

Table S2 – Frequency of cis elements present in promoters of the DMG.

Motif	Data set	Number of promoters in a each dataset	Number of promoters containing the pattern	Total number of patterns in each dataset	Promoter mean
ACGT	BG	77222	55801 (72.26%)	233388	3.02
	Cluster 1	3	3 (100%)	16	5.33
ACCGAC	BG	77222	8254 (10.7%)	10276	0.13
	Cluster 1	3	2 (66.7%)	2	0.66
WAACCA	BG	77222	58808 (76.2%)	121330	1.56
	Cluster 1	3	3 (100%)	6	2
CANNTG	BG	77222	73865 (95.7%)	540426	7.07
	Cluster 1	3	3 (100%)	24	7.99

Note: All analyzed promoter sequences presented 1,000 bp and POBO was run with the following parameters: Number pseudoclusters 50 and length of the background promoter 1,000 bp, bootstrap 1000. Calculated t-test using the linked on line GrapPad web site: <http://www.graphpad.com/quickcalcs/DistMenu.cfm>. P<0.0001. The symbol W was used in addition to A or T and the symbol N was used in additional to A,C,G or T. BG - background set that comprise all promoters regions of the *G. max* genome. Cluster 1 – promoters set that comprise the promoters regions of the GOI genes.