|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Table S5. Dent inbred lines with the allele composition for the SNPs significantly associated to cold tolerance-related traits, favorable allele composition of haplotype groups, And allele composition for the significant SNPs with highest level of signification from the testcross trials of flint inbreds. | | | | | | |
|  |  | Significant SNPs. Inbreds *per se* | | | Significant SNPs. Testcrosses | |
| Group | Inbred | 3075  Early vigor  CCCGGGCTA | 4871  SPAD CATTC | 22573  SPAD  CG | 18094  G | 25302  T |
|  | A347 | -CGGGC-A | ATTC | G | - | T |
| Mo17 | AS5707 | CC------ | ATTC | G | - | - |
|  | B103 | CC------ | ATTC | G | G | - |
| Mixed | B110 | -CGG-CTA | ---C | G | - | T |
| NG | B112 | -CGG-CTA | ---C | G | - | T |
| Stiff\_Stalk\_B73 | B37 | -CGG-CTA | ATTC | - | G | T |
| NG | B99 | -CGGACTA | ---C | G | - | T |
| Mixed | EP29 | -CGG-CTA | -T-C | G | - | T |
| M13 | EP51 | -CGG-CTA | ATTC | - | - | - |
| M13 | EZ11A | -CGGGC-A | ATTC | G | G | T |
| Mixed | EZ46 | -CGGGC-A | ATTC | G | G | T |
| Mixed | EZ47 | -CGG-CTA | ATTC | G | - | T |
| Mixed | EZ5 | C------- | ATTC | G | - | - |
| Mixed | F608 | -CGG-CTA | -T-C | G |  | - |
| M13 | F618 | -CGG-CTA | ATTC | - | G | T |
| OnI\_F252 | F7025 | -CG--C-A | ATTC | G | - | T |
| Mixed | F838 | -CGG-CTA | -T-C | G | - | T |
| M13 | F904 | CC------ | ATTC | G | - | - |
| OnI\_F252 | F918 | -CGG-CTA | ATTC | - | G | T |
| Stiff\_Stalk | F924 | -CGG-CTA | ATTC | G | - | T |
| Mixed | FV317 | -CG--C-A | ATTC | G | G | T |
| Iodent\_Ph207 | FV335 | -CGGGC-A | ATTC | G | - | T |
| M13 | LH82 | -CGG-CTA | -T-C | G | - | T |
| Mixed | LH85 | -CGGGC-A | ATTC | G | - | - |
| Mo17 | LH93 | -CGG-CTA | -T-C | - | - | T |
| M13 | N6 | -CGG-CTA | -T-- | G | G | T |
| Mo17 | NC258 | C------- | ATTC | G | - | T |
| M13 | NC262B | -CGG-CTA | -T-- | G | - | T |
| Mixed | NC290 | -CGG-CTA | -T-- | G | - | T |
| M13 | NK807 | -CGG-CTA | ATTC | G | - | T |
| M13 | Oh02 | -CGG-CTA | ATTC | - | - | T |
| M13 | PHB09 | -CGG-CTA | ATTC | - | G | - |
| Stiff\_Stalk\_B14a | PHG35 | -C---- | ATTC | G | A | T |
| Iodent\_Ph207 | PHG80 | -CGGG-CTA | ATTC | - | G | T |
| Mixed | PHJ40 | -CGG-CTA | ATTC | G | - | T |
| Mo17 | PHK29 | CC------ | ATTC | G | - | T |
| M13 | PHK76 | -CGGGC-A | ATTC | G | - | T |
| Mixed | T8 | -CGG-CTA | ATTC | - | G | - |
| OnI\_F252 | UH1595 | -CGG-CTA | ATTC | - | - | T |
| Iodent\_Ph207 | UH6103 | -CGG-CTA | ---C | G | - | T |
| Iodent\_Ph207 | UH6110 | -CGG-CTA | ---C | G | - | T |
| Iodent\_Ph207 | UH6132 | -CGG-CTA | ---C | G | - | - |
| Iodent\_Ph207 | UHP046 | -CGG-CTA | -T-C | G | G | C |
| Iodent\_Ph207 | UHP060 | -CGG-CTA | ---C | G | - | T |
| Iodent\_Ph207 | UHP075 | -CGG-CTA | ---C | G | - | C |
| Iodent\_Ph207 | UHP087 | -CGG-CTA | -T-C | G | - | T |
| Iodent\_Ph207 | UHP104 | -CGG-CTA | ---C | G | - | T |
| Iodent\_Ph207 | UH250 | -CGG-CTA | ---C | G | - | T |
| M13 | WH | -CGG-CTA | -T-C | G | - | T |
| a SNP site (see Table 2 for precise information) with the favorable allele in parenthesis  c Favorable alleles within each haplotype. The significant SNP is underlined | | | | | | |