-0.2722
SNMGYp	42	0.0496	0.1110	0.0305	0.1438	0.0979	0.1073	-0.0390
ReNMGYr	43	0.2342	0.1384	0.1599	0.1869	0.1149	0.1954	0.2570
BeNMGYr	44	-0.2071	-0.2633	-0.3064	-0.2673	-0.2187	-0.2811	-0.1365
SNMGYr	45	0.1138	0.0437	0.0029	0.1303	0.0674	0.1388	0.0893

1 2 3 4 5 6 7

Table 56 continued (2/5)

BeFIBREr	8	1.0000						
SFIBREr	9	0.8191	1.0000					
ReTCHpr	10	0.4240	0.4475	1.0000				
BeTCHpr	11	0.2302	0.1753	0.6588	1.0000			
STCHpr	12	0.4572	0.2773	0.7393	0.7024	1.0000		
ReTChp	13	0.3303	0.3427	0.8853	0.5485	0.5586	1.0000	
BeTChp	14	0.1878	0.0926	0.5200	0.8735	0.5420	0.5258	1.0000
STChp	15	0.5303	0.2988	0.5958	0.5712	0.8523	0.5212	0.5536
ReTChr	16	0.4317	0.4600	0.9406	0.6451	0.7654	0.6750	0.4413
BeTChr	17	0.2203	0.2114	0.6454	0.9069	0.6990	0.4569	0.5871
STChr	18	0.3433	0.2226	0.7198	0.6806	0.9444	0.4992	0.4542
ReCCSpr	19	-0.5356	-0.5345	0.0537	0.1182	0.0309	0.1438	0.1916
BeCCSpr	20	-0.7230	-0.7329	-0.2391	-0.1043	-0.2257	-0.1369	0.0712
SCCSpr	21	-0.4815	-0.3913	0.0614	-0.0823	-0.1189	0.0829	0.0153
ReCCSp	22	-0.5489	-0.5104	0.0903	0.1337	0.0187	0.1920	0.2182
BeCCSp	23	-0.6757	-0.7502	-0.3145	-0.1126	-0.1783	-0.2055	0.0388
SCCSp	24	-0.4931	-0.3913	-0.0676	-0.1813	-0.1821	-0.0769	-0.0337
ReCCSr	25	-0.4709	-0.5204	-0.0007	0.0867	0.0442	0.0655	0.1387
BeCCSr	26	-0.6960	-0.6396	-0.1381	-0.0850	-0.2504	-0.0532	0.0968
SCCSr	27	-0.4369	-0.3630	0.1683	0.0091	-0.0558	0.2145	0.0566
ReTSHpr	28	0.2281	0.2483	0.9477	0.6561	0.6995	0.8738	0.5567
BeTSHpr	29	-0.0563	-0.1186	0.5467	0.9180	0.5831	0.4818	0.8829
STSHpr	30	0.2637	0.1214	0.7368	0.6507	0.9299	0.5717	0.5379
ReTShp	31	0.0932	0.1194	0.7983	0.5306	0.4911	0.9374	0.5415
BeTShp	32	-0.0425	-0.1590	0.3893	0.7743	0.4470	0.4285	0.9451
STShp	33	0.3184	0.1312	0.5468	0.4783	0.7563	0.4655	0.5150
ReTShr	34	0.3074	0.3190	0.9170	0.6541	0.7629	0.6689	0.4749
BeTShr	35	-0.0592	-0.0521	0.6012	0.8829	0.6080	0.4401	0.6386
STShr	36	0.1863	0.0959	0.7472	0.6631	0.8995	0.5525	0.4689
ReNMGYpr	37	0.0201	0.0189	0.8125	0.6277	0.5859	0.8072	0.5843
BeNMGYpr	38	-0.2839	-0.3434	0.3330	0.7623	0.3993	0.3132	0.7847
SNMGYpr	39	0.0710	-0.0832	0.6035	0.5346	0.7779	0.4753	0.4598
ReNMGYp	40	-0.0951	-0.0613	0.6890	0.4687	0.3934	0.8435	0.5004
BeNMGYp	41	-0.2236	-0.3265	0.2820	0.6810	0.3493	0.3393	0.8618
SNMGYp	42	0.1183	-0.0352	0.4663	0.3894	0.6399	0.4006	0.4552
ReNMGYr	43	0.1541	0.1111	0.8018	0.6955	0.7019	0.6065	0.5709
BeNMGYr	44	-0.2932	-0.2871	0.3203	0.6903	0.3706	0.2119	0.5163
SNMGYr	45	0.0192	-0.1069	0.6032	0.5533	0.7455	0.4479	0.3781

8 9 10 11 12 13 14

Table 56 continued (3/5)

STCHp	15	1.0000						
ReTCHr	16	0.5650	1.0000					
BeTCHr	17	0.4708	0.6907	1.0000				
STCHr	18	0.6331	0.7779	0.7386	1.0000			
ReCCSpr	19	0.0118	-0.0198	0.0306	0.0383	1.0000		
BeCCSpr	20	-0.1646	-0.2796	-0.2352	-0.2305	0.8493	1.0000	
SCCSpr	21	-0.0556	0.0369	-0.1502	-0.1410	0.8200	0.7852	1.0000
ReCCSp	22	-0.0150	0.0030	0.0334	0.0371	0.9727	0.8253	0.8075
BeCCSp	23	-0.1021	-0.3490	-0.2210	-0.1997	0.7859	0.9493	0.6954
SCCSp	24	-0.0844	-0.0512	-0.2725	-0.2164	0.7701	0.7924	0.9550
ReCCSr	25	0.0464	-0.0490	0.0242	0.0363	0.9497	0.8077	0.7653
BeCCSr	26	-0.2108	-0.1803	-0.2252	-0.2379	0.8258	0.9480	0.7948
SCCSr	27	-0.0267	0.1104	-0.0341	-0.0658	0.8039	0.7225	0.9669
ReTSHpr	28	0.5638	0.8660	0.6091	0.6810	0.3679	0.0482	0.3104
BeTSHpr	29	0.4823	0.5159	0.7624	0.5599	0.4527	0.2943	0.2352
STSHpr	30	0.8150	0.7517	0.6166	0.8642	0.3393	0.0773	0.2520
ReTSHp	31	0.4462	0.5826	0.4137	0.4465	0.4660	0.1693	0.3440
BeTSHp	32	0.4823	0.3050	0.4696	0.3584	0.4442	0.3774	0.2485
STSHp	33	0.9262	0.5279	0.3497	0.5373	0.3090	0.1467	0.3038
ReTSHr	34	0.5706	0.9669	0.6766	0.7707	0.2190	-0.0664	0.2279
BeTSHr	35	0.3847	0.6329	0.9154	0.6581	0.3697	0.1472	0.1733
STSHr	36	0.6141	0.7823	0.6968	0.9454	0.3063	0.0193	0.1783
ReNMGYpr	37	0.4830	0.7000	0.5380	0.5636	0.6045	0.2889	0.5046
BeNMGYpr	38	0.3485	0.2998	0.5886	0.3721	0.6255	0.5429	0.4036
SNMGYpr	39	0.7133	0.6107	0.4909	0.7030	0.5678	0.3252	0.5069
ReNMGYp	40	0.3428	0.4776	0.3463	0.3668	0.6300	0.3589	0.4913
BeNMGYp	41	0.3816	0.1998	0.3866	0.2772	0.5673	0.5459	0.3696
SNMGYp	42	0.8136	0.4474	0.2536	0.4359	0.4830	0.3481	0.4968
ReNMGYr	43	0.5566	0.8295	0.6624	0.6891	0.4562	0.1489	0.4221
BeNMGYr	44	0.2307	0.3537	0.7011	0.4036	0.5558	0.4177	0.3541
SNMGYr	45	0.4990	0.6301	0.5929	0.7898	0.5314	0.2462	0.4210

15 16 17 18 19 20 21

Table 56 continued (4/5)

ReCCSp	22	1.0000						
BeCCSp	23	0.7699	1.0000					
SCCSp	24	0.7448	0.6924	1.0000				
ReCCSr	25	0.8510	0.7388	0.7372	1.0000			
BeCCSr	26	0.7962	0.7998	0.8116	0.7940	1.0000		
SCCSr	27	0.8033	0.6479	0.8478	0.7345	0.7233	1.0000	
ReTSHpr	28	0.3938	-0.0412	0.1760	0.3005	0.1338	0.4040	1.0000
BeTSHpr	29	0.4611	0.2579	0.1457	0.4017	0.3008	0.2955	0.6586
STSHpr	30	0.3252	0.0910	0.1752	0.3285	0.0556	0.3002	0.7932
ReTSHp	31	0.5201	0.0936	0.1839	0.3519	0.2286	0.4570	0.8958
BeTSHp	32	0.4664	0.3613	0.2015	0.3753	0.3548	0.2712	0.5151
STSHp	33	0.2757	0.1701	0.2946	0.3267	0.1079	0.2902	0.6107
ReTSHr	34	0.2158	-0.1525	0.1390	0.2041	0.0278	0.2885	0.9208
BeTSHr	35	0.3620	0.0968	0.0574	0.3478	0.1830	0.2609	0.6757
STSHr	36	0.3070	0.0244	0.0689	0.2782	0.0123	0.2598	0.7900
ReNMGYpr	37	0.6225	0.1904	0.3615	0.5271	0.3589	0.5917	0.9497
BeNMGYpr	38	0.6110	0.4899	0.3367	0.5904	0.5405	0.4323	0.5136
SNMGYpr	39	0.5381	0.3180	0.4216	0.5580	0.2989	0.5442	0.7394
ReNMGYp	40	0.6820	0.2780	0.3388	0.5044	0.4037	0.5872	0.8449
BeNMGYp	41	0.5853	0.5341	0.3306	0.4933	0.5015	0.3767	0.4529
SNMGYp	42	0.4470	0.3440	0.4995	0.4892	0.3164	0.4591	0.5888
ReNMGYr	43	0.4300	0.0485	0.3181	0.4515	0.2353	0.4817	0.8897
BeNMGYr	44	0.5054	0.3268	0.2685	0.5755	0.4666	0.4026	0.4722
SNMGYr	45	0.5123	0.2378	0.2797	0.5105	0.2292	0.5126	0.7247
	22	23	24	25	26	27	28	
BeTSHpr	29	1.0000						
STSHpr	30	0.6556	1.0000					
ReTSHp	31	0.5866	0.6067	1.0000				
BeTSHp	32	0.9061	0.5341	0.5441	1.0000			
STSHp	33	0.5194	0.8554	0.4965	0.5383	1.0000		
ReTSHr	34	0.6092	0.8216	0.6516	0.4017	0.6065	1.0000	
BeTSHr	35	0.8958	0.6503	0.5124	0.6238	0.3943	0.7037	1.0000
STSHr	36	0.6432	0.9394	0.5846	0.4478	0.6260	0.8355	0.7181
ReNMGYpr	37	0.7282	0.7569	0.9187	0.6172	0.6033	0.8148	0.6970
BeNMGYpr	38	0.9475	0.5403	0.4918	0.8897	0.4633	0.4450	0.8160
SNMGYpr	39	0.6432	0.9468	0.5944	0.5378	0.8502	0.7404	0.6235
ReNMGYp	40	0.6020	0.5663	0.9750	0.5669	0.4572	0.5866	0.5167
BeNMGYp	41	0.8800	0.4836	0.5078	0.9782	0.4915	0.3273	0.5984
SNMGYp	42	0.5151	0.8129	0.4982	0.5411	0.9694	0.5677	0.3833
ReNMGYr	43	0.7373	0.8373	0.6723	0.5572	0.6605	0.9288	0.7769
BeNMGYr	44	0.8173	0.4882	0.3626	0.5841	0.3257	0.4878	0.8964
SNMGYr	45	0.6279	0.8798	0.5625	0.4350	0.5951	0.7434	0.7031
	29	30	31	32	33	34	35	

Table 56 continued (5/5)

STSHr	36	1.0000						
ReNMGYpr	37	0.7402	1.0000					
BeNMGYpr	38	0.5069	0.6593	1.0000				
SNMGYpr	39	0.8627	0.7885	0.6137	1.0000			
ReNMGYp	40	0.5499	0.9265	0.5654	0.6121	1.0000		
BeNMGYp	41	0.4027	0.5970	0.9171	0.5343	0.5727	1.0000	
SNMGYp	42	0.5822	0.6358	0.5218	0.8729	0.5079	0.5381	1.0000
ReNMGYr	43	0.8234	0.8930	0.6432	0.8457	0.6580	0.5099	0.6647
BeNMGYr	44	0.5194	0.5871	0.8766	0.5725	0.4302	0.6121	0.3854
SNMGYr	45	0.9307	0.7664	0.5745	0.9176	0.5834	0.4318	0.6071
		36	37	38	39	40	41	42
ReNMGYr	43	1.0000						
BeNMGYr	44	0.6606	1.0000					
SNMGYr	45	0.8359	0.6185	1.0000				
		43	44	45				

Correlation is significantly different from zero if > 0.404 (5%), 0.515 (1%).

p = plant crop

r = ratoon crop

pr = (p+r)/2 crop

r_p = (r-p)/2 crop

NMGY = NMGYOT

Table 57. Correlation matrix for means of harvest and selection characters. 24 crosses, 3 crop classes (P, R, PR), trial Te, type (Re+Be+Se)/3

	1	2	3	4	5	6	DF = 22
FIBREp	1.0000						
FIBREr	0.9106	1.0000					
FIBREpr	0.9747	0.9799	1.0000				
TChp	0.3655	0.3702	0.3765	1.0000			
TChr	0.3859	0.4322	0.4198	0.6975	1.0000		
TCHpr	0.4086	0.4405	0.4352	0.8873	0.9494	1.0000	
CCSp	-0.5465	-0.6991	-0.6416	0.0018	-0.1694	-0.1083	1.0000
CCSr	-0.5227	-0.6194	-0.5870	0.0494	-0.0985	-0.0418	0.9394
CCSpr	-0.5432	-0.6704	-0.6245	0.0255	-0.1369	-0.0769	0.9854
TShp	0.1271	0.0721	0.1003	0.9221	0.5791	0.7769	0.3873
TShr	0.2094	0.2193	0.2196	0.7023	0.9437	0.9153	0.1464
TSHpr	0.1875	0.1674	0.1810	0.8638	0.8479	0.9244	0.2726
NMGYp	-0.0960	-0.1636	-0.1348	0.7984	0.4584	0.6450	0.5970
NMGYr	-0.0040	-0.0404	-0.0238	0.5960	0.7672	0.7551	0.4009
NMGYpr	-0.0540	-0.1101	-0.0856	0.7524	0.6613	0.7554	0.5385
SEL7p	0.2775	0.2385	0.2628	0.8338	0.4602	0.6617	0.1714
SEL7r	0.2331	0.2897	0.2690	0.5918	0.7607	0.7490	0.1511
SEL7pr	0.1939	0.1775	0.1894	0.7809	0.6734	0.7757	0.3224
SEL8p	0.0778	0.0349	0.0565	0.7668	0.3616	0.5688	0.2643
SEL8r	0.2111	0.2324	0.2274	0.6152	0.7513	0.7532	0.2408
SEL8pr	0.1773	0.1870	0.1866	0.8801	0.7199	0.8491	0.2660
SEL10p	0.0779	-0.0364	0.0180	0.6477	0.2149	0.4222	0.1998
SEL10r	0.1505	0.1468	0.1519	0.6582	0.7903	0.7972	0.1524
SEL10pr	0.1538	0.0548	0.1038	0.7559	0.5820	0.7060	0.2407
STALKp	0.2336	0.2963	0.2729	0.3972	0.4435	0.4596	-0.3229
STALKr	0.2890	0.4163	0.3645	0.3728	0.7824	0.6670	-0.3840
STALKpr	0.2924	0.4064	0.3607	0.4121	0.7213	0.6450	-0.3942
BRIXp	-0.2909	-0.3661	-0.3383	0.1495	-0.0700	0.0204	0.7634
BRIXr	0.0381	0.0064	0.0218	0.0649	0.0588	0.0663	0.5272
BRIXpr	-0.1300	-0.1932	-0.1672	0.1280	-0.0040	0.0535	0.7750
HARDp	0.6418	0.6262	0.6481	0.3700	0.0696	0.2070	-0.2977
HARDr	0.7068	0.7550	0.7491	0.2359	0.1750	0.2160	-0.4224
HARDpr	0.7070	0.7238	0.7324	0.3183	0.1296	0.2229	-0.3772
VISGp	0.2188	0.1896	0.2081	0.8806	0.4717	0.6896	0.1947
VISGr	0.2829	0.3373	0.3188	0.6667	0.8182	0.8189	0.1158
VISGpr	0.2979	0.3200	0.3167	0.8847	0.7811	0.8905	0.1742
WSp	0.1464	0.1025	0.1260	0.5428	0.2308	0.3864	0.2650
WSr	0.1479	0.0315	0.0884	0.4172	0.2739	0.3592	0.3213
WSpr	0.1559	0.0779	0.1173	0.5214	0.2634	0.3981	0.3055
STVARp	-0.0615	-0.0174	-0.0392	-0.0039	0.1685	0.1068	-0.1501
STVARr	0.1807	0.2905	0.2441	0.2464	0.5684	0.4738	-0.3430
STVARpr	0.1092	0.1615	0.1399	0.1359	0.4156	0.3271	-0.2129
BRVARp	0.0793	0.1123	0.0990	-0.0165	-0.1309	-0.0914	-0.2743
BRVARr	-0.2223	-0.3382	-0.2901	-0.3732	-0.7043	-0.6169	0.0719
BRVARpr	0.1021	0.0615	0.0825	-0.1174	-0.4090	-0.3147	-0.3298
HVARp	0.4387	0.4364	0.4476	-0.0064	-0.0500	-0.0349	-0.1073
HVARr	0.3078	0.2901	0.3054	-0.1318	-0.2446	-0.2151	-0.2115
HVARpr	0.3418	0.3806	0.3707	-0.1119	-0.2124	-0.1858	-0.2006
GVARp	-0.2985	-0.3851	-0.3523	0.0188	-0.2310	-0.1404	0.3000
GVARr	0.0759	-0.0358	0.0172	0.5672	0.4482	0.5371	0.2437
GVARpr	-0.0678	-0.2207	-0.1520	0.4090	0.1667	0.2866	0.3298
WSr_p	-0.0688	-0.1254	-0.1010	-0.3959	-0.0648	-0.2151	-0.0671
WSp	0.1464	0.1025	0.1260	0.5428	0.2308	0.3864	0.2650
WSr	0.1479	0.0315	0.0884	0.4172	0.2739	0.3592	0.3213
WSpr	0.1559	0.0779	0.1173	0.5214	0.2634	0.3981	0.3055

Table 57 continued (2/6)

CCSr	8	1.0000							
CCSpr	9	0.9841	1.0000						
TSHp	10	0.4040	0.4016	1.0000					
TSHr	11	0.2339	0.1921	0.7048	1.0000				
TSHpr	12	0.3337	0.3071	0.9023	0.9418	1.0000			
NMGYp	13	0.5979	0.6067	0.9666	0.6500	0.8532	1.0000		
NMGYr	14	0.5140	0.4633	0.7039	0.9193	0.8923	0.7172	1.0000	
NMGYpr	15	0.6000	0.5774	0.9013	0.8468	0.9418	0.9266	0.9266	
SEL7p	16	0.1617	0.1693	0.8365	0.5065	0.7043	0.7594	0.4913	
SEL7r	17	0.1732	0.1645	0.6038	0.8050	0.7754	0.5574	0.6101	
SEL7pr	18	0.3286	0.3305	0.8434	0.7718	0.8688	0.8080	0.6838	
SEL8p	19	0.2331	0.2529	0.8125	0.4327	0.6481	0.7772	0.4528	
SEL8r	20	0.2304	0.2393	0.6614	0.8142	0.8083	0.6279	0.6440	
SEL8pr	21	0.2755	0.2749	0.9153	0.7969	0.9181	0.8637	0.6972	
SEL10p	22	0.1494	0.1779	0.6808	0.2652	0.4839	0.6449	0.2645	
SEL10r	23	0.1293	0.1433	0.6650	0.8146	0.8103	0.6239	0.6550	
SEL10pr	24	0.1759	0.2122	0.7955	0.6328	0.7617	0.7534	0.5325	
STALKp	25	-0.2285	-0.2810	0.2426	0.3574	0.3321	0.1342	0.3524	
STALKr	26	-0.3187	-0.3575	0.1988	0.6589	0.4946	0.0832	0.5406	
STALKpr	27	-0.3146	-0.3608	0.2306	0.6007	0.4743	0.1081	0.5130	
BRIXp	28	0.7111	0.7493	0.4330	0.1742	0.3112	0.5677	0.3783	
BRIXr	29	0.5214	0.5325	0.2634	0.2302	0.2648	0.3362	0.1960	
BRIXpr	30	0.7403	0.7698	0.4177	0.2456	0.3473	0.5400	0.3336	
HARDp	31	-0.2233	-0.2652	0.2166	-0.0058	0.0992	0.0651	-0.1111	
HARDr	32	-0.2749	-0.3556	0.0421	0.0743	0.0652	-0.1207	-0.0568	
HARDpr	33	-0.2611	-0.3253	0.1365	0.0373	0.0875	-0.0282	-0.0869	
VISGp	34	0.2077	0.2042	0.8884	0.5328	0.7449	0.8180	0.5281	
VISGr	35	0.1427	0.1310	0.6587	0.8489	0.8281	0.5955	0.6525	
VISGpr	36	0.1962	0.1879	0.8832	0.8315	0.9239	0.8059	0.6954	
WSp	37	0.2181	0.2458	0.6022	0.3046	0.4706	0.5811	0.1927	
WSr	38	0.3093	0.3204	0.5064	0.3690	0.4643	0.5048	0.2617	
WSpr	39	0.2709	0.2930	0.5973	0.3509	0.4964	0.5833	0.2342	
STVARp	40	-0.2459	-0.2000	-0.0645	0.0834	0.0201	-0.0774	-0.0482	
STVARr	41	-0.3884	-0.3708	0.0934	0.4216	0.3004	0.0087	0.2469	
STVARpr	42	-0.2894	-0.2541	0.0382	0.3059	0.2040	-0.0105	0.1583	
BRVARp	43	-0.2932	-0.2881	-0.1091	-0.2091	-0.1788	-0.1649	-0.3386	
BRVARr	44	-0.0168	0.0289	-0.3128	-0.6782	-0.5604	-0.2474	-0.5701	
BRVARpr	45	-0.3553	-0.3477	-0.2299	-0.5009	-0.4134	-0.2866	-0.5594	
HVARp	46	0.0430	-0.0343	-0.0481	-0.0341	-0.0434	-0.1146	-0.0806	
HVARr	47	-0.1647	-0.1916	-0.2015	-0.2887	-0.2710	-0.2615	-0.3497	
HVARpr	48	-0.1019	-0.1547	-0.1793	-0.2425	-0.2324	-0.2423	-0.3093	
GVARp	49	0.1189	0.2146	0.1446	-0.1703	-0.0349	0.2172	-0.1915	
GVARr	50	0.1525	0.2022	0.6181	0.4874	0.5892	0.6058	0.3668	
GVARpr	51	0.1976	0.2692	0.5075	0.2309	0.3808	0.5324	0.1779	
WSr_p	52	-0.0071	-0.0383	-0.3925	-0.0774	-0.2331	-0.3615	-0.0186	
WSp	53	0.2181	0.2458	0.6022	0.3046	0.4706	0.5811	0.1927	
WSr	54	0.3093	0.3204	0.5064	0.3690	0.4643	0.5048	0.2617	
WSpr	55	0.2709	0.2930	0.5973	0.3509	0.4964	0.5833	0.2342	

Table 57 continued (3/6)

Table 57 continued (4/6)

SEL10p	22	1.0000
SEL10r	23	0.2769
SEL10pr	24	0.7078
	25	0.7949
STALKp	26	0.2005
STALKr	27	0.1725
STALKpr	28	0.1398
BRIXp	29	1.0000
BRIXr	30	0.4471
BRIXpr	31	0.1447
HARDp	32	0.6850
HARDr	33	1.0000
HARDpr	34	1.0000
VISGp	35	0.1111
VISGr	36	0.0029
VISGpr	37	0.1510
WSp	38	0.3366
WSr	39	0.2322
WSp	40	0.2698
STVARp	41	0.0003
STVARr	42	0.4009
STVARpr	43	0.1057
BRVARp	44	0.1326
BRVARr	45	-0.0939
BRVARpr	46	-0.1133
HVARp	47	0.3028
HVARr	48	0.3592
HVARpr	49	0.3104
GVARp	50	0.7660
GVARr	51	0.3104
GVARpr	52	0.0023
WSr_p	53	0.1241
WSp	54	0.1981
WSr	55	-0.1029
WSp	56	0.0695
WSr	57	0.1399
WSp	58	0.3881
WSr	59	0.2901
WSp	60	0.2364
WSr	61	0.0321
WSp	62	0.1622
WSr	63	-0.1052
WSp	64	0.6531
WSr	65	-0.0008
WSp	66	0.5140
WSr	67	0.0208
WSp	68	0.2848
WSr	69	-0.5854
WSp	70	0.1227
WSr	71	-0.4756
WSp	72	-0.5156
WSr	73	-0.2907
WSp	74	-0.1469
WSr	75	-0.2207
WSp	76	-0.3415
WSr	77	-0.2893
WSp	78	-0.3238
WSr	79	-0.2872
WSp	80	0.1429
WSr	81	-0.5348
WSp	82	0.1611
WSr	83	-0.0417
WSp	84	0.1720
WSr	85	-0.2794
WSp	86	-0.3328
WSr	87	0.2364
WSp	88	-0.3887
WSr	89	0.0321
WSp	90	0.1622

Table 57 continued (5/6)

BRIXr	29	1.0000						
BRIXpr	30	0.8519						
HARDp	31	0.0407	0.0338	1.0000				
HARDr	32	0.1438	-0.0109	0.8283	1.0000			
HARDpr	33	0.0968	0.0120	0.9562	0.9560	1.0000		
VISGp	34	0.0507	0.2488	0.3165	0.1021	0.2205	1.0000	
VISGr	35	0.5288	0.4327	0.1061	0.2191	0.1718	0.4582	1.0000
VISGpr	36	0.3800	0.4161	0.2311	0.1961	0.2254	0.8001	0.8995
WSp	37	0.4249	0.4238	0.2663	0.1411	0.2135	0.4072	0.4958
WSr	38	0.5995	0.4233	0.1806	0.1020	0.1483	0.3258	0.5198
WSpr	39	0.5262	0.4493	0.2454	0.1326	0.1982	0.3967	0.5363
STVARp	40	-0.0335	-0.0826	-0.1022	-0.1486	-0.1311	-0.0005	0.2597
STVARr	41	-0.2697	-0.1858	-0.0813	-0.0628	-0.0745	0.1909	0.3871
STVARpr	42	-0.1606	-0.1009	-0.0695	-0.0683	-0.0716	0.1209	0.3580
BRVARp	43	0.0611	-0.2748	-0.0539	-0.0795	-0.0686	-0.1732	-0.0645
BRVARr	44	-0.2741	-0.1119	-0.0178	-0.2061	-0.1174	-0.2712	-0.6339
BRVARpr	45	-0.2242	-0.4271	0.0410	-0.0560	-0.0061	-0.2101	-0.3771
HVARp	46	0.4656	0.2361	0.4719	0.5857	0.5537	-0.0017	0.1067
HVARr	47	0.0824	-0.0987	0.3348	0.3060	0.3361	-0.2240	-0.1865
HVARpr	48	0.2739	0.0310	0.3947	0.4380	0.4365	-0.1407	-0.1002
GVARp	49	0.0709	0.1365	-0.1717	-0.4976	-0.3488	0.0532	-0.0770
GVARr	50	0.2594	0.2655	0.0227	-0.2219	-0.1029	0.4653	0.5095
GVARpr	51	0.1583	0.2060	0.0327	-0.3269	-0.1526	0.3807	0.2369
WSr_p	52	-0.0170	-0.2043	-0.2202	-0.1097	-0.1727	-0.2832	-0.2128
WSp	53	0.4249	0.4238	0.2663	0.1411	0.2135	0.4072	0.4958
WSr	54	0.5995	0.4233	0.1806	0.1020	0.1483	0.3258	0.5198
WSpr	55	0.5262	0.4493	0.2454	0.1326	0.1982	0.3967	0.5363

	29	30	31	32	33	34	35	
VISGpr	36	1.0000						
WSp	37	0.5438	1.0000					
WSr	38	0.5100	0.7693	1.0000				
WSpr	39	0.5621	0.9609	0.9161	1.0000			
STVARp	40	0.1725	-0.2457	-0.0978	-0.1964	1.0000		
STVARr	41	0.3539	-0.1706	-0.2054	-0.1960	0.5898	1.0000	
STVARpr	42	0.2982	-0.2260	-0.1595	-0.2109	0.8252	0.9016	1.0000
BRVARp	43	-0.1297	0.0919	0.2347	0.1593	0.0481	-0.3413	-0.2617
BRVARr	44	-0.5515	-0.0418	-0.2799	-0.1473	-0.2155	-0.4587	-0.3533
BRVARpr	45	-0.3546	-0.0191	-0.0190	-0.0200	-0.0102	-0.3823	-0.2749
HVARp	46	0.0657	0.0791	0.3714	0.2105	-0.2256	-0.3583	-0.3449
HVARr	47	-0.2328	0.1972	0.1751	0.1996	-0.4831	-0.5201	-0.5982
HVARpr	48	-0.1381	0.1363	0.2547	0.1959	-0.4491	-0.4869	-0.5668
GVARp	49	-0.0150	0.5163	0.4120	0.5028	-0.0307	-0.1814	-0.1564
GVARr	50	0.5769	0.5641	0.6555	0.6382	0.0749	0.2765	0.2180
GVARpr	51	0.3539	0.5583	0.6307	0.6239	-0.0256	0.0285	0.0176
WSr_p	52	-0.2979	-0.7287	-0.1231	-0.5107	0.2765	0.0447	0.1799
WSp	53	0.5438	1.0000	0.7693	0.9609	-0.2457	-0.1706	-0.2260
WSr	54	0.5100	0.7693	1.0000	0.9161	-0.0978	-0.2054	-0.1595
WSpr	55	0.5621	0.9609	0.9161	1.0000	-0.1964	-0.2109	-0.2109

Table 57 continued (6/6)

BRVARP	43	1.0000						
BRVARR	44	0.1035	1.0000					
BRVARPr	45	0.7963	0.5122	1.0000				
HVARP	46	0.1893	-0.1939	0.1036	1.0000			
HVARR	47	0.3809	0.1621	0.4750	0.4689	1.0000		
HVARPr	48	0.3354	-0.0559	0.3362	0.7499	0.8942	1.0000	
GVARP	49	0.3553	0.2739	0.3014	-0.1832	0.0767	-0.0217	1.0000
GVARR	50	-0.0433	-0.2050	-0.1638	-0.1381	-0.2560	-0.2397	0.4352
GVARPr	51	0.0716	-0.0079	-0.0008	-0.1504	-0.1233	-0.1486	0.7055
WSr_p	52	0.1089	-0.2354	0.0090	0.2751	-0.1187	0.0612	-0.3608
WSp	53	0.0919	-0.0418	-0.0191	0.0791	0.1972	0.1363	0.5163
WSr	54	0.2347	-0.2799	-0.0190	0.3714	0.1751	0.2547	0.4120
WSpr	55	0.1593	-0.1473	-0.0200	0.2105	0.1996	0.1959	0.5028
		43	44	45	46	47	48	49
GVARr	50	1.0000						
GVARPr	51	0.8997	1.0000					
WSr_p	52	-0.1739	-0.1917	1.0000				
WSp	53	0.5641	0.5583	-0.7287	1.0000			
WSr	54	0.6555	0.6307	-0.1231	0.7693	1.0000		
WSpr	55	0.6382	0.6239	-0.5107	0.9609	0.9161	1.0000	
		50	51	52	53	54	55	

Correlation is significantly different from zero if > 0.404 (5%), 0.515 (1%).

p = plant crop

r = ratoon crop

pr = (p+r)/2 crop

r_p = (r-p)/2 crop

NMGY = NMGYOT

VISG = visual net merit grade

SEL7 = number of selections graded 7+

SEL8 = number of selections graded 8+

SEL10 = number of selections graded 10+

ST = number of stalks

WS = weight per stalk

STV = within plot variance for number of stalks

BRV = within plot variance for BRIX

HV = within plot variance for HARDNESS

GV = within plot variance for visual net merit grade

Table 58a. Correlation matrix on a plot basis for Re+Be+Se, followed by separate matrices for Re, Be and Se types. Each matrix consists of two parts (a,b) which have some correlations in common.

The following matrix is for random+bunch+single

DF = 214

pFIBRE	1	1.0000					
pTCH	2	0.1904	1.0000				
pCCS	3	-0.2435	0.0410	1.0000			
pTSH	4	0.0943	0.9395	0.3767	1.0000		
pNMGYOT	5	-0.0733	0.8349	0.5233	0.9524	1.0000	
WSp	6	0.0347	0.5396	0.0682	0.5256	0.4748	1.0000
rFIBRE	7	0.6376	0.1770	-0.2978	0.0613	-0.0483	0.0361
rTCH	8	0.2065	0.5912	-0.1531	0.4918	0.3949	0.2974
rCCS	9	-0.2251	-0.0530	0.5730	0.1472	0.2613	0.0159
rTSH	10	0.1284	0.5690	0.0454	0.5405	0.4826	0.3038
rNMGYOT	11	0.0634	0.4250	0.2788	0.4867	0.3946	0.1784
WSr	12	0.0338	0.3638	0.0059	0.3368	0.2999	0.6006
SEL7p	13	0.2478	0.5381	0.1779	0.5646	0.5013	0.1905
SEL8p	14	0.1451	0.4819	0.2294	0.5316	0.4919	0.1477
SEL10p	15	0.1055	0.3775	0.1268	0.4022	0.3448	0.1476
STALKp	16	0.1874	0.4486	-0.0531	0.3948	0.3349	-0.4851
BRIXp	17	0.1209	0.0818	0.6791	0.3042	0.3694	0.0060
HARDp	18	0.5262	0.2894	-0.0972	0.2329	0.1189	0.2250
NMGr	19	0.2503	0.6205	0.2281	0.6588	0.5896	0.1833
SEL7r	20	0.1702	0.3744	0.0944	0.3799	0.3619	0.2860
SEL8r	21	0.0907	0.4441	0.1835	0.4757	0.4701	0.3727
SEL10r	22	0.0437	0.3949	0.0317	0.3782	0.3639	0.3098
STALKr	23	0.2287	0.3511	-0.1891	0.2586	0.1757	-0.2195
BRIXr	24	0.0740	-0.0790	0.4824	0.0870	0.1701	0.0723
HARDr	25	0.5288	0.0466	-0.0830	0.0070	-0.0672	0.0099
NMGr	26	0.1796	0.5051	0.1108	0.5038	0.4747	0.3510
pSTvar	27	-0.0128	0.0856	-0.0252	0.0729	0.0703	-0.1893
pBRvar	28	-0.1317	-0.1149	-0.3592	-0.2161	-0.2215	-0.0133
pHARDvar	29	0.0993	0.0066	-0.1011	-0.0256	-0.0308	0.0402
pNMGvar	30	-0.0926	-0.0524	0.0334	-0.0301	-0.0204	0.0276
rSTvar	31	0.0521	0.1838	-0.0842	0.1397	0.0995	-0.0445
rBRvar	32	0.0073	-0.1246	-0.1003	-0.1428	-0.1576	-0.0061
rHARDvar	33	0.0459	0.0170	-0.2092	-0.0557	-0.0652	0.0941
rNMGvar	34	-0.0018	0.2501	0.0524	0.2470	0.2439	0.2190

1 2 3 4 5 6 7

Table 58a continued (2/12)

rTCH	8	1.0000						
rCCS	9	-0.1637	1.0000					
rTSH	10	0.9351	0.1901	1.0000				
rNMGYOT	11	0.7002	0.3406	0.8182	1.0000			
WSr	12	0.5911	-0.0120	0.5817	0.4257	1.0000		
SEL7p	13	0.2602	0.1177	0.3080	0.3322	0.1342	1.0000	
SEL8p	14	0.1372	0.1244	0.1869	0.2387	0.0841	0.7949	1.0000
SEL10p	15	0.0713	0.0866	0.1122	0.1775	0.1519	0.4592	0.6348
STALKp	16	0.2826	-0.0927	0.2497	0.2265	-0.2601	0.3468	0.3456
BRIXp	17	-0.1104	0.4915	0.0635	0.2317	-0.1299	0.3469	0.3362
HARDp	18	0.1262	-0.0479	0.1083	0.0579	0.1223	0.2888	0.2214
NMGr	19	0.2941	0.1424	0.3497	0.3785	0.1387	0.8621	0.8382
SEL7r	20	0.5670	0.0730	0.5983	0.3712	0.3855	0.2753	0.1821
SEL8r	21	0.5758	0.0966	0.6150	0.4036	0.4007	0.2751	0.2040
SEL10r	22	0.4638	-0.0674	0.4409	0.2112	0.2841	0.1506	0.0834
STALKr	23	0.6376	-0.1787	0.5727	0.4338	-0.2299	0.1762	0.0849
BRIXr	24	-0.0286	0.3424	0.0914	0.0708	0.1420	0.0034	-0.0063
HARDr	25	0.0208	-0.0648	-0.0030	0.0270	-0.0436	0.1291	0.0373
NMGr	26	0.6908	0.0608	0.7119	0.4623	0.4429	0.3158	0.1951
pSTvar	27	-0.0179	-0.0375	-0.0305	-0.0516	-0.1385	0.0753	0.1340
pBRvar	28	-0.1304	-0.1254	-0.1607	-0.2628	-0.0358	-0.1921	-0.1072
pHARDvar	29	-0.0269	0.0301	-0.0109	-0.0952	0.1235	0.0431	0.0718
pNMGvar	30	-0.2297	-0.0211	-0.2268	-0.1443	-0.0342	0.0346	0.2586
rSTvar	31	0.1830	-0.1484	0.1231	0.0668	-0.1468	0.0841	0.1142
rBRvar	32	-0.1774	-0.1073	-0.2099	-0.1798	-0.0455	-0.1697	-0.1061
rHARDvar	33	-0.0072	-0.0504	-0.0225	-0.1702	0.1276	-0.0788	-0.0236
rNMGvar	34	0.1662	-0.0509	0.1459	0.0239	0.1939	0.0352	0.0866

	8	9	10	11	12	13	14	
SEL10p	15	1.0000						
STALKp	16	0.2432	1.0000					
BRIXp	17	0.1716	0.0832	1.0000				
HARDp	18	0.1149	0.0848	0.1883	1.0000			
NMGr	19	0.6640	0.4353	0.4032	0.2954	1.0000		
SEL7r	20	0.1486	0.0974	0.0922	0.1483	0.2835	1.0000	
SEL8r	21	0.1463	0.0673	0.1244	0.1265	0.2770	0.8327	1.0000
SEL10r	22	0.0691	0.0827	-0.0234	0.0432	0.1312	0.5386	0.6579
STALKr	23	-0.0653	0.5884	-0.0007	0.0411	0.2190	0.3287	0.3177
BRIXr	24	-0.0792	-0.1511	0.4085	0.0086	-0.0371	0.3805	0.3612
HARDr	25	-0.0391	0.0554	0.1833	0.5535	0.1155	0.0536	0.0042
NMGr	26	0.0817	0.1454	0.0862	0.1303	0.3160	0.8801	0.8581
pSTvar	27	0.2379	0.3383	-0.0205	-0.0441	0.0520	0.0806	0.1046
pBRvar	28	-0.0062	-0.0828	-0.5471	-0.0790	-0.2406	-0.0055	-0.0552
pHARDvar	29	0.0426	-0.0089	-0.0577	0.2598	0.0286	0.1011	0.0191
pNMGvar	30	0.4316	-0.0477	0.0073	-0.1302	0.0486	-0.0821	-0.0498
rSTvar	31	0.1179	0.2252	-0.0128	-0.0194	0.0988	0.0882	0.1711
rBRvar	32	0.0193	-0.1099	-0.0848	0.0068	-0.1357	-0.2064	-0.1526
rHARDvar	33	-0.0789	-0.0833	-0.1491	0.1553	-0.1238	-0.0880	-0.1042
rNMGvar	34	0.2154	0.0115	-0.0444	-0.0241	0.0394	0.2495	0.3577

15 16 17 18 19 20 21

Table 58a continued (3/12)

Table 58a continued (4/12)

The following analysis is for random seedlings

***** CORRELATION MATRIX *****

DF = 70

	1	2	3	4	5	6	7
pFIBRE	1 1.0000						
pTCH	2 0.2121	1.0000					
pCCS	3 -0.2703	0.0866	1.0000				
pTSH	4 0.0933	0.9386	0.4211	1.0000			
pNMGYOT	5 -0.0403	0.8249	0.5848	0.9543	1.0000		
WSp	6 0.1363	0.4099	-0.0006	0.3819	0.3143	1.0000	
rFIBRE	7 0.6279	0.2989	-0.3371	0.1551	0.0317	0.1491	1.0000
rTCH	8 0.2646	0.6104	-0.0506	0.5310	0.4275	0.1125	0.3019
rCCS	9 -0.2033	-0.1388	0.6337	0.0891	0.2109	-0.0633	-0.4265
rTSH	10 0.2020	0.5510	0.1462	0.5453	0.4812	0.1069	0.1750
rNMGYOT	11 0.0345	0.4445	0.3632	0.5194	0.4337	0.0085	0.0071
WSr	12 0.0182	0.3674	0.0481	0.3501	0.2901	0.5108	0.0304
SEL7p	13 0.2210	0.5167	0.1278	0.5230	0.4882	0.0177	0.2371
SEL8p	14 0.1311	0.5326	0.1226	0.5346	0.4935	0.0635	0.1684
SEL10p	15 0.0016	0.3744	0.0397	0.3618	0.3466	0.1099	0.1843
STALKp	16 0.1116	0.4809	0.0169	0.4357	0.3891	-0.5580	0.1395
BRIXp	17 0.1413	0.1522	0.6100	0.3421	0.4276	-0.0224	-0.0200
HARDp	18 0.5191	0.3232	-0.1101	0.2523	0.1507	0.2569	0.4547
NMGr	19 0.2707	0.6620	0.2036	0.6760	0.6311	0.0444	0.2821
SEL7r	20 0.2338	0.4333	0.2058	0.4612	0.4366	0.1186	0.1909
SEL8r	21 0.1674	0.4485	0.2306	0.4891	0.4781	0.2672	0.1864
SEL10r	22 0.1093	0.4584	0.0597	0.4447	0.4116	0.2338	0.0946
STALKr	23 0.3089	0.3942	-0.1090	0.3132	0.2411	-0.3163	0.3383
BRIXr	24 0.1210	0.1001	0.4890	0.2588	0.3235	0.0419	0.0455
HARDr	25 0.5025	0.0691	-0.1632	-0.0072	-0.0733	0.0441	0.6066
NMGr	26 0.2629	0.5356	0.2155	0.5580	0.5211	0.1398	0.1988
pSTvar	27 -0.0693	0.1219	-0.1874	0.0494	0.0405	-0.2509	-0.0038
pBRvar	28 -0.0588	-0.2242	-0.4985	-0.3574	-0.3977	0.1469	-0.0112
pHARDvar	29 0.1954	0.0864	-0.2561	-0.0127	-0.0683	-0.0593	0.2556
pNMGvar	30 -0.1352	-0.0585	-0.2318	-0.1208	-0.1404	0.0851	0.1177
rSTvar	31 0.1126	0.2246	-0.1880	0.1305	0.0528	-0.1162	0.2427
rBRvar	32 -0.1140	-0.0328	-0.1100	-0.0607	-0.0555	0.2350	-0.0201
rHARDvar	33 0.0971	-0.0041	-0.2904	-0.1090	-0.1380	-0.0091	0.0385
rNMGvar	34 0.0634	0.3622	0.1455	0.3788	0.4012	0.2041	0.1012

Table 58a continued (5/12)

rTCH	8	1.0000						
rCCS	9	-0.0938	1.0000					
rTSH	10	0.9498	0.2167	1.0000				
rNMGYOT	11	0.7221	0.3954	0.8296	1.0000			
WSr	12	0.5601	0.0679	0.5748	0.4659	1.0000		
SEL7p	13	0.2559	-0.0966	0.2206	0.2213	0.0207	1.0000	
SEL8p	14	0.1587	-0.2067	0.0886	0.1273	-0.0281	0.7745	1.0000
SEL10p	15	0.1024	-0.0824	0.0864	0.0871	0.0959	0.4780	0.5846
STALKp	16	0.4159	-0.0969	0.3654	0.3578	-0.1680	0.4516	0.4583
BRIXP	17	0.0300	0.4468	0.1670	0.2637	-0.1051	0.3566	0.2786
HARDp	18	0.1466	-0.1045	0.1147	0.0502	0.0432	0.2943	0.2330
NMGP	19	0.3938	-0.0728	0.3588	0.3485	0.1339	0.8442	0.7816
SEL7r	20	0.6657	0.0474	0.6730	0.4948	0.4142	0.3487	0.2090
SEL8r	21	0.6173	0.0883	0.6394	0.4514	0.3925	0.2139	0.1023
SEL10r	22	0.5184	-0.0761	0.4858	0.3228	0.2425	0.2542	0.1597
STALKr	23	0.7017	-0.1780	0.6268	0.4440	-0.1876	0.2661	0.1995
BRIXR	24	0.2001	0.2861	0.2918	0.2795	0.2604	0.1004	-0.0004
HARDr	25	0.0702	-0.0817	0.0533	0.0347	-0.0556	0.0023	-0.0335
NMGr	26	0.7917	0.0407	0.7863	0.6034	0.4880	0.3282	0.1907
pSTvar	27	0.0033	-0.1336	-0.0437	-0.0803	-0.1688	0.1567	0.1455
pBRvar	28	-0.2612	-0.2824	-0.3244	-0.4439	-0.0393	-0.2668	-0.0866
pHARDvar	29	0.0786	-0.1557	0.0323	-0.0562	0.1378	0.0186	0.0441
pNMGvar	30	-0.2921	-0.1954	-0.3316	-0.2734	-0.1061	0.1576	0.2906
rSTvar	31	0.1480	-0.1989	0.0782	0.0629	-0.2015	0.2013	0.1548
rBRvar	32	-0.1249	-0.1010	-0.1379	-0.1773	0.0770	-0.0682	-0.1006
rHARDvar	33	-0.0104	-0.1775	-0.0639	-0.2054	0.0368	-0.0889	0.0319
rNMGvar	34	0.3840	-0.0772	0.3516	0.1645	0.2455	0.1951	0.1273

	8	9	10	11	12	13	14	
SEL10p	15	1.0000						
STALKp	16	0.3173	1.0000					
BRIXP	17	0.1184	0.1686	1.0000				
HARDp	18	0.0434	0.0797	0.2399	1.0000			
NMGP	19	0.6060	0.5486	0.4509	0.3154	1.0000		
SEL7r	20	0.1245	0.2764	0.1753	0.1660	0.3642	1.0000	
SEL8r	21	0.0398	0.1219	0.1574	0.1520	0.2256	0.7893	1.0000
SEL10r	22	0.0099	0.1755	0.0005	0.0590	0.2124	0.5442	0.6777
STALKr	23	0.0287	0.6346	0.1172	0.1266	0.3444	0.4373	0.3880
BRIXR	24	-0.0956	0.0259	0.3543	0.0064	0.0835	0.4363	0.5053
HARDr	25	-0.0399	0.0379	0.1855	0.5205	0.0876	-0.0117	0.0189
NMGr	26	0.0240	0.3093	0.1499	0.1190	0.3836	0.8766	0.8256
pSTvar	27	0.3282	0.4395	-0.1699	-0.0563	0.0744	0.0263	0.0252
pBRvar	28	-0.0536	-0.2663	-0.6880	-0.1468	-0.4082	-0.1890	-0.1639
pHARDvar	29	0.0135	0.1834	-0.2542	0.2582	-0.0214	0.2310	0.0876
pNMGvar	30	0.4837	-0.0331	-0.1866	-0.1344	0.0186	-0.2072	-0.2117
rSTvar	31	0.1697	0.2783	-0.0388	0.0880	0.1425	0.0900	0.1694
rBRvar	32	-0.0280	-0.2422	-0.2115	0.1029	-0.1620	-0.1239	-0.0354
rHARDvar	33	-0.1218	0.0015	-0.2764	0.1665	-0.0904	-0.1759	-0.1810
rNMGvar	34	0.1696	0.0848	-0.0207	0.0286	0.1892	0.4313	0.5818

15 16 17 18 19 20 21

Table 58a continued (6/12)

Table 58a continued (7/12)

The following analysis is for bunch seedlings

***** CORRELATION MATRIX *****

DF = 70

	1	2	3	4	5	6	7
pFIBRE	1 1.0000						
pTCH	2 0.1076	1.0000					
pCCS	3 -0.3013	0.1068	1.0000				
pTSH	4 0.0045	0.9414	0.4324	1.0000			
pNMGYOT	5 -0.1891	0.8482	0.5576	0.9549	1.0000		
WSp	6 -0.0877	0.5343	0.1980	0.5475	0.5200	1.0000	
rFIBRE	7 0.7222	0.1526	-0.3749	0.0089	-0.1291	-0.0084	1.0000
rTCH	8 0.1736	0.5124	-0.2062	0.3885	0.2967	0.2328	0.1425
rCCS	9 -0.4246	0.0332	0.4579	0.1871	0.2918	0.0863	-0.4527
rTSH	10 0.0069	0.5356	-0.0316	0.4706	0.4154	0.2628	-0.0384
rNMGYOT	11 0.0231	0.3864	0.1995	0.4172	0.3139	0.1451	-0.1356
WSr	12 0.0031	0.2619	0.0390	0.2456	0.2292	0.5782	-0.0863
SEL7p	13 0.2619	0.6050	0.2275	0.6269	0.5315	0.1729	0.1737
SEL8p	14 0.0852	0.5040	0.3297	0.5737	0.5400	0.1267	-0.0882
SEL10p	15 0.1721	0.4381	0.2539	0.4911	0.4289	0.0920	-0.0597
STALKp	16 0.2108	0.4929	-0.0978	0.4166	0.3457	-0.4582	0.2123
BRIXp	17 0.0076	0.1138	0.7495	0.3533	0.4026	0.0925	-0.0896
HARDp	18 0.5210	0.2838	-0.1396	0.2110	0.0646	0.2053	0.5014
NMGp	19 0.2482	0.6301	0.2955	0.6779	0.5897	0.1114	0.0905
SEL7r	20 0.0250	0.3223	0.0493	0.3085	0.2849	0.3552	0.0521
SEL8r	21 -0.1049	0.4073	0.2693	0.4542	0.4638	0.3848	-0.0120
SEL10r	22 -0.0651	0.4237	0.1160	0.4112	0.3854	0.3743	-0.0112
STALKr	23 0.2079	0.3279	-0.2970	0.1959	0.1031	-0.2570	0.2697
BRIXr	24 -0.0566	-0.1366	0.4070	0.0072	0.0693	0.2322	-0.0350
HARDr	25 0.5820	0.0213	-0.1361	-0.0298	-0.1415	-0.0068	0.6377
NMGr	26 0.0088	0.4979	0.0551	0.4632	0.4240	0.4335	0.1097
pSTvar	27 -0.0510	0.0683	0.0418	0.0694	0.0904	-0.2138	0.0683
pBRvar	28 -0.1358	-0.0523	-0.3898	-0.1698	-0.1926	-0.1131	-0.1277
pHARDvar	29 0.0088	-0.0156	0.0640	0.0160	0.0471	0.0983	-0.0068
pNMGvar	30 -0.0636	-0.0013	0.1842	0.0623	0.1048	0.0588	-0.1335
rSTvar	31 -0.0292	0.2722	0.0063	0.2401	0.2476	-0.0129	0.0689
rBRvar	32 0.1086	-0.1354	-0.0128	-0.1225	-0.1336	-0.1315	-0.0030
rHARDvar	33 -0.1072	0.0921	-0.0928	0.0536	0.0906	0.2266	-0.0791
rNMGvar	34 -0.1221	0.2878	0.1256	0.2902	0.2997	0.3264	-0.1937

Table 58a continued (8/12)

rTCH	8	1.0000												
rCCS	9	-0.2738	1.0000											
rTSH	10	0.9137	0.1357	1.0000										
rNMGYOT	11	0.6628	0.2735	0.8011	1.0000									
WSr	12	0.5473	-0.0891	0.5157	0.3194	1.0000								
SEL7p	13	0.2120	0.2003	0.3121	0.3664	0.0872	1.0000							
SEL8p	14	0.0829	0.2637	0.1983	0.2482	0.0811	0.8112	1.0000						
SEL10p	15	-0.0328	0.1870	0.0462	0.1053	0.0392	0.5196	0.7136						
STALKp	16	0.2889	-0.0624	0.2811	0.2346	-0.3161	0.4572	0.3984						
BRIXp	17	-0.1845	0.4493	-0.0050	0.2147	-0.1128	0.3881	0.3626						
HARDp	18	0.1100	-0.0659	0.0857	0.0877	0.1363	0.2831	0.2172						
NMGr	19	0.1227	0.2270	0.2299	0.3011	-0.0032	0.8948	0.8824						
SEL7r	20	0.3801	-0.0230	0.3917	0.1521	0.2986	0.1274	0.1213						
SEL8r	21	0.4143	0.0647	0.4594	0.2750	0.3206	0.2096	0.2130						
SEL10r	22	0.4108	-0.1602	0.3541	0.1825	0.2981	0.1322	0.1267						
STALKr	23	0.6586	-0.2366	0.5910	0.4653	-0.2543	0.1626	0.0218						
BRIXr	24	-0.0844	0.2045	-0.0152	-0.0268	0.2552	-0.0930	-0.1010						
HARDr	25	0.0503	-0.1653	-0.0223	0.0690	0.0280	0.0585	-0.0962						
NMGr	26	0.5783	-0.0573	0.5754	0.3102	0.3483	0.2195	0.1485						
pSTvar	27	-0.0925	-0.0925	-0.1391	-0.1909	-0.2104	-0.0121	0.1069						
pBRvar	28	-0.0620	0.0426	-0.0394	-0.1292	-0.0949	-0.1906	-0.0562						
pHARDvar	29	-0.1200	0.2537	-0.0177	-0.0347	0.0378	0.0985	0.2074						
pNMGvar	30	-0.1974	0.0667	-0.1830	-0.1983	0.0186	0.0202	0.2467						
rSTvar	31	0.2131	-0.2029	0.1234	-0.0054	-0.0586	0.0300	0.0983						
rBRvar	32	-0.2153	-0.1592	-0.2860	-0.1995	-0.2062	-0.1202	0.0082						
rHARDvar	33	0.0760	0.1454	0.1340	-0.0541	0.3147	-0.0330	0.0456						
rNMGvar	34	0.1025	-0.0305	0.0757	-0.0578	0.2687	0.1079	0.2422						

	8	9	10	11	12	13	14	
SEL10p	15	1.0000						
STALKp	16	0.3653	1.0000					
BRIXp	17	0.3314	0.0266	1.0000				
HARDp	18	0.2299	0.1151	0.0542	1.0000			
NMGr	19	0.7566	0.5431	0.4316	0.3281	1.0000		
SEL7r	20	0.2134	-0.0020	0.0540	0.1083	0.1578	1.0000	
SEL8r	21	0.2140	0.0644	0.1692	0.0879	0.2307	0.8573	1.0000
SEL10r	22	0.2074	0.0763	-0.0103	0.0235	0.1235	0.4914	0.6185
STALKr	23	-0.0827	0.6143	-0.1082	0.0177	0.1288	0.1667	0.1873
BRIXr	24	-0.0277	-0.3611	0.3195	-0.1095	-0.1573	0.4014	0.3683
HARDr	25	-0.0616	0.0486	0.0402	0.5894	0.0248	-0.0265	-0.0877
NMGr	26	0.1530	0.0997	0.0316	0.0842	0.1926	0.8509	0.8468
pSTvar	27	0.2225	0.3420	0.0217	0.0207	0.0288	0.1024	0.1382
pBRvar	28	0.0528	0.0527	-0.5316	-0.0027	-0.1297	0.2006	-0.0012
pHARDvar	29	0.1607	-0.1072	0.2047	0.2666	0.1238	-0.1048	-0.1299
pNMGvar	30	0.4235	-0.0363	0.1480	-0.1098	0.1074	0.1368	0.1340
rSTvar	31	0.2791	0.3009	0.0283	-0.1335	0.0818	0.2127	0.2153
rBRvar	32	0.1338	-0.0031	0.0130	-0.0671	-0.0061	-0.2422	-0.1774
rHARDvar	33	0.0080	-0.1502	-0.0851	0.0645	-0.0259	-0.0673	-0.1069
rNMGvar	34	0.3641	-0.0454	0.0286	-0.0223	0.1567	0.2316	0.2686

15	16	17	18	19	20	21

Table 58a continued (9/12)

Table 58a continued (10/12)

The following analysis is for single seedlings

***** CORRELATION MATRIX *****

DF = 70

	1	2	3	4	5	6	7
pFIBRE	1 1.0000						
pTCH	2 0.3355	1.0000					
pCCS	3 -0.1789	-0.1106	1.0000				
pTSH	4 0.2609	0.9291	0.2603	1.0000			
pNMGYOT	5 0.0720	0.7951	0.4307	0.9331	1.0000		
WSp	6 0.1215	0.5509	0.0398	0.5501	0.4884	1.0000	
rFIBRE	7 0.5453	0.1212	-0.2207	0.0375	-0.0354	-0.0088	1.0000
rTCH	8 0.2273	0.5675	-0.2338	0.4722	0.3684	0.3831	-0.0116
rCCS	9 -0.0309	-0.0919	0.6043	0.1413	0.2631	0.0875	-0.3009
rTSH	10 0.2161	0.5335	-0.0248	0.5200	0.4588	0.4066	-0.1096
rNMGYOT	11 0.1418	0.3443	0.2591	0.4396	0.3401	0.2550	-0.2574
WSr	12 0.1298	0.2561	-0.0239	0.2396	0.2197	0.5492	-0.1473
SEL7p	13 0.2661	0.3834	0.1024	0.4171	0.3529	0.2396	0.1194
SEL8p	14 0.2477	0.3639	0.1392	0.4112	0.3419	0.1965	0.1308
SEL10p	15 0.0913	0.2286	-0.0092	0.2262	0.1144	0.1848	-0.0974
STALKp	16 0.2584	0.5159	-0.1336	0.4503	0.3664	-0.4219	0.1503
BRIXp	17 0.2199	0.0184	0.6309	0.2542	0.3077	0.0442	0.0493
HARDp	18 0.5588	0.1742	-0.0904	0.1316	0.0365	0.1164	0.4526
NMGr	19 0.2498	0.4701	0.1101	0.5069	0.4200	0.2641	0.1289
SEL7r	20 0.2881	0.3174	0.0004	0.3210	0.3212	0.3234	0.1431
SEL8r	21 0.2606	0.4115	0.0154	0.4213	0.4039	0.3949	0.0995
SEL10r	22 0.1222	0.3350	-0.0686	0.3128	0.3361	0.3579	0.0592
STALKr	23 0.1592	0.4217	-0.2360	0.3316	0.2276	-0.0464	0.1153
BRIXr	24 0.1597	-0.0830	0.5263	0.1123	0.2485	0.1401	0.1332
HARDr	25 0.4795	0.0803	0.0170	0.0762	0.0320	0.0304	0.5854
NMGr	26 0.2901	0.4237	0.0215	0.4296	0.4230	0.4211	0.1825
pSTvar	27 0.0896	0.1611	0.0334	0.1834	0.1356	0.0123	-0.0866
pBRvar	28 -0.1995	0.0010	-0.1778	-0.0562	-0.0104	-0.0016	0.1054
pHARDvar	29 0.1119	-0.2489	-0.0856	-0.2762	-0.2499	-0.0849	0.3266
pNMGvar	30 -0.1001	0.0191	0.1281	0.0707	0.0509	0.1065	-0.1273
rSTvar	31 0.0721	0.1600	-0.1544	0.1086	0.0256	0.0335	0.0559
rBRvar	32 0.0494	-0.1723	-0.0934	-0.1959	-0.2337	-0.1322	-0.0751
rHARDvar	33 0.1986	-0.0793	-0.2115	-0.1578	-0.2082	0.0419	0.1398
rNMGvar	34 0.1155	0.2814	-0.0453	0.2640	0.2079	0.3438	-0.0197

Table 58a continued (11/12)

rTCH	8	1.0000						
rCCS	9	-0.1257	1.0000					
rTSH	10	0.9443	0.2033	1.0000				
rNMGYOT	11	0.6817	0.3536	0.7917	1.0000			
WSr	12	0.5565	0.0897	0.5842	0.4210	1.0000		
SEL7p	13	0.1922	0.1207	0.2361	0.2679	0.1127	1.0000	
SEL8p	14	0.1041	0.1647	0.1639	0.2498	0.0979	0.7758	1.0000
SEL10p	15	0.1109	0.0664	0.1429	0.3069	0.2798	0.3143	0.5269
STALKp	16	0.2210	-0.1806	0.1634	0.1106	-0.2818	0.1771	0.1844
BRIXp	17	-0.1716	0.5059	0.0044	0.2060	-0.1016	0.2958	0.3562
HARDp	18	0.0211	-0.0415	0.0057	-0.0890	0.0598	0.2009	0.1497
NMGr	19	0.2730	0.1935	0.3388	0.3855	0.1132	0.8097	0.8303
SEL7r	20	0.6499	0.1686	0.6987	0.4176	0.4120	0.3069	0.1774
SEL8r	21	0.6674	0.1166	0.7005	0.4210	0.4225	0.3094	0.2206
SEL10r	22	0.5077	0.0776	0.5328	0.1554	0.3317	0.1038	-0.0284
STALKr	23	0.6596	-0.2112	0.5736	0.4245	-0.2496	0.1129	0.0334
BRIXr	24	-0.0800	0.4660	0.0816	0.0060	0.1617	0.0451	0.0945
HARDr	25	-0.0505	0.0014	-0.0505	-0.0476	-0.0867	0.3282	0.2761
NMGr	26	0.6798	0.1495	0.7226	0.3896	0.4287	0.3085	0.1825
pSTvar	27	0.1132	0.0565	0.1366	0.1609	0.0728	0.1269	0.1703
pBRvar	28	-0.0130	-0.1182	-0.0467	-0.1572	0.1085	-0.0717	-0.1369
pHARDvar	29	-0.2006	0.0201	-0.1877	-0.3369	0.0336	-0.0930	-0.1309
pNMGvar	30	-0.1244	0.0096	-0.1071	0.0988	0.1455	0.0233	0.3114
rSTvar	31	0.2414	-0.1618	0.1754	0.1287	-0.1537	0.0669	0.1077
rBRvar	32	-0.1533	0.0704	-0.1326	-0.0750	0.0327	-0.2393	-0.1842
rHARDvar	33	-0.1218	-0.0758	-0.1389	-0.2631	-0.0100	-0.1183	-0.1583
rNMGvar	34	0.1632	0.1116	0.2051	0.1299	0.2588	-0.0481	-0.0441

	8	9	10	11	12	13	14	
SEL10p	15	1.0000						
STALKp	16	0.0337	1.0000					
BRIXp	17	0.0140	-0.0118	1.0000				
HARDp	18	-0.0650	0.0860	0.2880	1.0000			
NMGr	19	0.5659	0.2365	0.3402	0.1242	1.0000		
SEL7r	20	0.0382	0.0256	0.0304	0.1136	0.2736	1.0000	
SEL8r	21	0.0856	0.0473	0.0441	0.0724	0.2840	0.8327	1.0000
SEL10r	22	-0.0754	-0.0047	-0.0276	0.0547	0.0725	0.5983	0.7087
STALKr	23	-0.1334	0.5023	-0.1002	-0.0256	0.2052	0.3906	0.3983
BRIXr	24	-0.1152	-0.2139	0.4811	0.1563	0.0115	0.3716	0.3121
HARDr	25	-0.0067	0.0734	0.3051	0.5559	0.2718	0.1917	0.0849
NMGr	26	-0.0174	0.0379	0.0493	0.1012	0.2721	0.9066	0.8896
pSTvar	27	0.2248	0.1552	0.0446	-0.1077	0.0898	0.1364	0.1882
pBRvar	28	0.0021	-0.0056	-0.4418	-0.0433	-0.1274	0.0302	0.0441
pHARDvar	29	-0.1641	-0.1702	-0.0352	0.2211	-0.1548	0.1151	0.0212
pNMGvar	30	0.5054	-0.1202	0.0303	-0.1093	0.1133	-0.1336	-0.0241
rSTvar	31	-0.0382	0.1397	-0.0884	-0.0006	0.1043	0.0115	0.1633
rBRvar	32	-0.0516	-0.0427	0.0775	0.0737	-0.1663	-0.2079	-0.1932
rHARDvar	33	-0.1782	-0.1144	0.0016	0.2734	-0.3043	-0.0183	-0.0315
rNMGvar	34	0.1580	-0.0526	-0.0505	0.0342	-0.1322	0.2061	0.3873

15	16	17	18	19	20	21
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Table 58a continued (12/12)

SEL10r	22	1.0000						
STALKr	23	0.2678	1.0000					
BRIXr	24	0.2056	-0.2266	1.0000				
HARDr	25	-0.0554	0.0342	0.3228	1.0000			
NMGr	26	0.7290	0.4059	0.4513	0.2020	1.0000		
pSTvar	27	0.1121	0.0618	0.0954	-0.1664	0.1455	1.0000	
pBRvar	28	0.0323	-0.1163	-0.1589	-0.1475	0.0035	-0.0884	1.0000
pHARDvar	29	-0.0049	-0.2723	0.3466	0.1973	0.0755	-0.1041	0.3683
pNMGvar	30	-0.1253	-0.2707	0.0251	-0.0682	-0.0833	0.4550	0.1052
rSTvar	31	-0.0208	0.4453	-0.1276	-0.1125	0.0608	0.3634	-0.0762
rBRvar	32	-0.0711	-0.1986	-0.1977	-0.2358	-0.2552	-0.0694	-0.0786
rHARDvar	33	0.0172	-0.1614	0.1517	0.1182	0.0050	-0.0315	-0.0548
rNMGvar	34	0.4793	-0.0537	0.0287	-0.2001	0.2939	0.2648	0.0567
	22		23		24		25	
pHARDvar	29	1.0000						
pNMGvar	30	-0.0638	1.0000					
rSTvar	31	-0.2156	0.1165	1.0000				
rBRvar	32	0.0229	-0.0388	-0.0655	1.0000			
rHARDvar	33	0.2615	-0.0458	0.0442	0.0839	1.0000		
rNMGvar	34	-0.0521	0.3517	0.0739	0.2422	0.2583	1.0000	
	29		30		31		32	
	33		34					

Table 58b. Correlation matrix on a plot basis for Re+Be+Se, followed by separate matrices for Re, Be and Se types.

The following analysis is for Random + bunch + single

DF = 214

pFIBRE	1	1.0000						
pTCH	2	0.1904	1.0000					
pCCS	3	-0.2435	0.0410	1.0000				
pTSH	4	0.0943	0.9395	0.3767	1.0000			
pNMGYOT	5	-0.0733	0.8349	0.5233	0.9524	1.0000		
rFIBRE	6	0.6376	0.1770	-0.2978	0.0613	-0.0483	1.0000	
rTCH	7	0.2065	0.5912	-0.1531	0.4918	0.3949	0.1336	1.0000
rCCS	8	-0.2251	-0.0530	0.5730	0.1472	0.2613	-0.3678	-0.1637
rTSH	9	0.1284	0.5690	0.0454	0.5405	0.4826	0.0076	0.9351
rNMGYOT	10	0.0634	0.4250	0.2788	0.4867	0.3946	-0.1212	0.7002
prFIBRE	11	0.8954	0.2026	-0.3004	0.0851	-0.0665	0.9139	0.1860
prTCH	12	0.2232	0.8565	-0.0784	0.7639	0.6519	0.1702	0.9227
prCCS	13	-0.2641	-0.0076	0.8831	0.2934	0.4401	-0.3758	-0.1787
prTSH	14	0.1281	0.8438	0.2269	0.8584	0.7979	0.0371	0.8302
prNMGYOT	15	-0.0053	0.7526	0.4792	0.8597	0.8325	-0.1018	0.6570
SEL7p	16	0.2478	0.5381	0.1779	0.5646	0.5013	0.1724	0.2602
SEL8p	17	0.1451	0.4819	0.2294	0.5316	0.4919	0.0576	0.1372
NMGr	18	0.2503	0.6205	0.2281	0.6588	0.5896	0.1609	0.2941
SEL7r	19	0.1702	0.3744	0.0944	0.3799	0.3619	0.1268	0.5670
SEL8r	20	0.0907	0.4441	0.1835	0.4757	0.4701	0.0865	0.5758
NMGp	21	0.1796	0.5051	0.1108	0.5038	0.4747	0.1630	0.6908
WSpr	22	0.0362	0.5096	0.0498	0.4892	0.4418	-0.0259	0.4808
SEL7pr	23	0.1534	0.5416	0.2637	0.5921	0.5705	0.0592	0.4956
SEL8pr	24	0.1248	0.6021	0.2337	0.6429	0.6141	0.1155	0.4253
SEL10pr	25	0.1498	0.3976	0.1233	0.4187	0.3799	0.0380	0.2419
STALKSpr	26	0.2397	0.4365	-0.1537	0.3496	0.2671	0.2430	0.5506
BRIXpr	27	0.1200	0.0002	0.6899	0.2314	0.3192	0.0325	-0.0909
HARDpr	28	0.5989	0.1934	-0.1021	0.1388	0.0318	0.6117	0.0850
NMGpr	29	0.2653	0.6881	0.2007	0.7086	0.6496	0.2022	0.6176
prSTvar	30	0.0325	0.1660	-0.0396	0.1379	0.1132	0.0692	0.1037
prBRvar	31	-0.0228	-0.1135	-0.3427	-0.2109	-0.2469	0.0125	-0.1782
prHARDva	32	0.0520	-0.0224	-0.2385	-0.1016	-0.1094	0.1279	-0.0341
prNMGvar	33	-0.0501	0.1184	0.0781	0.1368	0.1417	-0.0413	-0.0593

1 2 3 4 5 6 7

Table 58b continued (2/12)

rCCS	8	1.0000						
rTSH	9	0.1901	1.0000					
rNMGYOT	10	0.3406	0.8182	1.0000				
prFIBRE	11	-0.3312	0.0720	-0.0367	1.0000			
prTCH	12	-0.1301	0.8705	0.6513	0.2159	1.0000		
prCCS	13	0.8905	0.1340	0.3497	-0.3564	-0.1180	1.0000	
prTSH	14	0.1938	0.8956	0.7563	0.0889	0.9347	0.2369	1.0000
prNMGYOT	15	0.3607	0.7803	0.8376	-0.0617	0.7803	0.4725	0.9304
SEL7p	16	0.1177	0.3080	0.3322	0.2303	0.4238	0.1662	0.4863
SEL8p	17	0.1244	0.1869	0.2387	0.1098	0.3182	0.1985	0.3951
NMGr	18	0.1424	0.3497	0.3785	0.2248	0.4849	0.2082	0.5616
SEL7r	19	0.0730	0.5983	0.3712	0.1629	0.5419	0.0942	0.5657
SEL8r	20	0.0966	0.6150	0.4036	0.0978	0.5809	0.1571	0.6265
NMGr	21	0.0608	0.7119	0.4623	0.1889	0.6836	0.0963	0.7005
WSpr	22	0.0061	0.4806	0.3292	0.0041	0.5513	0.0311	0.5517
SEL7pr	23	0.1582	0.5570	0.4510	0.1151	0.5761	0.2369	0.6527
SEL8pr	24	0.0734	0.4583	0.3598	0.1325	0.5600	0.1718	0.6195
SEL10pr	25	0.0795	0.2729	0.1841	0.1009	0.3449	0.1140	0.3878
STALKSpr	26	-0.1646	0.4917	0.3864	0.2667	0.5611	-0.1796	0.4846
BRIXpr	27	0.4935	0.0838	0.1732	0.0820	-0.0581	0.6655	0.1734
HARDpr	28	-0.0658	0.0608	0.0479	0.6691	0.1469	-0.0943	0.1105
NMGpr	29	0.1195	0.6633	0.5132	0.2566	0.7242	0.1798	0.7791
prSTvar	30	-0.0817	0.0691	0.0401	0.0571	0.1457	-0.0688	0.1151
prBRvar	31	-0.1908	-0.2327	-0.2644	-0.0048	-0.1683	-0.2994	-0.2534
prHARDva	32	-0.0524	-0.0493	-0.2085	0.1013	-0.0325	-0.1624	-0.0838
prNMGvar	33	-0.0003	-0.0576	-0.0536	-0.0503	0.0186	0.0432	0.0372
	8	9	10	11	12	13	14	
prNMGYOT	15	1.0000						
SEL7p	16	0.4984	1.0000					
SEL8p	17	0.4364	0.7949	1.0000				
NMGr	18	0.5788	0.8621	0.8382	1.0000			
SEL7r	19	0.4390	0.2753	0.1821	0.2835	1.0000		
SEL8r	20	0.5228	0.2751	0.2040	0.2770	0.8327	1.0000	
NMGr	21	0.5610	0.3158	0.1951	0.3160	0.8801	0.8581	1.0000
WSpr	22	0.4612	0.1926	0.1445	0.1947	0.3640	0.4193	0.4297
SEL7pr	23	0.6112	0.6748	0.5790	0.6465	0.7406	0.7207	0.7492
SEL8pr	24	0.5821	0.6322	0.6233	0.6837	0.6036	0.6683	0.6435
SEL10pr	25	0.3369	0.3102	0.4071	0.4431	0.3638	0.4040	0.4113
STALKSpr	26	0.3918	0.2752	0.2155	0.3424	0.2639	0.2434	0.3430
BRIXpr	27	0.2942	0.2117	0.2012	0.2196	0.2755	0.2850	0.2912
HARDpr	28	0.0478	0.2389	0.1484	0.2348	0.1162	0.0765	0.1292
NMGpr	29	0.6956	0.7052	0.6149	0.7829	0.7435	0.7263	0.8358
prSTvar	30	0.0915	0.0858	0.1365	0.0902	0.0894	0.1606	0.1179
prBRvar	31	-0.3062	-0.2021	-0.1178	-0.2100	-0.1697	-0.1609	-0.2256
prHARDva	32	-0.1908	-0.0463	-0.0330	-0.1129	-0.0048	-0.0753	-0.0079
prNMGvar	33	0.0520	0.0607	0.2093	0.0770	0.0683	0.1373	0.0688
	15	16	17	18	19	20	21	

Table 58b continued (3/12)

WSpr	22	1.0000						
SEL7pr	23	0.3414	1.0000					
SEL8pr	24	0.3249	0.7705	1.0000				
SEL10pr	25	0.2026	0.3498	0.5104	1.0000			
STALKSpr	26	-0.3656	0.3018	0.2941	0.1783	1.0000		
BRIXpr	27	0.0337	0.3563	0.2777	0.1370	-0.0840	1.0000	
HARDpr	28	0.1012	0.1418	0.1214	0.0327	0.0865	0.2100	1.0000
NMGpr	29	0.4018	0.8650	0.8176	0.5258	0.4135	0.3209	0.2235
prSTvar	30	-0.1381	0.0690	0.2168	0.3449	0.3121	0.0000	-0.0530
prBRvar	31	-0.0565	-0.2445	-0.1660	-0.0104	-0.1286	-0.4050	-0.0919
prHARDva	32	0.1264	-0.0239	-0.0802	-0.1269	-0.1493	-0.0946	0.1906
prNMGvar	33	0.0913	0.0650	0.2955	0.6036	-0.0719	0.0425	-0.1316
	22	23	24	25	26	27	28	
NMGpr	29	1.0000						
prSTvar	30	0.1282	1.0000					
prBRvar	31	-0.2624	-0.0347	1.0000				
prHARDva	32	-0.0701	-0.1090	0.2282	1.0000			
prNMGvar	33	0.0902	0.4282	0.1680	-0.0359	1.0000		
	29	30	31	32	33			

Table 58b continued (4/12)

The following analysis is for random seedlings

***** CORRELATION MATRIX *****

DF = 70

	1	2	3	4	5	6	7
pFIBRE	1.0000						
pTCH	0.2121	1.0000					
pCCS	-0.2703	0.0866	1.0000				
pTSH	0.0933	0.9386	0.4211	1.0000			
pNMGYOT	-0.0403	0.8249	0.5848	0.9543	1.0000		
rFIBRE	0.6279	0.2989	-0.3371	0.1551	0.0317	1.0000	
rTCH	0.2646	0.6104	-0.0506	0.5310	0.4275	0.3019	1.0000
rCCS	-0.2033	-0.1388	0.6337	0.0891	0.2109	-0.4265	-0.0938
rTSH	0.2020	0.5510	0.1462	0.5453	0.4812	0.1750	0.9498
rNMGYOT	0.0345	0.4445	0.3632	0.5194	0.4337	0.0071	0.7221
prFIBRE	0.8879	0.2863	-0.3389	0.1399	-0.0021	0.9156	0.3152
prTCH	0.2690	0.8663	0.0098	0.7867	0.6667	0.3343	0.9245
prCCS	-0.2632	-0.0248	0.9102	0.2881	0.4468	-0.4208	-0.0791
prTSH	0.1718	0.8328	0.3126	0.8620	0.7989	0.1884	0.8570
prNMGYOT	-0.0022	0.7432	0.5561	0.8629	0.8371	0.0225	0.6837
SEL7p	0.2210	0.5167	0.1278	0.5230	0.4882	0.2371	0.2559
SEL8p	0.1311	0.5326	0.1226	0.5346	0.4935	0.1684	0.1587
NMGrp	0.2707	0.6620	0.2036	0.6760	0.6311	0.2821	0.3938
SEL7r	0.2338	0.4333	0.2058	0.4612	0.4366	0.1909	0.6657
SEL8r	0.1674	0.4485	0.2306	0.4891	0.4781	0.1864	0.6173
NMGr	0.2629	0.5356	0.2155	0.5580	0.5211	0.1988	0.7917
WSpr	0.0793	0.4538	0.0391	0.4316	0.3609	0.0991	0.3562
SEL7pr	0.1850	0.5747	0.2302	0.5977	0.5657	0.1370	0.5450
SEL8pr	0.1886	0.6297	0.2086	0.6476	0.6299	0.2347	0.4988
SEL10pr	0.1133	0.3677	0.1149	0.3776	0.3676	0.2116	0.3810
STALKSpr	0.2584	0.4769	-0.0695	0.4017	0.3319	0.2873	0.6339
BRIXpr	0.1695	0.1462	0.6612	0.3570	0.4475	0.0172	0.1080
HARDpr	0.5851	0.2232	-0.1560	0.1390	0.0435	0.6121	0.1234
NMGpr	0.3371	0.7146	0.2435	0.7348	0.6829	0.2950	0.7160
prSTvar	0.0281	0.2113	-0.1989	0.1168	0.0700	0.1345	0.0865
prBRvar	-0.0190	-0.0799	-0.4230	-0.2054	-0.2583	0.0534	-0.1615
prHARDvra	0.1537	0.0233	-0.3859	-0.1120	-0.1685	0.1930	0.0734
prNMGvar	-0.0952	0.2451	0.0318	0.2376	0.2476	0.1202	0.1036

Table 58b continued (5/12)

rCCS	8	1.0000											
rTSH	9	0.2167	1.0000										
rNMGYOT	10	0.3954	0.8296	1.0000									
prFIBRE	11	-0.3572	0.2078	0.0220	1.0000								
prTCH	12	-0.1260	0.8642	0.6694	0.3366	1.0000							
prCCS	13	0.8972	0.1995	0.4191	-0.3847	-0.0619	1.0000						
prTSH	14	0.1784	0.8949	0.7781	0.2001	0.9413	0.2740	1.0000					
prNMGYOT	15	0.3611	0.7798	0.8560	0.0122	0.7889	0.5108	0.9308					
SEL7p	16	-0.0966	0.2206	0.2213	0.2544	0.4101	0.0213	0.4117					
SEL8p	17	-0.2067	0.0886	0.1273	0.1673	0.3564	-0.0407	0.3382					
NMGrp	18	-0.0728	0.3588	0.3485	0.3066	0.5670	0.0773	0.5768					
SEL7r	19	0.0474	0.6730	0.4948	0.2337	0.6284	0.1429	0.6524					
SEL8r	20	0.0883	0.6394	0.4514	0.1967	0.6052	0.1789	0.6469					
NMGr	21	0.0407	0.7863	0.6034	0.2534	0.7571	0.1448	0.7725					
WSpr	22	0.0043	0.3626	0.2530	0.0996	0.4430	0.0246	0.4490					
SEL7pr	23	-0.0365	0.5176	0.4659	0.1766	0.6203	0.1119	0.6311					
SEL8pr	24	-0.1272	0.4461	0.3469	0.2362	0.6176	0.0510	0.6145					
SEL10pr	25	-0.0079	0.3735	0.2721	0.1836	0.4173	0.0613	0.4268					
STALKSpr	26	-0.1670	0.5612	0.4410	0.3033	0.6293	-0.1291	0.5531					
BRIXpr	27	0.4400	0.2474	0.3043	0.0978	0.1385	0.6131	0.3396					
HARDpr	28	-0.1085	0.0950	0.0475	0.6642	0.1852	-0.1472	0.1314					
NMGrp	29	-0.0249	0.6920	0.5672	0.3486	0.7955	0.1257	0.8096					
prSTvar	30	-0.1745	0.0225	0.0073	0.0940	0.1563	-0.2070	0.0758					
prBRvar	31	-0.2918	-0.2305	-0.3277	0.0217	-0.1403	-0.3977	-0.2488					
prHARDvra	32	-0.2393	0.0012	-0.1748	0.1935	0.0575	-0.3485	-0.0589					
prNMGvar	33	-0.1076	0.0711	0.0220	0.0219	0.1833	-0.0395	0.1694					

	8	9	10	11	12	13	14	
prNMGYOT	15	1.0000						
SEL7p	16	0.4145	1.0000					
SEL8p	17	0.3605	0.7745	1.0000				
NMGrp	18	0.5737	0.8442	0.7816	1.0000			
SEL7r	19	0.5509	0.3487	0.2090	0.3642	1.0000		
SEL8r	20	0.5484	0.2139	0.1023	0.2256	0.7893	1.0000	
NMGr	21	0.6654	0.3282	0.1907	0.3836	0.8766	0.8256	1.0000
WSpr	22	0.3607	0.0343	0.0355	0.1153	0.2924	0.3679	0.3413
SEL7pr	23	0.6075	0.7246	0.5828	0.6715	0.7314	0.5914	0.7190
SEL8pr	24	0.5721	0.6337	0.6376	0.7164	0.5561	0.5871	0.6296
SEL10pr	25	0.3761	0.2921	0.2492	0.3499	0.3765	0.4141	0.4751
STALKSpr	26	0.4582	0.3867	0.3510	0.4796	0.4040	0.3012	0.4677
BRIXpr	27	0.4416	0.2871	0.1855	0.3323	0.3468	0.3794	0.3519
HARDpr	28	0.0538	0.1656	0.1097	0.2280	0.0862	0.0977	0.0854
NMGrp	29	0.7362	0.6903	0.5713	0.8077	0.7682	0.6613	0.8507
prSTvar	30	0.0446	0.1986	0.1725	0.1314	0.0449	0.1073	0.0700
prBRvar	31	-0.3472	-0.1660	-0.0768	-0.2686	-0.2310	-0.1840	-0.2886
prHARDvra	32	-0.2028	-0.0615	0.0097	-0.1165	0.0719	-0.0193	-0.0004
prNMGvar	33	0.1554	0.2726	0.3199	0.2059	0.1589	0.2297	0.1919

15 16 17 18 19 20 21

Table 58b continued (6/12)

WSpr	22	1.0000						
SEL7pr	23	0.1821	1.0000					
SEL8pr	24	0.1906	0.7234	1.0000				
SEL10pr	25	0.0854	0.2805	0.4988	1.0000			
STALKSpr	26	-0.3985	0.4573	0.4578	0.3594	1.0000		
BRIXpr	27	0.0696	0.3598	0.2796	0.1586	0.0903	1.0000	
HARDpr	28	0.0988	0.1259	0.0389	0.0119	0.1404	0.2242	1.0000
NMGpr	29	0.3037	0.8349	0.8066	0.5050	0.5508	0.4224	0.1966
prSTvar	30	-0.1968	0.1457	0.2856	0.4863	0.3285	-0.1873	0.0413
prBRvar	31	0.1081	-0.2644	-0.2124	-0.1604	-0.2194	-0.4891	-0.0691
prHARDva	32	0.0512	-0.0133	-0.0611	-0.1625	0.0317	-0.2960	0.2016
prNMGvar	33	0.0987	0.2484	0.4651	0.7120	0.0893	-0.0307	-0.1357
	22		23		24		25	
NMGpr	29	1.0000						
prSTvar	30	0.1137	1.0000					
prBRvar	31	-0.3215	-0.0439	1.0000				
prHARDva	32	-0.0686	-0.0182	0.4325	1.0000			
prNMGvar	33	0.2410	0.5513	0.0852	-0.0397	1.0000		
	29		30		31		32	

Table 58b continued (7/12)

The following analysis is for bunch seedlings

***** CORRELATION MATRIX *****

DF = 70

pFIBRE	1	1.0000						
pTCH	2	0.1076	1.0000					
pCCS	3	-0.3013	0.1068	1.0000				
pTSH	4	0.0045	0.9414	0.4324	1.0000			
pNMGYOT	5	-0.1891	0.8482	0.5576	0.9549	1.0000		
rFIBRE	6	0.7222	0.1526	-0.3749	0.0089	-0.1291	1.0000	
rTCH	7	0.1736	0.5124	-0.2062	0.3885	0.2967	0.1425	1.0000
rCCS	8	-0.4246	0.0332	0.4579	0.1871	0.2918	-0.4527	-0.2738
rTSH	9	0.0069	0.5356	-0.0316	0.4706	0.4154	-0.0384	0.9137
rNMGYOT	10	0.0231	0.3864	0.1995	0.4172	0.3139	-0.1356	0.6628
prFIBRE	11	0.9290	0.1400	-0.3640	0.0072	-0.1717	0.9269	0.1704
prTCH	12	0.1661	0.8310	-0.0803	0.7214	0.6154	0.1684	0.9036
prCCS	13	-0.4260	0.0815	0.8499	0.3610	0.4956	-0.4852	-0.2816
prTSH	14	0.0067	0.8593	0.2315	0.8549	0.7964	-0.0174	0.7618
prNMGYOT	15	-0.1099	0.7774	0.4794	0.8648	0.8342	-0.1629	0.5784
SEL7p	16	0.2619	0.6050	0.2275	0.6269	0.5315	0.1737	0.2120
SEL8p	17	0.0852	0.5040	0.3297	0.5737	0.5400	-0.0882	0.0829
NMGr	18	0.2482	0.6301	0.2955	0.6779	0.5897	0.0905	0.1227
SEL7r	19	0.0250	0.3223	0.0493	0.3085	0.2849	0.0521	0.3801
SEL8r	20	-0.1049	0.4073	0.2693	0.4542	0.4638	-0.0120	0.4143
NMGr	21	0.0088	0.4979	0.0551	0.4632	0.4240	0.1097	0.5783
WSpr	22	-0.0459	0.4591	0.1430	0.4599	0.4364	-0.0607	0.4203
SEL7pr	23	0.0278	0.5502	0.3725	0.6246	0.6178	-0.0077	0.3238
SEL8pr	24	0.0409	0.6654	0.3182	0.7107	0.6621	0.0024	0.3150
SEL10pr	25	0.1689	0.3972	0.2307	0.4449	0.3885	-0.0722	0.0730
STALKSpr	26	0.2302	0.4372	-0.2390	0.3161	0.2247	0.2749	0.5646
BRIXpr	27	-0.0300	-0.0126	0.7140	0.2239	0.2927	-0.0768	-0.1662
HARDpr	28	0.6174	0.1752	-0.1544	0.1055	-0.0394	0.6370	0.0907
NMGpr	29	0.1689	0.7308	0.2327	0.7415	0.6599	0.1303	0.4437
prSTvar	30	-0.0500	0.1500	0.0594	0.1446	0.1646	0.0666	0.0481
prBRvar	31	0.0451	-0.1182	-0.2694	-0.1931	-0.2319	-0.0250	-0.2104
prHARDva	32	-0.0537	-0.0093	-0.1245	-0.0495	-0.0198	-0.0012	-0.0319
prNMGvar	33	-0.0936	0.1592	0.2032	0.2030	0.2306	-0.1522	-0.0944

1 2 3 4 5 6 7

Table 58b continued (8/12)

rCCS	8	1.0000						
rTSH	9	0.1357	1.0000					
rNMGYOT	10	0.2735	0.8011	1.0000				
prFIBRE	11	-0.4726	-0.0168	-0.0600	1.0000			
prTCH	12	-0.1608	0.8592	0.6222	0.1803	1.0000		
prCCS	13	0.8576	0.0622	0.2776	-0.4907	-0.1418	1.0000	
prTSH	14	0.1879	0.8600	0.7122	-0.0057	0.9223	0.2453	1.0000
prNMGYOT	15	0.3491	0.7361	0.7855	-0.1468	0.7626	0.4843	0.9329
SEL7p	16	0.2003	0.3121	0.3664	0.2351	0.4392	0.2504	0.5460
SEL8p	17	0.2637	0.1983	0.2482	-0.0010	0.3051	0.3470	0.4484
NMGr	18	0.2270	0.2299	0.3011	0.1831	0.3939	0.3055	0.5272
SEL7r	19	-0.0230	0.3917	0.1521	0.0415	0.4070	0.0149	0.4087
SEL8r	20	0.0647	0.4594	0.2750	-0.0634	0.4716	0.1941	0.5327
NMGr	21	-0.0573	0.5754	0.3102	0.0635	0.6231	-0.0021	0.6061
WSpr	22	0.0050	0.4211	0.2490	-0.0574	0.5013	0.0857	0.5135
SEL7pr	23	0.2047	0.4268	0.3123	0.0110	0.4843	0.3368	0.6122
SEL8pr	24	0.1096	0.3797	0.3022	0.0235	0.5361	0.2491	0.6342
SEL10pr	25	0.0533	0.0943	0.0825	0.0530	0.2455	0.1651	0.3127
STALKSpr	26	-0.1846	0.5165	0.4073	0.2720	0.5839	-0.2476	0.4864
BRIXpr	27	0.4038	-0.0125	0.1163	-0.0574	-0.1139	0.6524	0.1222
HARDpr	28	-0.1281	0.0373	0.0870	0.6758	0.1462	-0.1653	0.0829
NMGr	29	0.1152	0.5133	0.3893	0.1614	0.6521	0.2029	0.7305
prSTvar	30	-0.1398	-0.0218	-0.1010	0.0085	0.1060	-0.0485	0.0708
prBRvar	31	-0.1161	-0.2606	-0.2122	0.0111	-0.1953	-0.2247	-0.2649
prHARDva	32	0.1556	0.0296	-0.1178	-0.0298	-0.0253	0.0203	-0.0113
prNMGvar	33	0.0353	-0.0995	-0.1571	-0.1322	0.0183	0.1384	0.0589
	8	9	10	11	12	13	14	
prNMGYOT	15	1.0000						
SEL7p	16	0.5593	1.0000					
SEL8p	17	0.4961	0.8112	1.0000				
NMGr	18	0.5593	0.8948	0.8824	1.0000			
SEL7r	19	0.2741	0.1274	0.1213	0.1578	1.0000		
SEL8r	20	0.4621	0.2096	0.2130	0.2307	0.8573	1.0000	
NMGr	21	0.4566	0.2195	0.1485	0.1926	0.8509	0.8468	1.0000
WSpr	22	0.4291	0.1679	0.1440	0.0874	0.3511	0.3797	0.4168
SEL7pr	23	0.5841	0.6501	0.6282	0.6336	0.6512	0.7481	0.6734
SEL8pr	24	0.6072	0.6385	0.6508	0.7228	0.6070	0.6877	0.6186
SEL10pr	25	0.3012	0.3838	0.5456	0.5653	0.3077	0.3280	0.3023
STALKSpr	26	0.3831	0.3129	0.1957	0.3282	0.1168	0.1590	0.2787
BRIXpr	27	0.2583	0.1846	0.1642	0.1723	0.2792	0.3305	0.2697
HARDpr	28	0.0248	0.1954	0.0736	0.2028	0.0498	0.0044	0.0725
NMGr	29	0.6563	0.7340	0.6833	0.7862	0.6459	0.6906	0.7561
prSTvar	30	0.0486	-0.0202	0.0875	0.0293	0.1697	0.1848	0.1907
prBRvar	31	-0.2744	-0.1979	-0.0593	-0.0896	-0.0780	-0.1530	-0.1479
prHARDva	32	-0.0813	0.0091	0.0673	-0.0105	-0.1204	-0.2009	-0.0924
prNMGvar	33	0.0591	0.1004	0.2681	0.1660	0.1539	0.1826	0.1083
	15	16	17	18	19	20	21	

Table 58b continued (9/12)

WSpr	22	1.0000						
SEL7pr	23	0.3222	1.0000					
SEL8pr	24	0.2554	0.8012	1.0000				
SEL10pr	25	0.1816	0.3454	0.5636	1.0000			
STALKSpr	26	-0.3935	0.2173	0.3319	0.0711	1.0000		
BRIXpr	27	0.1581	0.4068	0.2597	0.1638	-0.2627	1.0000	
HARDpr	28	0.1170	0.0467	0.0602	0.0536	0.0642	0.0545	1.0000
NMGpr	29	0.3214	0.8494	0.8716	0.5625	0.3927	0.2862	0.1795
prSTvar	30	-0.1337	0.0357	0.2600	0.3476	0.2686	0.1021	-0.0812
prBRvar	31	-0.2326	-0.1943	-0.1268	0.1159	0.0042	-0.3407	-0.0593
prHARDva	32	0.2224	0.0001	-0.1250	-0.1065	-0.2184	-0.0154	0.1415
prNMGvar	33	0.2092	0.0864	0.3004	0.6751	-0.1743	0.1284	-0.1134
	22		23		24		25	
NMGpr	29	1.0000						
prSTvar	30	0.1397	1.0000					
prBRvar	31	-0.1547	0.0652	1.0000				
prHARDva	32	-0.0608	-0.1249	0.0348	1.0000			
prNMGvar	33	0.1765	0.5491	0.1889	-0.0201	1.0000		
	29		30		31		32	

Table 58b continued (10/12)

The following analysis is for single seedlings

***** CORRELATION MATRIX *****

DF = 70

pFIBRE	1	1.0000						
pTCH	2	0.3355	1.0000					
pCCS	3	-0.1789	-0.1106	1.0000				
pTSH	4	0.2609	0.9291	0.2603	1.0000			
pNMGYOT	5	0.0720	0.7951	0.4307	0.9331	1.0000		
rFIBRE	6	0.5453	0.1212	-0.2207	0.0375	-0.0354	1.0000	
rTCH	7	0.2273	0.5675	-0.2338	0.4722	0.3684	-0.0116	1.0000
rCCS	8	-0.0309	-0.0919	0.6043	0.1413	0.2631	-0.3009	-0.1257
rTSH	9	0.2161	0.5335	-0.0248	0.5200	0.4588	-0.1096	0.9443
rNMGYOT	10	0.1418	0.3443	0.2591	0.4396	0.3401	-0.2574	0.6817
prFIBRE	11	0.8545	0.2484	-0.2292	0.1580	0.0153	0.9014	0.1102
prTCH	12	0.3049	0.8356	-0.2066	0.7396	0.6091	0.0476	0.9265
prCCS	13	-0.1127	-0.1124	0.8836	0.2206	0.3822	-0.2935	-0.1974
prTSH	14	0.2683	0.7986	0.1080	0.8235	0.7508	-0.0548	0.8530
prNMGYOT	15	0.1342	0.6700	0.4111	0.8099	0.7809	-0.1906	0.6572
SEL7p	16	0.2661	0.3834	0.1024	0.4171	0.3529	0.1194	0.1922
SEL8p	17	0.2477	0.3639	0.1392	0.4112	0.3419	0.1308	0.1041
NMGr	18	0.2498	0.4701	0.1101	0.5069	0.4200	0.1289	0.2730
SEL7r	19	0.2881	0.3174	0.0004	0.3210	0.3212	0.1431	0.6499
SEL8r	20	0.2606	0.4115	0.0154	0.4213	0.4039	0.0995	0.6674
NMGr	21	0.2901	0.4237	0.0215	0.4296	0.4230	0.1825	0.6798
WSpr	22	0.1498	0.4443	0.0135	0.4361	0.3929	-0.0898	0.5180
SEL7pr	23	0.2775	0.4533	0.1329	0.4966	0.4568	0.0527	0.5791
SEL8pr	24	0.1705	0.4664	0.1184	0.5125	0.4892	0.1256	0.4273
SEL10pr	25	0.1646	0.4451	-0.0395	0.4343	0.3835	0.0138	0.3422
STALKSpr	26	0.2239	0.5214	-0.2259	0.4290	0.3188	0.1465	0.5666
BRIXpr	27	0.2218	-0.0368	0.6700	0.2127	0.3240	0.1097	-0.1416
HARDpr	28	0.5910	0.1478	-0.0418	0.1213	0.0416	0.5888	-0.0131
NMGpr	29	0.3377	0.5486	0.0718	0.5717	0.5230	0.1976	0.6364
prSTvar	30	0.1051	0.2242	-0.0667	0.2064	0.1304	-0.0005	0.2235
prBRvar	31	-0.0855	-0.0846	-0.2514	-0.1635	-0.1746	0.0256	-0.1147
prHARDva	32	0.0942	-0.2324	-0.1925	-0.3033	-0.2976	0.2270	-0.2768
prNMGvar	33	0.0697	0.1786	0.0665	0.2048	0.1626	-0.0845	-0.0019

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Table 58b continued (11/12)

rCCS	8	1.0000						
rTSH	9	0.2033	1.0000					
rNMGYOT	10	0.3536	0.7917	1.0000				
prFIBRE	11	-0.2024	0.0438	-0.0862	1.0000			
prTCH	12	-0.1259	0.8738	0.6121	0.1871	1.0000		
prCCS	13	0.9071	0.1064	0.3447	-0.2401	-0.1831	1.0000	
prTSH	14	0.2026	0.9128	0.7360	0.1046	0.9340	0.1761	1.0000
prNMGYOT	15	0.3809	0.7805	0.8530	-0.0488	0.7447	0.4411	0.9056
SEL7p	16	0.1207	0.2361	0.2679	0.2115	0.3034	0.1250	0.3562
SEL8p	17	0.1647	0.1639	0.2498	0.2090	0.2358	0.1704	0.3055
NMGr	18	0.1935	0.3388	0.3855	0.2089	0.3970	0.1719	0.4674
SEL7r	19	0.1686	0.6987	0.4176	0.2375	0.5787	0.0993	0.6176
SEL8r	20	0.1166	0.7005	0.4210	0.1963	0.6333	0.0767	0.6667
NMGr	21	0.1495	0.7226	0.3896	0.2629	0.6472	0.0992	0.6853
WSpr	22	0.1034	0.5492	0.3763	0.0218	0.5486	0.0679	0.5733
SEL7pr	23	0.2116	0.6471	0.4995	0.1760	0.5935	0.1946	0.6672
SEL8pr	24	0.1521	0.4830	0.3560	0.1659	0.4982	0.1520	0.5658
SEL10pr	25	0.2376	0.4221	0.2249	0.0936	0.4317	0.1188	0.4880
STALKSpr	26	-0.2281	0.4805	0.3511	0.2064	0.6163	-0.2534	0.5242
BRIXpr	27	0.5609	0.0535	0.1206	0.1826	-0.1113	0.6837	0.1372
HARDpr	28	-0.0260	-0.0226	-0.0755	0.6702	0.0588	-0.0373	0.0430
NMGpr	29	0.2123	0.7023	0.4817	0.2969	0.6753	0.1627	0.7398
prSTvar	30	-0.0433	0.2022	0.1963	0.0540	0.2516	-0.0607	0.2330
prBRvar	31	-0.0460	-0.1253	-0.1529	-0.0283	-0.1152	-0.1598	-0.1614
prHARDva	32	-0.0833	-0.2969	-0.4594	0.1893	-0.2909	-0.1507	-0.3422
prNMGvar	33	0.1699	0.0650	0.1743	-0.0164	0.0804	0.1350	0.1411
	8	9	10	11	12	13	14	
prNMGYOT	15	1.0000						
SEL7p	16	0.3738	1.0000					
SEL8p	17	0.3557	0.7758	1.0000				
NMGr	18	0.4891	0.8097	0.8303	1.0000			
SEL7r	19	0.4556	0.3069	0.1774	0.2736	1.0000		
SEL8r	20	0.5038	0.3094	0.2206	0.2840	0.8327	1.0000	
NMGr	21	0.4936	0.3085	0.1825	0.2721	0.9066	0.8896	1.0000
WSpr	22	0.4680	0.1971	0.1711	0.2109	0.4040	0.4471	0.4655
SEL7pr	23	0.5854	0.6192	0.4857	0.5936	0.8137	0.7673	0.8144
SEL8pr	24	0.5080	0.5805	0.5479	0.5653	0.6099	0.6869	0.6522
SEL10pr	25	0.3622	0.2084	0.3266	0.3545	0.4361	0.5101	0.5083
STALKSpr	26	0.4102	0.1562	0.1023	0.2476	0.2908	0.3055	0.3070
BRIXpr	27	0.2599	0.1962	0.2585	0.2002	0.2423	0.2141	0.3012
HARDpr	28	-0.0270	0.3028	0.2429	0.2267	0.1745	0.0911	0.1736
NMGpr	29	0.6102	0.6368	0.5563	0.7082	0.8044	0.7973	0.8718
prSTvar	30	0.2028	0.1111	0.1600	0.1351	0.0626	0.1996	0.1152
prBRvar	31	-0.1985	-0.1603	-0.1660	-0.1723	-0.1298	-0.0846	-0.1452
prHARDva	32	-0.4703	-0.1794	-0.2754	-0.3686	0.0034	-0.0507	0.0119
prNMGvar	33	0.2060	0.0224	0.1829	0.0519	0.0173	0.1600	0.0790
	15	16	17	18	19	20	21	

Table 58b continued (12/12)

WSpr	22	1.0000						
SEL7pr	23	0.4296	1.0000					
SEL8pr	24	0.4802	0.7538	1.0000				
SEL10pr	25	0.3665	0.4352	0.4610	1.0000			
STALKSpr	26	-0.3140	0.2701	0.1052	0.1321	1.0000		
BRIXpr	27	0.0879	0.3427	0.3204	0.1278	-0.1917	1.0000	
HARDpr	28	0.0403	0.2014	0.2157	0.0114	0.0460	0.3525	1.0000
NMGpr	29	0.4508	0.8992	0.7670	0.5569	0.3478	0.3233	0.2413
prSTvar	30	-0.0342	0.0409	0.1381	0.2623	0.3223	-0.0220	-0.1224
prBRvar	31	-0.0283	-0.2018	-0.0813	0.0462	-0.1090	-0.3391	-0.0947
prHARDva	32	-0.0505	-0.1152	-0.0961	-0.1466	-0.2931	0.1205	0.2436
prNMGvar	33	0.2621	0.0536	0.3105	0.4936	-0.1730	0.0619	-0.0763
	22	23	24	25	26	27	28	
NMGpr	29	1.0000						
prSTvar	30	0.1535	1.0000					
prBRvar	31	-0.1921	-0.0715	1.0000				
prHARDva	32	-0.1795	-0.1601	0.1633	1.0000			
prNMGvar	33	0.0870	0.2699	0.1529	0.0112	1.0000		
	29	30	31	32	33			

Correlation is significantly different from zero if > 0.138 (5%), 0.181 (1%).

p = plant crop

r = ratoon crop

pr = (p + r)/2 where p and r are plot values for harvest characters and clone values for selection characters.

NMG = visual net merit grade

SEL7 = number of selections graded 7+

SEL8 = number of selections graded 8+

SEL10 = number of selections graded 10+

ST = number of stalks

WS = weight per stalk

var = within plot variance

BRvar = within plot variance for BRIX

HARDva = within plot variance for hardness

Table 59. Trial Te, Genotypic, phenotypic and environmental correlations for Re type, 24 families.

Character & crop			Plots rP	Means (df = 22)		
X	Y	rG		rP	rE	
Kg/stalkP	vs	stalkP	-.558	-.578 ± .331	-.562 ± .048	-.569 ± .100
Kg/stalkR	vs	stalkR	-.188	-.365 ± .273	-.270 ± .064	-.065 ± .147
Kg/stalkPR	vs	stalkPR	-.399	-.434 ± .251	-.421 ± .057	-.396 ± .124
Kg/stalkP	vs	tchP	.410	.618 ± .275	.475 ± .054	.293 ± .135
Kg/stalkR	vs	tchR	.560	.292 ± .294	.444 ± .056	.696 ± .076
Kg/stalkPR	vs	tchPR	.443	.460 ± .245	.438 ± .056	.395 ± .124
tchP	vs	stalkP	.481	.315 ± .411	.433 ± .056	.555 ± .102
tchR	vs	stalkR	.702	.778 ± .127	.737 ± .032	.664 ± .082
tchPR	vs	stalkPR	.633	.597 ± .199	.622 ± .043	.669 ± .081
tchP	vs	ccsP	-.087	.320 ± .321	.192 ± .067	-.014 ± .147
tchR	vs	ccsR	-.094	.171 ± 1.180	-.049 ± .069	-.146 ± .144
tchP	vs	tshP	.939	.936 ± .041	.937 ± .008	.946 ± .015
tchR	vs	tshR	.950	.991 ± .017	.967 ± .005	.923 ± .022
tchP	vs	nmgyotP	.825	.837 ± .097	.843 ± .020	.867 ± .036
tchR	vs	nmgyotR	.722	.888 ± .100	.830 ± .022	.759 ± .063
tshP	vs	ccsP	.421	.634 ± .218	.520 ± .051	.304 ± .134
tshR	vs	ccsR	.217	.322 ± 1.125	.204 ± .067	.238 ± .139
tshP	vs	nmgyotP	.954	.975 ± .015	.975 ± .003	.977 ± .007
tshR	vs	nmgyotR	.830	.943 ± .045	.929 ± .010	.924 ± .022
nmgyotP	vs	ccsP	.585	.790 ± .150	.682 ± .037	.464 ± .116
nmgyotR	vs	ccsR	.395	.708 ± 1.442	.451 ± .055	.481 ± .113
tchP	vs	tchR	.610	.788 ± .171	.675 ± .038	.503 ± .110
ccsP	vs	ccsR	.634	2.620 ± 5.916	.851 ± .019	.533 ± .106
tshP	vs	tshR	.545	.800 ± .167	.652 ± .040	.378 ± .126
nmgyotP	vs	nmgyotR	.434	.887 ± .184	.658 ± .039	.322 ± .132
fibreP	vs	fibreR	.628	1.043 ± .093	.830 ± .022	.321 ± .132
stalkP	vs	stalkR	.635	.832 ± .216	.684 ± .037	.649 ± .085
brixP	vs	brixR	.354	-.023 ± .388	.206 ± .067	.505 ± .110
hardnessP	vs	hardnessR	.520	.950 ± .133	.730 ± .032	.278 ± .136
visualnmgP	vs	visualnmgR	.384	.573 ± .225	.467 ± .054	.244 ± .139
sel17P	vs	sel17R	.349	.319 ± .300	.332 ± .062	.383 ± .126
sel18P	vs	sel18R	.102	.057 ± .389	.087 ± .069	.125 ± .145
sel10P	vs	sel10R	.010	1.688 ± 3.389	.165 ± .068	-.062 ± .147

Table 59 continued (2/3)

Character & crop	X	Y	Plots rP	Means (df = 22)		
				rG	rP	rE
sel8P	vs	visualnmgP	.782	.978 ± .098	.848 ± .020	.705 ± .074
sel8R	vs	visualnmgR	.826	1.074 ± .060	.934 ± .009	.674 ± .081
sel8PR	vs	visualnmgPR	.807	1.067 ± .111	.891 ± .014	.736 ± .068
sel8P	vs	hardnessP	.233	.432 ± .317	.311 ± .063	.153 ± .144
sel8R	vs	hardnessR	.019	.155 ± .331	.073 ± .069	-.062 ± .147
sel8PR	vs	hardnessPR	.039	-.048 ± .355	-.005 ± .070	.061 ± .147
sel8R	vs	brixR	.505	.857 ± .180	.652 ± .040	.333 ± .131
sel8PR	vs	brixPR	.280	.725 ± .385	.405 ± .058	.134 ± .145
sel8P	vs	stalkP	.458	.530 ± .400	.470 ± .054	.434 ± .120
sel8R	vs	stalkR	.388	.423 ± .250	.402 ± .058	.378 ± .126
sel8PR	vs	stalkPR	.458	.619 ± .272	.515 ± .051	.413 ± .122
sel8P	vs	nmgvarP	----	---- ± ----	---- ± ----	---- ± ----
sel8R	vs	nmgvarR	.582	.630 ± .356	.578 ± .046	.606 ± .093
sel8PR	vs	nmgvarPR	----	---- ± ----	---- ± ----	---- ± ----
sel8P	vs	tchP	.533	.746 ± .230	.616 ± .043	.476 ± .114
sel8R	vs	tchR	.617	.940 ± .128	.758 ± .030	.462 ± .116
sel8PR	vs	tchP	.630	1.082 ± .165	.804 ± .025	.527 ± .106
sel8PR	vs	tchR	.499	1.022 ± .214	.697 ± .036	.339 ± .130
sel8PR	vs	tchPR	.618	1.104 ± .169	.809 ± .024	.486 ± .113
sel8P	vs	ccsP	.123	.286 ± .359	.164 ± .068	.005 ± .147
sel8R	vs	ccsR	.088	.950 ± 2.429	.194 ± .067	.006 ± .147
sel8PR	vs	ccsP	.209	.289 ± .363	.221 ± .066	.147 ± .144
sel8PR	vs	ccsR	-.127	.669 ± 2.264	-.025 ± .069	-.196 ± .142
sel8PR	vs	ccsPR	.051	.295 ± .430	.120 ± .068	-.048 ± .147
sel8P	vs	tshP	.535	.730 ± .222	.604 ± .044	.461 ± .116
sel8R	vs	tshR	.639	.988 ± .115	.792 ± .026	.468 ± .115
sel8PR	vs	tshP	.648	.996 ± .153	.780 ± .027	.554 ± .102
sel8PR	vs	tshR	.446	1.037 ± .236	.670 ± .038	.255 ± .138
sel8PR	vs	tshPR	.614	1.073 ± .168	.794 ± .026	.475 ± .114
sel8P	vs	nmgryotP	.494	.669 ± .239	.557 ± .048	.428 ± .120
sel8R	vs	nmgryotR	.451	.887 ± .186	.673 ± .038	.396 ± .124

Table 59 continued (3/3)

Character & crop			Plots rP	Means (df = 22)		
X	Y	rG		rP		
sel8PR	vs	nmgypotP	.630	.883 ± .174	.715 ± .034	.542 ± .104
sel8PR	vs	nmgypotR	.347	1.037 ± .295	.607 ± .044	.198 ± .142
sel8PR	vs	nmgypotPR	.572	.976 ± .178	.730 ± .032	.455 ± .117
visnmgP	vs	nmgypotP	.631	.816 ± .142	.712 ± .034	.519 ± .108
visnmgR	vs	nmgypotR	.603	.894 ± .125	.762 ± .029	.577 ± .098
visnmgPR	vs	nmgypotP	.683	.830 ± .113	.753 ± .030	.566 ± .100
visnmgPR	vs	nmgypotR	.567	.929 ± .137	.744 ± .031	.458 ± .116
visnmgPR	vs	nmgypotPR	.736	.897 ± .081	.822 ± .023	.630 ± .089
stalkP	vs	nmgypotP	.389	.191 ± .407	.314 ± .063	.483 ± .113
stalkR	vs	nmgypotR	.444	.687 ± .198	.594 ± .045	.469 ± .115
stalkPR	vs	nmgypotP	.332	-.033 ± .318	.170 ± .067	.580 ± .098
stalkPR	vs	nmgypotR	.441	.764 ± .207	.605 ± .044	.383 ± .126
stalkPR	vs	nmgypotPR	.458	.315 ± .266	.404 ± .058	.592 ± .096
brixP	vs	ccsP	.610	.659 ± .211	.628 ± .042	.604 ± .094
brixR	vs	ccsR	.286	1.063 ± 2.408	.366 ± .060	.251 ± .138
brixPR	vs	ccsP	.661	.827 ± .168	.715 ± .034	.598 ± .095
brixPR	vs	ccsR	.440	1.381 ± 2.883	.528 ± .050	.403 ± .124
brixPR	vs	ccsPR	.613	.762 ± .220	.660 ± .039	.559 ± .101
hardnessP	vs	fibreP	.519	.593 ± .195	.557 ± .048	.471 ± .115
hardnessR	vs	fibreR	.607	.695 ± .174	.633 ± .042	.508 ± .109
hardnessPR	vs	fibreP	.585	.697 ± .155	.642 ± .041	.493 ± .112
hardnessPR	vs	fibreR	.612	.631 ± .171	.617 ± .043	.582 ± .097
hardnessPR	vs	fibrePR	.664	.656 ± .149	.657 ± .039	.664 ± .082

For Plots, df = 70, correlations significantly > 0 at .232 (P.05) or .302 (P.01)

For Means, df = 22, t = r/se is significant at 2.074 (P.05) or 2.819(P.01)

Table 60. Trial Te, Genotypic, phenotypic and environmental correlations for MEAN vs VARIANCE

Character	Type	Crop	F ^a	Plots rP	Means (df = 22)		
					rG	rP	rE
Visual NMG	Be	P	*	.107	.258 ± .340	.168 ± .068	.040 ± .147
Visual NMG	Re+Be+Se	P		.049	-.117 ± .390	-.005 ± .040	.065 ± .084
Visual NMG	Re	R		.519	.797 ± .356	.574 ± .047	.516 ± .108
Visual NMG	Be	R		.255	.587 ± .324	.365 ± .060	.105 ± .146
Visual NMG	Se	R	*	.294	.178 ± .322	.243 ± .065	.408 ± .123
Visual NMG	Re+Be+Se	R	**	.304	.292 ± .193	.288 ± .036	.335 ± .074
Visual NMG	Be	PR		.176	.719 ± .334	.377 ± .060	-.079 ± .147
Visual NMG	Se	PR		.087	.185 ± .411	.127 ± .068	.106 ± .146
Visual NMG	Re+Be+Se	PR	*	.090	.115 ± .234	.094 ± .039	.099 ± .083
BRIX	Re	P		-.688	-3.343 ± 42.174	-.747 ± .031	-.682 ± .079
BRIX	Be	P		-.532	-1.218 ± 13.527	-.483 ± .053	-.542 ± .104
BRIX	Re+Be+Se	P		-.547	-1.610 ± 5.907	-.550 ± .028	-.549 ± .059
BRIX	Be	R		-.246	-.379 ± .423	-.283 ± .064	-.314 ± .133
BRIX	Be	PR		-.341	-.174 ± .565	-.290 ± .064	-.449 ± .118
BRIX	Se	PR		-.339	-.649 ± .500	-.394 ± .059	-.292 ± .135
BRIX	Re+Be+Se	PR		-.405	-1.194 ± 5.191	-.387 ± .034	-.432 ± .068
Hardness	Re	P	*	.258	.660 ± .276	.417 ± .057	.049 ± .147
Hardness	Be	P		.267	.919 ± .163	.386 ± .059	.240 ± .139
Hardness	Se	P	**	.221	.285 ± .303	.238 ± .066	.161 ± .144
Hardness	Re+Be+Se	P	**	.260	.536 ± .179	.363 ± .034	.139 ± .082
Hardness	Re	R	*	.130	.370 ± .320	.269 ± .064	.123 ± .145
Hardness	Be	R		.038	.301 ± .331	.226 ± .066	.148 ± .144
Hardness	Se	R		.118	.152 ± .435	.158 ± .068	.203 ± .141
Hardness	Re+Be+Se	R	**	.085	.266 ± .204	.198 ± .038	.120 ± .083
Hardness	Re	PR	*	.202	.725 ± .278	.433 ± .056	-.021 ± .147
Hardness	Be	PR	**	.142	.310 ± .281	.254 ± .065	.155 ± .144
Hardness	Se	PR		.244	.260 ± .360	.240 ± .065	.270 ± .137
Hardness	Re+Be+Se	PR	**	.191	.442 ± .174	.307 ± .036	.101 ± .083
No. of stalks	Be	R		.304	.611 ± .295	.422 ± .057	.244 ± .139
No. of stalks	Be	PR		.269	.657 ± .504	.359 ± .061	.214 ± .141

For 1 type (Re, Be or Se):

Plots, df = 70, r is significantly > 0 at .232 (P.05) or .302 (P.01)

Means, df = 22, t = r/se is significant at 2.074 (P.05) or 2.819(P.01)

For Re+Be+Se:

Plots, df = 214, r is significantly > 0 at .138 (P.05) or .181 (P.01)

Means, df = 70, t = r/se is significant at 1.994 (P.05) or 2.648(P.01)

Correlations could not be computed if variance ratios were less than 1.0 for mean or variance.

^a Significant F values for the RCB analysis of within-family variance are shown as * or **. A blank space shows F was not significant

Table 61. Trial Te, Genotypic, phenotypic and environmental correlations for Re, Be and Se types. RBS = Re+Be+Se = 72 families. The crop (P = P, R or PR) is included in the name of the character.

Character & crop		Type	Plots	Means		
X	Y		rP	rG	rP	rE
Kg/stalkP	vs	stalkP	Re -.558	-.578 ± .331	-.562 ± .048	-.569 ± .100
Kg/stalkP	vs	stalkP	Be -.458	-.380 ± .258	-.421 ± .057	-.510 ± .109
Kg/stalkP	vs	stalkP	Se -.422	-.570 ± .227	-.488 ± .053	-.351 ± .129
Kg/stalkP	vs	stalkP	RBS -.485	-.488 ± .151	-.484 ± .030	-.489 ± .064
Kg/stalkR	vs	stalkR	Re -.188	-.365 ± .273	-.270 ± .064	-.065 ± .147
Kg/stalkR	vs	stalkR	Be -.254	-.772 ± .431	-.405 ± .058	-.090 ± .146
Kg/stalkR	vs	stalkR	Se -.250	-.437 ± .232	-.347 ± .061	-.099 ± .146
Kg/stalkR	vs	stalkR	RBS -.230	-.413 ± .144	-.320 ± .035	-.089 ± .083
Kg/stalkPR	vs	stalkPR	Re -.399	-.434 ± .251	-.421 ± .057	-.396 ± .124
Kg/stalkPR	vs	stalkPR	Be -.395	-.521 ± .232	-.448 ± .056	-.326 ± .132
Kg/stalkPR	vs	stalkPR	Se -.314	-.471 ± .216	-.401 ± .058	-.183 ± .142
Kg/stalkPR	vs	stalkPR	RBS -.366	-.437 ± .131	-.405 ± .033	-.310 ± .076
Kg/stalkP	vs	tchP	Re .410	.618 ± .275	.475 ± .054	.293 ± .135
Kg/stalkP	vs	tchP	Be .534	.462 ± .232	.501 ± .052	.595 ± .095
Kg/stalkP	vs	tchP	Se .551	.601 ± .223	.565 ± .047	.525 ± .107
Kg/stalkP	vs	tchP	RBS .540	.636 ± .112	.581 ± .026	.464 ± .066
Kg/stalkR	vs	tchR	Re .560	.292 ± .294	.444 ± .056	.696 ± .076
Kg/stalkR	vs	tchR	Be .547	-.470 ± .823	.269 ± .064	.789 ± .056
Kg/stalkR	vs	tchR	Se .557	-.182 ± .294	.384 ± .059	.803 ± .052
Kg/stalkR	vs	tchR	RBS .591	.297 ± .164	.462 ± .031	.766 ± .035
Kg/stalkPR	vs	tchPR	Re .443	.460 ± .245	.438 ± .056	.395 ± .124
Kg/stalkPR	vs	tchPR	Be .501	.188 ± .317	.368 ± .060	.672 ± .081
Kg/stalkPR	vs	tchPR	Se .549	.298 ± .260	.427 ± .057	.723 ± .070
Kg/stalkPR	vs	tchPR	RBS .551	.480 ± .124	.514 ± .029	.603 ± .053
tchP	vs	stalkP	Re .481	.315 ± .411	.433 ± .056	.555 ± .102
tchP	vs	stalkP	Be .493	.645 ± .183	.567 ± .047	.364 ± .128
tchP	vs	stalkP	Se .516	.316 ± .322	.439 ± .056	.601 ± .094
tchP	vs	stalkP	RBS .449	.367 ± .168	.416 ± .033	.506 ± .062
tchR	vs	stalkR	Re .702	.778 ± .127	.737 ± .032	.664 ± .082
tchR	vs	stalkR	Be .659	.922 ± .119	.764 ± .029	.521 ± .107
tchR	vs	stalkR	Se .660	.805 ± .109	.729 ± .033	.498 ± .111
tchR	vs	stalkR	RBS .638	.742 ± .079	.683 ± .021	.552 ± .058
tchPR	vs	stalkPR	Re .633	.597 ± .199	.622 ± .043	.669 ± .081
tchPR	vs	stalkPR	Be .584	.737 ± .146	.658 ± .039	.457 ± .117
tchPR	vs	stalkPR	Se .616	.701 ± .145	.653 ± .040	.538 ± .105
tchPR	vs	stalkPR	RBS .562	.574 ± .108	.567 ± .027	.552 ± .058

Table 61 continued (2/8)

Character & crop	X	Y	Type	Plots	Means		
					rP	rG	rP
rE							
tchP	vs	ccsP	Re	.087	.320 ± .321	.192 ± .067	-.014 ± .147
tchP	vs	ccsP	Be	.107	-.041 ± .274	.039 ± .069	-.273 ± .136
tchP	vs	ccsP	Se	-.111	-.123 ± .316	-.084 ± .069	-.016 ± .147
tchP	vs	ccsP	RBS	.041	.031 ± .168	.051 ± .039	.098 ± .083
tchR	vs	ccsR	Re	-.094	.171 ± 1.180	-.049 ± .069	-.146 ± .144
tchR	vs	ccsR	Be	-.274	-.108 ± .355	-.225 ± .066	-.390 ± .125
tchR	vs	ccsR	Se	-.126	.031 ± .294	-.066 ± .069	-.294 ± .135
tchR	vs	ccsR	RBS	-.164	-.016 ± .195	-.110 ± .039	-.269 ± .078
tchP	vs	tshP	Re	.939	.936 ± .041	.937 ± .008	.946 ± .015
tchP	vs	tshP	Be	.941	.941 ± .031	.945 ± .007	.956 ± .013
tchP	vs	tshP	Se	.929	.901 ± .062	.926 ± .010	.959 ± .012
tchP	vs	tshP	RBS	.939	.937 ± .020	.942 ± .004	.953 ± .008
tchR	vs	tshR	Re	.950	.991 ± .017	.967 ± .005	.923 ± .022
tchR	vs	tshR	Be	.914	.919 ± .057	.915 ± .011	.917 ± .024
tchR	vs	tshR	Se	.944	.950 ± .028	.945 ± .007	.938 ± .018
tchR	vs	tshR	RBS	.935	.952 ± .018	.942 ± .004	.923 ± .013
tchP	vs	nmgyotP	Re	.825	.837 ± .097	.843 ± .020	.867 ± .036
tchP	vs	nmgyotP	Be	.848	.841 ± .078	.862 ± .018	.917 ± .023
tchP	vs	nmgyotP	Se	.795	.747 ± .145	.814 ± .024	.904 ± .027
tchP	vs	nmgyotP	RBS	.835	.838 ± .049	.856 ± .011	.896 ± .017
tchR	vs	nmgyotR	Re	.722	.888 ± .100	.830 ± .022	.759 ± .063
tchR	vs	nmgyotR	Be	.663	.671 ± .181	.701 ± .035	.762 ± .062
tchR	vs	nmgyotR	Se	.682	.820 ± .106	.790 ± .026	.726 ± .070
tchR	vs	nmgyotR	RBS	.700	.802 ± .067	.784 ± .015	.747 ± .037
tshP	vs	ccsP	Re	.421	.634 ± .218	.520 ± .051	.304 ± .134
tshP	vs	ccsP	Be	.432	.299 ± .248	.361 ± .060	.536 ± .105
tshP	vs	ccsP	Se	.260	.320 ± .282	.295 ± .063	.261 ± .137
tshP	vs	ccsP	RBS	.377	.378 ± .143	.380 ± .034	.388 ± .071
tshR	vs	ccsR	Re	.217	.322 ± 1.125	.204 ± .067	.238 ± .139
tshR	vs	ccsR	Be	.136	.294 ± .322	.183 ± .067	.004 ± .147
tshR	vs	ccsR	Se	.203	.341 ± .259	.260 ± .065	.047 ± .147
tshR	vs	ccsR	RBS	.190	.290 ± .177	.225 ± .038	.113 ± .083
tshP	vs	nmgyotP	Re	.954	.975 ± .015	.975 ± .003	.977 ± .007
tshP	vs	nmgyotP	Be	.955	.975 ± .013	.978 ± .003	.986 ± .004
tshP	vs	nmgyotP	Se	.933	.961 ± .025	.969 ± .004	.982 ± .005
tshP	vs	nmgyotP	RBS	.952	.976 ± .008	.977 ± .002	.981 ± .003

Table 61 continued (3/8)

Character & crop		Type	Plots	Means		rP	rE
X	Y		rP	rG		rP	rE
tshR	vs	nmgyotR	Re	.830	.943 ± .045	.929 ± .010	.924 ± .022
tshR	vs	nmgyotR	Be	.801	.882 ± .067	.896 ± .014	.925 ± .021
tshR	vs	nmgyotR	Se	.792	.963 ± .033	.931 ± .009	.865 ± .037
tshR	vs	nmgyotR	RBS	.818	.936 ± .024	.925 ± .006	.905 ± .015
nmgyotP	vs	ccsP	Re	.585	.790 ± .150	.682 ± .037	.464 ± .116
nmgyotP	vs	ccsP	Be	.558	.506 ± .202	.534 ± .050	.615 ± .092
nmgyotP	vs	ccsP	Se	.431	.564 ± .222	.500 ± .052	.386 ± .125
nmgyotP	vs	ccsP	RBS	.523	.570 ± .114	.551 ± .028	.506 ± .062
nmgyotR	vs	ccsR	Re	.395	.708 ± 1.442	.451 ± .055	.481 ± .113
nmgyotR	vs	ccsR	Be	.274	.609 ± .240	.466 ± .054	.212 ± .141
nmgyotR	vs	ccsR	Se	.354	.623 ± .212	.512 ± .051	.280 ± .136
nmgyotR	vs	ccsR	RBS	.341	.557 ± .146	.472 ± .031	.336 ± .074
sel18P	vs	visualnmgP	Re	.782	.978 ± .098	.848 ± .020	.705 ± .074
sel18P	vs	visualnmgP	Be	.882	.958 ± .046	.915 ± .011	.851 ± .041
sel18P	vs	visualnmgP	Se	.830	1.416 ± .564	.940 ± .008	.757 ± .063
sel18R	vs	visualnmgR	Re	.826	1.074 ± .060	.934 ± .009	.674 ± .081
sel18R	vs	visualnmgR	Be	.847	1.056 ± .062	.931 ± .009	.757 ± .063
sel18R	vs	visualnmgR	Se	.890	1.093 ± .071	.963 ± .005	.816 ± .049
sel18PR	vs	visualnmgPR	Re	.807	1.067 ± .111	.891 ± .014	.736 ± .068
sel18PR	vs	visualnmgPR	Be	.872	1.049 ± .043	.950 ± .007	.766 ± .061
sel18PR	vs	visualnmgPR	Se	.767	.985 ± .076	.860 ± .018	.669 ± .081
sel18PR	vs	visualnmgPR	RBS	.818	1.014 ± .035	.900 ± .008	.722 ± .040
sel18P	vs	hardnessP	Re	.233	.432 ± .317	.311 ± .063	.153 ± .144
sel18P	vs	hardnessP	Be	.217	.344 ± .287	.280 ± .064	.167 ± .143
sel18P	vs	hardnessP	Se	.150	.223 ± .496	.194 ± .067	.223 ± .140
sel18R	vs	hardnessR	Re	.019	.155 ± .331	.073 ± .069	-.062 ± .147
sel18R	vs	hardnessR	Be	-.088	.141 ± .309	.021 ± .069	-.244 ± .139
sel18R	vs	hardnessR	Se	.085	.461 ± .309	.245 ± .065	-.127 ± .145
sel18PR	vs	hardnessPR	Re	.039	-.048 ± .355	-.005 ± .070	.061 ± .147
sel18PR	vs	hardnessPR	Be	.060	.117 ± .287	.086 ± .069	.014 ± .147
sel18PR	vs	hardnessPR	Se	.216	.396 ± .274	.294 ± .064	.092 ± .146
sel18PR	vs	hardnessPR	RBS	.121	.203 ± .173	.157 ± .039	.066 ± .084
sel18P	vs	brixP	Be	.363	.384 ± .335	.368 ± .060	.352 ± .129
sel18P	vs	brixP	Se	.356	.595 ± .536	.385 ± .059	.294 ± .135
sel18R	vs	brixR	Re	.505	.857 ± .180	.652 ± .040	.333 ± .131
sel18R	vs	brixR	Be	.368	.671 ± .215	.500 ± .052	.156 ± .144
sel18R	vs	brixR	Se	.312	.371 ± .279	.321 ± .062	.259 ± .138

Table 61 continued (4/8)

Character & crop	X	Y	Type	Plots	Means		
					rP	rG	rP
rE							
sel8PR	vs	brixPR	Re	.280	.725 ± .385	.405 ± .058	.134 ± .145
sel8PR	vs	brixPR	Be	.260	.190 ± .304	.224 ± .066	.290 ± .135
sel8PR	vs	brixPR	Se	.320	.371 ± .281	.335 ± .062	.279 ± .136
sel8PR	vs	brixPR	RBS	.278	.335 ± .175	.295 ± .036	.232 ± .079
sel8P	vs	stalkP	Re	.458	.530 ± .400	.470 ± .054	.434 ± .120
sel8P	vs	stalkP	Be	.398	.289 ± .287	.350 ± .061	.470 ± .115
sel8P	vs	stalkP	Se	.184	.202 ± .564	.196 ± .067	.215 ± .141
sel8R	vs	stalkR	Re	.388	.423 ± .250	.402 ± .058	.378 ± .126
sel8R	vs	stalkR	Be	.187	.034 ± .294	.119 ± .069	.381 ± .126
sel8R	vs	stalkR	Se	.398	.763 ± .196	.559 ± .048	.147 ± .144
sel8PR	vs	stalkPR	Re	.458	.619 ± .272	.515 ± .051	.413 ± .122
sel8PR	vs	stalkPR	Be	.332	.282 ± .263	.306 ± .063	.395 ± .124
sel8PR	vs	stalkPR	Se	.105	.196 ± .284	.151 ± .068	.054 ± .147
sel8PR	vs	stalkPR	RBS	.294	.310 ± .162	.302 ± .036	.304 ± .076
sel8P	vs	nmgvarP	R				
sel8P	vs	nmgvarP	Be	.247	.228 ± .360	.238 ± .066	.252 ± .138
sel8P	vs	nmgvarP	S				
sel8R	vs	nmgvarR	Re	.582	.630 ± .356	.578 ± .046	.606 ± .093
sel8R	vs	nmgvarR	Be	.269	.711 ± .380	.403 ± .058	.134 ± .145
sel8R	vs	nmgvarR	Se	.387	.055 ± .433	.281 ± .064	.509 ± .109
sel8PR	vs	nmgvarPR	R				
sel8PR	vs	nmgvarPR	Be	.300	.822 ± .335	.472 ± .054	.126 ± .145
sel8PR	vs	nmgvarPR	Se	.311	.320 ± .475	.311 ± .063	.328 ± .132
sel8PR	vs	nmgvarPR	RBS	.295	.262 ± .267	.276 ± .037	.305 ± .076
sel8P	vs	tchP	Re	.533	.746 ± .230	.616 ± .043	.476 ± .114
sel8P	vs	tchP	Be	.504	.986 ± .152	.715 ± .034	.202 ± .141
sel8P	vs	tchP	Se	.364	.939 ± .526	.525 ± .050	.324 ± .132
sel8R	vs	tchR	Re	.617	.940 ± .128	.758 ± .030	.462 ± .116
sel8R	vs	tchR	Be	.414	.423 ± .312	.425 ± .057	.428 ± .120
sel8R	vs	tchR	Se	.667	1.026 ± .117	.814 ± .023	.499 ± .111
sel8PR	vs	tchP	Re	.630	1.082 ± .165	.804 ± .025	.527 ± .106
sel8PR	vs	tchP	Be	.665	1.068 ± .098	.846 ± .020	.399 ± .124
sel8PR	vs	tchP	Se	.466	.818 ± .219	.606 ± .044	.335 ± .131
sel8PR	vs	tchP	RBS	.602	.969 ± .075	.761 ± .017	.412 ± .070

Table 61 continued (5/8)

Character & crop	X	Y	Type	Plots	Means		
					rP	rG	rP
sel8PR	vs	tchR	Re	.499	1.022 ± .214	.697 ± .036	.339 ± .130
sel8PR	vs	tchR	Be	.315	.882 ± .251	.542 ± .049	.070 ± .147
sel8PR	vs	tchR	Se	.427	.765 ± .198	.583 ± .046	.263 ± .137
sel8PR	vs	tchR	RBS	.425	.859 ± .112	.616 ± .025	.213 ± .080
sel8PR	vs	tchPR	Re	.618	1.104 ± .169	.809 ± .024	.486 ± .113
sel8PR	vs	tchPR	Be	.536	1.061 ± .141	.766 ± .029	.236 ± .139
sel8PR	vs	tchPR	Se	.498	.833 ± .173	.651 ± .040	.344 ± .130
sel8PR	vs	tchPR	RBS	.560	.964 ± .079	.742 ± .018	.347 ± .074
sel8P	vs	ccsP	Re	.123	.286 ± .359	.164 ± .068	.005 ± .147
sel8P	vs	ccsP	Be	.330	.327 ± .274	.329 ± .062	.352 ± .129
sel8P	vs	ccsP	Se	.139	.834 ± .652	.270 ± .064	-.188 ± .142
sel8R	vs	ccsR	Re	.088	.950 ± 2.429	.194 ± .067	.006 ± .147
sel8R	vs	ccsR	Be	.065	.654 ± .337	.292 ± .064	-.219 ± .140
sel8R	vs	ccsR	Se	.117	.151 ± .337	.119 ± .069	.072 ± .147
sel8PR	vs	ccsP	Re	.209	.289 ± .363	.221 ± .066	.147 ± .144
sel8PR	vs	ccsP	Be	.318	.147 ± .290	.237 ± .066	.450 ± .118
sel8PR	vs	ccsP	RBS	.234	.305 ± .169	.256 ± .037	.170 ± .082
sel8PR	vs	ccsR	Re	-.127	.669 ± 2.264	-.025 ± .069	-.145 ± .144
sel8PR	vs	ccsR	Be	.110	.302 ± .321	.198 ± .067	.031 ± .147
sel8PR	vs	ccsR	Se	.152	.642 ± .283	.359 ± .061	-.128 ± .145
sel8PR	vs	ccsR	RBS	.073	.455 ± .199	.226 ± .038	-.092 ± .083
sel8PR	vs	ccsPR	Re	.051	.295 ± .430	.120 ± .068	-.048 ± .147
sel8PR	vs	ccsPR	Be	.249	.215 ± .277	.229 ± .066	.279 ± .136
sel8PR	vs	ccsPR	Se	.152	.565 ± .270	.330 ± .062	-.157 ± .144
sel8PR	vs	ccsPR	RBS	.172	.368 ± .168	.252 ± .037	.029 ± .084
sel8P	vs	tshP	Re	.535	.730 ± .222	.604 ± .044	.461 ± .116
sel8P	vs	tshP	Be	.574	1.042 ± .134	.773 ± .028	.294 ± .135
sel8P	vs	tshP	Se	.411	1.233 ± .634	.604 ± .044	.271 ± .137
sel8R	vs	tshR	Re	.639	.988 ± .115	.792 ± .026	.468 ± .115
sel8R	vs	tshR	Be	.459	.670 ± .232	.553 ± .048	.388 ± .125
sel8R	vs	tshR	Se	.700	.997 ± .106	.821 ± .023	.561 ± .101
sel8PR	vs	tshP	Re	.648	.996 ± .153	.780 ± .027	.554 ± .102
sel8PR	vs	tshP	Be	.711	1.050 ± .087	.859 ± .018	.493 ± .112
sel8PR	vs	tshP	Se	.512	.970 ± .184	.688 ± .037	.306 ± .134
sel8PR	vs	tshP	RBS	.643	.993 ± .068	.790 ± .015	.444 ± .067
sel8PR	vs	tshR	Re	.446	1.037 ± .236	.670 ± .038	.255 ± .138
sel8PR	vs	tshR	Be	.380	.952 ± .199	.630 ± .042	.107 ± .146
sel8PR	vs	tshR	Se	.483	.909 ± .158	.681 ± .037	.251 ± .138
sel8PR	vs	tshR	RBS	.458	.945 ± .097	.680 ± .021	.203 ± .080

Table 61 continued (6/8)

Character & crop X	Y	Type	Plots rP	Means		rP	rE
				rG	rP		
sel8PR	vs	tshPR	Re .614	1.073 ± .168	.794 ± .026	.475 ± .114	
sel8PR	vs	tshPR	Be .634	1.067 ± .107	.829 ± .022	.357 ± .129	
sel8PR	vs	tshPR	Se .566	.991 ± .134	.755 ± .030	.328 ± .132	
sel8PR	vs	tshPR	RBS .619	1.022 ± .066	.800 ± .014	.382 ± .072	
sel8P	vs	nmgyotP	Re .494	.669 ± .239	.557 ± .048	.428 ± .120	
sel8P	vs	nmgyotP	Be .540	1.029 ± .136	.765 ± .029	.289 ± .135	
sel8P	vs	nmgyotP	Se .342	1.264 ± .675	.586 ± .046	.212 ± .141	
sel8R	vs	nmgyotR	Re .451	.887 ± .186	.673 ± .038	.396 ± .124	
sel8R	vs	nmgyotR	Be .275	.421 ± .287	.378 ± .060	.316 ± .133	
sel8R	vs	nmgyotR	Se .421	.830 ± .188	.646 ± .040	.386 ± .125	
sel8PR	vs	nmgyotP	Re .630	.883 ± .174	.715 ± .034	.542 ± .104	
sel8PR	vs	nmgyotP	Be .662	1.011 ± .092	.831 ± .022	.485 ± .113	
sel8PR	vs	nmgyotP	Se .489	.965 ± .187	.675 ± .038	.267 ± .137	
sel8PR	vs	nmgyotP	RBS .614	.957 ± .074	.760 ± .017	.421 ± .069	
sel8PR	vs	nmgyotR	Re .347	1.037 ± .295	.607 ± .044	.198 ± .142	
sel8PR	vs	nmgyotR	Be .302	.696 ± .234	.485 ± .053	.105 ± .146	
sel8PR	vs	nmgyotR	Se .356	.957 ± .199	.633 ± .042	.104 ± .146	
sel8PR	vs	nmgyotR	RBS .360	.877 ± .119	.599 ± .025	.140 ± .082	
sel8PR	vs	nmgyotPR	Re .572	.976 ± .178	.730 ± .032	.455 ± .117	
sel8PR	vs	nmgyotPR	Be .607	.930 ± .120	.750 ± .030	.380 ± .126	
sel8PR	vs	nmgyotPR	Se .508	1.021 ± .058	.726 ± .033	.221 ± .140	
sel8PR	vs	nmgyotPR	RBS .582	.964 ± .076	.750 ± .017	.349 ± .074	
visnmgp	vs	nmgyotP	Re .631	.816 ± .142	.712 ± .034	.519 ± .108	
visnmgp	vs	nmgyotP	Be .590	1.003 ± .094	.815 ± .023	.395 ± .124	
visnmgp	vs	nmgyotP	Se .420	.858 ± .182	.637 ± .041	.267 ± .137	
visnmgr	vs	nmgyotR	Re .603	.894 ± .125	.762 ± .029	.577 ± .098	
visnmgr	vs	nmgyotR	Be .310	.487 ± .224	.423 ± .057	.260 ± .137	
visnmgr	vs	nmgyotR	Se .390	.738 ± .157	.631 ± .042	.359 ± .128	
visnmgr	vs	nmgyotP	Re .683	.830 ± .113	.753 ± .030	.566 ± .100	
visnmgr	vs	nmgyotP	Be .660	.930 ± .079	.819 ± .023	.504 ± .110	
visnmgr	vs	nmgyotP	Se .523	.843 ± .147	.673 ± .038	.307 ± .034	
visnmgr	vs	nmgyotP	RBS .650	.883 ± .057	.773 ± .016	.458 ± .066	
visnmgr	vs	nmgyotR	Re .567	.929 ± .137	.744 ± .031	.458 ± .116	
visnmgr	vs	nmgyotR	Be .389	.615 ± .200	.506 ± .052	.229 ± .140	
visnmgr	vs	nmgyotR	Se .482	.868 ± .122	.711 ± .034	.266 ± .137	
visnmgr	vs	nmgyotR	RBS .513	.820 ± .078	.687 ± .021	.334 ± .075	