Supplementary file

<u>**Supplementary Table 1: Interaction effect between Rootstock and Season for Mg petiole concentration.**</u>

Rootstock x Season	Mg (%)
OR*2003-04	0.712 a
140 Ru*2006-07	0.552 b
OR*2004-05	0.551 b
St. George*2006-07	0.516 bc
Harmony*2006-07	0.514 bc
OR*2007-08	0.505 bcd
OR*2005-06	0.503 bcd
Harmony*2003-04	0.497 bcde
99 Ri*2006-07	0.491 bcdef
Harmony*2005-06	0.490 bcdef
Harmony*2004-05	0.489 bcdef
St. George*2003-04	0.487 bcdefg
1103 P*2005-06	0.487 bcdefg
99 Ri*2003-04	0.487 bcdefg
1103 P*2006-07	0.486 bcdefg
OR*2006-07	0.486 bcdefg
1103 P*2003-04	0.481 bcdefgh
St. George*2004-05	0.478 bcdefgh
140 Ru*2005-06	0.462 bcdefghi
1103 P*2004-05	0.457 bcdefghi
140 Ru*2004-05	0.454 bcdefghij
99 Ri*2005-06	0.452 bcdefghij
140 Ru*2003-04	0.451 bcdefghij
Harmony*2007-08	0.449 bcdefghij
140 Ru*2007-08	0.448 bcdefghij

99 Ri*2004-05	0.438 bcdefghijk
St. George*2005-06	0.432 bcdefghijk
99 Ri*2007-08	0.429 bcdefghijk
Salt Creek*2006-07	0.418 bcdefghijkl
1103 P*2007-08	0.415 bcdefghijkl
St. George*2007-08	0.407 cdefghijkl
Salt Creek*2007-08	0.379 cdefghijkl
Freedom*2006-07	0.376 defghijkl
SO4*2006-07	0.373 defghijkl
Salt Creek*2005-06	0.365 efghijkl
Freedom*2007-08	0.359 fghijkl
Salt Creek*2003-04	0.356 fghijkl
Freedom*2004-05	0.352 ghijkl
Freedom*2005-06	0.347 hijkl
SO4*2007-08	0.337 ijkl
Salt Creek*2004-05	0.326 ijkl
SO4*2003-04	0.319 jkl
SO4*2005-06	0.302 kl
Freedom*2003-04	0.292 l
SO4*2004-05	0.288 l

For a given factor and significance $p < 0.05$, different letters within a column represent significant differences (Tukey's test, $p < 0.05$).

Supplementary Table 2: Pearson's correlation matrix obtained from Principal Component Analysis of performed on variables measured as a function of rootstocks (Figure 1).

Variables	N	P	K	Ca	Mg	Zinc	Mn	Cu	Nº Bu	Yi	Bu W	P W	Ravaz I	Bu	Fru	S TC
N	1	0.666	**0.702**	**0.818**	0.051	-0.129	0.089	-0.049	**-0.853**	**-0.848**	-0.637	0.566	**-0.808**	-0.598	**-0.697**	-0.157
P		1	-0.030	0.384	-0.169	0.283	0.621	0.243	-0.635	-0.535	-0.310	**0.785**	**-0.836**	-0.356	-0.073	-0.453
K			1	**0.757**	0.443	-0.549	-0.294	-0.286	-0.569	**-0.668**	-0.576	-0.083	-0.213	-0.403	**-0.839**	0.373
Ca				1	0.089	-0.466	0.090	-0.299	**-0.753**	**-0.755**	-0.464	0.343	-0.561	-0.592	**-0.912**	0.210
Mg					1	-0.585	0.295	-0.016	-0.063	-0.148	-0.133	-0.595	0.435	0.339	-0.060	**0.667**
Zinc						1	-0.081	0.491	0.229	0.213	-0.172	0.572	-0.329	-0.298	0.574	-0.516
Mn							1	0.275	-0.255	-0.129	0.186	0.202	-0.189	0.185	0.260	0.101
Cu								1	0.222	0.341	0.215	0.397	-0.162	0.121	0.536	0.076
Nº Bu									1	**0.959**	0.534	-0.378	**0.747**	0.591	0.615	0.217
Yi										1	**0.726**	-0.288	0.662	**0.677**	0.663	0.142
Bu W											1	-0.260	0.432	**0.777**	0.429	0.071
P W												1	**-0.886**	-0.553	-0.106	-0.461
Ravaz I													1	0.663	0.360	0.503
Bu														1	0.497	0.152
Fru															1	-0.183
S TC																1

Values in bold are statistically significant (p value < 0.05).

Supplementary Table 3: Pearson's correlation matrix obtained from Principal Component Analysis performed on variables measured as a function of Season (Figure 2).

Variables	N	P	K	Ca	Mg	Zinc	Mn	Cu	Nº Bu	Yi	Bu W	P W	Ravaz I	Bu	Fru	S TC
N	1	0.218	0.156	0.839	0.748	0.399	0.592	**0.881**	-0.478	-0.218	-0.055	-0.366	0.004	-0.126	-0.434	-0.203
P		1	0.409	0.196	-0.355	**0.929**	-0.526	0.226	-0.358	-0.568	-0.501	-0.389	-0.272	-0.722	-0.640	0.698
K			1	0.626	0.275	0.356	-0.523	0.515	-0.821	**-0.955**	-0.746	0.589	**-0.962**	0.296	0.343	0.786
Ca				1	0.835	0.347	0.260	**0.974**	-0.754	-0.631	-0.423	0.161	-0.522	0.252	0.011	0.168
Mg					1	-0.175	0.641	0.801	-0.501	-0.194	-0.017	0.233	-0.225	0.544	0.247	-0.324
Zinc						1	-0.391	0.442	-0.248	-0.581	-0.619	-0.385	-0.259	-0.619	-0.634	0.618
Mn							1	0.287	0.075	0.585	0.672	-0.384	0.600	0.098	-0.187	**-0.903**
Cu								1	-0.603	-0.581	-0.462	0.062	-0.431	0.183	-0.086	0.134
Nº Bu									1	0.704	0.305	-0.242	0.653	-0.109	-0.063	-0.414
Yi										1	**0.888**	-0.466	**0.931**	-0.155	-0.185	-0.864
Bu W											1	-0.470	0.824	-0.173	-0.211	-0.851
P W												1	-0.751	0.874	**0.954**	0.370
Ravaz I													1	-0.457	-0.524	-0.798
Bu														1	**0.937**	-0.090
Fru															1	0.095
S TC																1

Values in bold are statistically significant (p value < 0.05).