

## Supplementary Tables

**Table S1 Genotypic covariance/ variance /correlation matrix for stalk rot traits from the combined analysis of variance for three environments.** The diagonal (bold) is an estimate of genetic variance ( $\hat{\sigma}G^2$ ) plus the genotype by environment interaction ( $\hat{\sigma}GE^2$ ) within each environment. Estimates of covariance between pairs of environments are shown below the diagonal, and genetic correlations between genotypes in each pair of environments are shown above the diagonal.

	Fusarium thapsinum			Macrophomina phaseolina		
	Manhattan		Ottawa 2012	Manhattan		Ottawa 2012
	2011	2012		2011	2012	
<b>Major lesion length</b>						
Manhattan 2011	<b>0.14</b>	0.83	0.66	<b>0.17</b>	0.89	0.51
Manhattan 2012	0.11	<b>0.12</b>	0.72	0.14	<b>0.15</b>	0.66
Ottawa 2012	0.09	0.09	<b>0.12</b>	0.10	0.13	<b>0.24</b>
<b>Total lesion length</b>						
Manhattan 2011	<b>0.14</b>	0.75	0.48	<b>0.18</b>	0.89	0.57
Manhattan 2012	0.10	<b>0.13</b>	0.66	0.16	<b>0.17</b>	0.68
Ottawa 2012	0.07	0.09	<b>0.14</b>	0.13	0.15	<b>0.29</b>
<b>Relative total lesion length</b>						
Manhattan 2011	<b>0.11</b>	0.70	0.36	<b>0.12</b>	0.84	0.44
Manhattan 2012	0.08	<b>0.13</b>	0.52	0.10	<b>0.12</b>	0.47
Ottawa 2012	0.04	0.06	<b>0.11</b>	0.07	0.08	<b>0.22</b>
<b>Relative major lesion length</b>						
Manhattan 2011	<b>0.10</b>	0.77	0.56	<b>0.11</b>	0.85	0.35
Manhattan 2012	0.08	<b>0.11</b>	0.56	0.09	<b>0.10</b>	0.44
Ottawa 2012	0.05	0.05	<b>0.09</b>	0.05	0.06	<b>0.18</b>
<b>Plant height</b>						
Manhattan 2011	<b>587.70</b>	0.79	0.88	<b>0.33</b>	0.76	0.82
Manhattan 2012	613.80	<b>1029.00</b>	0.99	0.20	<b>0.21</b>	0.76
Ottawa 2012	318.00	473.10	<b>223.30</b>	0.30	0.22	<b>0.39</b>
<b>Days to flowering</b>						
Manhattan 2011	<b>0.33</b>	0.76	0.82	<b>0.33</b>	0.76	0.82
Manhattan 2012	0.20	<b>0.21</b>	0.76	0.20	<b>0.21</b>	0.76
Ottawa 2012	0.30	0.22	<b>0.39</b>	0.30	0.22	<b>0.39</b>