|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Linkage group | SNP ID | SNP position (bp) | Gene name | Gene position (bp) | Function or Biological process |
| Tomato spotted wilt (TSW) |
| 2013 | B08 | AX-147258184 | 34,825,599 | *RPT5A* | 34804060-34804447 | Transcription |
| 2013 | B08 | AX-147258184 | 34,825,599 | *KK1\_043666* | 34850725-34853512 | DNA integration and recombination |
| 2013 | B08 | AX-147258184 | 34,825,599 | *LRR-RLK* | 34878415-34887426 | innate immune response |
| 2013 | B08 | AX-147258189 | 35,016,844 | *LRR-RLK* | 34878415-34887426 | innate immune response |
| 2013 | B08 | AX-147258189 | 35,016,844 | *LOC107484292* | 35399947-35401026 | Regulation of gene expression |
| 2013 | B08 | AX-147258189 | 35,016,844 | *LOC107457889* | 35426562-35427593 | Defense response  |
| 2013 | B08 | AX-147258189 | 35,016,844 | *LRR-RLK* | 34651402-34658410 | innate immune response |
| 2013 | B08 | AX-147258189 | 35,016,844 | *RPT5A* | 34804060-34804447 | Transcription |
| 2013 | B08 | AX-177637190 | 46,518,312 | *KK1\_048795* | 46647784-46653046 | DNA integration |
| 2013 | B08 | AX-177637190 | 46,518,312 | *KK1\_043666* | 46071580-46073827 | DNA integration and recombination |
| 2015 | B05 | AX-176802081 | 120,108,986 | *KK1\_048795* | 120042101-120044272 | DNA integration |
| 2015 | B05 | AX-176802081 | 120,108,986 | *RPPL1* | 120505605-120506678 | Potential disease resistance protein |
| 2015 | B05 | AX-176802081 | 120,108,986 | *LOC107484292* | 119620095-119621174 | Regulation of gene expression |
| 2015 | B05 | AX-176802081 | 120,108,986 | *LIMYB* | 120108173-120109321  | Regulation of transcription |
| 2015 | B05 | AX-176813166 | 119,858,337 | *LOC107470950*  | 119366168-119368628 | Regulation of translation |
| 2015 | B05 | AX-176813166 | 119,858,337 | *DEF1* | 119594135-119595648 | response to DNA damage stimulus |
| 2015 | A05 | AX-147223558 | 101,618,480 | *MYB8* | 101334256-101335258 | Transcription activator |
| 2015  | A05 | AX-147223558 | 101,618,480 | *205D04\_12*  | 101176517-101178591 | signal transduction |
| 2015 | A05 | AX-147223558 | 101,618,480 | *KK1\_048795* | 101670653-101671654 | DNA integration |
| 2015 | A05 | AX-147223558 | 101,618,480 | *KK1\_043666* | 101482632-101483749 | DNA integration and recombination |
| Early leaf spot (ELS) |
| 2014 | B09 | AX-177643393 | 143,783,013 | *KK1\_048795* | 143849895-143852279 | DNA integration |
| 2014 | B09 | AX-177643393 | 143,783,013 | *KK1\_043666* | 143862654-143870158 | DNA integration and recombination |
| 2014 | B09 | AX-177643393 | 143,783,013 | *205D04\_12* | 143824354-143825225 | signal transduction |
| 2014 | B09 | AX-177643343 | 143,767,171 | *KK1\_043666* | 143862647-143870161 | DNA integration and recombination |
| 2014 | B09 | AX-177643343 | 143,767,171 | *205D04\_12* | 143824357-143825225 | signal transduction |
| Late leaf spot (LLS) |
| 2014 | B09 | AX-177643393 | 143,783,013 | *KK1\_048795* | 143975254-143977973 | DNA integration |
| 2014 | B09 | AX-177643393 | 143,783,013 | *205D04\_12* | 143824354-143825225 | signal transduction |
| 2014 | B09 | AX-177643393 | 143,783,013 | *KK1\_043666* | 143862654-143870158 | DNA integration and recombination |
| 2014 | B09 | AX-177643343 | 143,767,171 | *KK1\_048795* | 143567653-143571480 | DNA integration |
| 2014 | B09 | AX-177643343 | 143,767,171 | *205D04\_12* | 143824357-143825225 | signal transduction |
| 2014 | B09 | AX-177643343 | 143,767,171 | *KK1\_043666* | 143862647-143870161 | DNA integration and recombination |