

Supplemental Table 6. Pyrimidine dinucleotide analyses at G:C>A:T substitution sites in six FN M₃ plant lines.

FN Line	Position	Substitution category	Substitution and flanking sequence	DiPyr±DiPyr Forward Strand	DiPyr±DiPyr Reverse Strand	Pyr-Pyr	Functional context	Substitution class	Substitution effect	Gene orientation	On transcribed strand
E125	Chr1:21445271	G:C→A:T	TTCTAACAAAC C TATTAAC T AT		CT	y	Intergenic			NA	NA
E125	Chr1:22289862	G:C→A:T	CATTGATGGAC A T C ATTGGTT				Exon	synonymous	silent	Forward	yes
E128	Chr1:22959189	G:C→A:T	ATTGTGGAAG C CTGTCAT G T				Exon	synonymous	silent	Reverse	No
E125	Chr1:29219260	G:C→A:T	CTTCAAGCCT C TTTTT A TCT		TC CT	y	UTR			NA	NA
E99	Chr1:29991776	G:C→A:T	AGCTTGGTCT C CTGATT A CT	TC CT		y	Exon	synonymous	silent	Forward	yes
E71	Chr1:30242299	G:C→A:T	TAGGAGCAGC C TATGCAG C TG		CC CT	y	Exon	synonymous	silent	Forward	yes
E216	Chr2:13496083	G:C→A:T	ATATATACTA C TATCTT A CTG		CT	y	Intron			NA	NA
E125	Chr2:16150493	G:C→A:T	GTTTCTCACT C TCCCA A ATCC	TC CT		y	Exon	non-synonymous	missense	Forward	yes
E71	Chr2:17438544	G:C→A:T	ACACATGTCA C ATGAAGGG T G				Intron			NA	NA
E138	Chr2:19568871	G:C→A:T	AAATAATCA A CTGCA A AGA	CC		y	Exon	non-synonymous	missense	Forward	yes
E216	Chr2:8139800	G:C→A:T	TGAGAGTAA C GGAGATG A TT				Exon	non-synonymous	truncated	Forward	yes
E128	Chr3:15105689	G:C→A:T	CTTAATATTT C AGCTTT G AAT	TC		y	Intergenic			NA	NA
E138	Chr3:18755414	G:C→A:T	CTTCACGAT C CTCCGCC A CC		CC CT	y	Exon	non-synonymous	missense	Reverse	no
E71	Chr3:2496101	G:C→A:T	ATCGACTTGT C ATTTG C CGG	TC		y	Intergenic			NA	NA
E71	Chr3:8303675	G:C→A:T	TAATACTTAA C CGACACT T CG	CC		y	Intergenic			NA	NA
E125	Chr3:9623429	G:C→A:T	GTTACGCTGA C GTCA T TGAG				Intergenic			NA	NA
E138	Chr4:12517099	G:C→A:T	GAAACGAAT C AGAA A TAAA				UTR			NA	NA
E125	Chr4:14565079	G:C→A:T	CTTGGTTTT C TTTATG A AAA	TC CT		y	Intron			NA	NA
E99	Chr4:891280	G:C→A:T	ATGGTCTCA T CGCTTCC G CA	TC		y	Intron			NA	NA
E216	Chr5:8368874	G:C→A:T	ATATAAA A T C CTACG T CTC		CC	y	Intergenic			NA	NA