**Supplemental Table 1: Segregation of candidate gene markers in population.** Presence or absence of a colonial bentgrass allele for each candidate gene in the 93 individuals of the hybrid backcross population; + = Presence of the colonial bentgrass allele for a given candidate gene marker; - = absence of the colonial bentgrass allele for a given candidate gene marker.

| Backcross population individual | Cystein protease | Expansin | Catalse | Glutathione-S-Transferase | Glyceraldehyde-3-Phosphate DeHydrogenase | Heat Shock Protein 26 | Heat Shock Protein 101 | Heat Shock Protein 70 |
|--------------------------------|------------------|----------|---------|---------------------------|-------------------------------------------|----------------------|----------------------|----------------------|
| 8                              | +                | +        | +       | -                         | -                                         | +                    | +                    | -                    |
| 9                              | +                | +        | -       | +                         | -                                         | +                    | +                    | -                    |
| 10                             | +                | +        | -       | +                         | -                                         | +                    | +                    | +                    |
| 14                             | +                | +        | +       | +                         | -                                         | +                    | +                    | -                    |
| 16                             | +                | +        | +       | +                         | -                                         | +                    | +                    | -                    |
| 24                             | +                | +        | -       | +                         | -                                         | -                    | +                    | -                    |
| 25                             | +                | +        | +       | +                         | -                                         | +                    | +                    | -                    |
| 27                             | -                | -        | +       | -                         | -                                         | +                    | +                    | -                    |
| 29                             | +                | +        | +       | +                         | +                                         | +                    | +                    | +                    |
| 38                             | +                | +        | +       | -                         | +                                         | +                    | +                    | +                    |
| 45                             | +                | -        | +       | +                         | -                                         | +                    | -                    | -                    |
| 48                             | +                | +        | -       | +                         | -                                         | -                    | -                    | -                    |
| 51                             | +                | +        | +       | -                         | -                                         | +                    | +                    | +                    |
| 52                             | +                | -        | -       | +                         | -                                         | -                    | -                    | -                    |
| 56                             | +                | +        | -       | -                         | -                                         | -                    | +                    | -                    |
| 66                             | +                | +        | +       | -                         | -                                         | +                    | +                    | -                    |
| 72                             | +                | -        | +       | -                         | -                                         | +                    | +                    | -                    |
| 77                             | +                | +        | -       | -                         | +                                         | +                    | +                    | +                    |
| 91                             | +                | +        | +       | +                         | -                                         | +                    | -                    | -                    |
| 98                             | +                | -        | -       | -                         | +                                         | -                    | +                    | -                    |
| 101                            | +                | +        | -       | -                         | -                                         | -                    | +                    | -                    |
| 108                            | +                | +        | +       | -                         | -                                         | +                    | +                    | -                    |
| 131                            | +                | +        | +       | +                         | -                                         | +                    | +                    | +                    |
| 132                            | +                | +        | +       | +                         | -                                         | +                    | +                    | +                    |
| 141                            | +                | +        | +       | -                         | -                                         | +                    | +                    | +                    |
| 169                            | +                | -        | -       | -                         | -                                         | -                    | +                    | -                    |
| 182                            | -                | +        | +       | +                         | -                                         | +                    | +                    | -                    |
| 185                            | -                | +        | -       | -                         | -                                         | -                    | -                    | -                    |
| 189                            | -                | +        | -       | -                         | -                                         | -                    | +                    | -                    |
| 190                            | +                | -        | +       | +                         | -                                         | +                    | +                    | +                    |
| 191                            | +                | +        | +       | -                         | -                                         | +                    | +                    | -                    |
| 275                            | +                | -        | -       | +                         | -                                         | +                    | +                    | -                    |
| 293                            | +                | +        | +       | +                         | -                                         | +                    | +                    | +                    |
| 308                            | +                | +        | +       | -                         | -                                         | +                    | +                    | +                    |
| 310                            | +                | +        | +       | -                         | -                                         | +                    | -                    | -                    |
| 312                            | +                | +        | -       | +                         | -                                         | -                    | -                    | +                    |
| 314                            | -                | +        | -       | +                         | -                                         | -                    | +                    | -                    |
| 315                            | +                | +        | -       | +                         | -                                         | -                    | +                    | +                    |
| 322                            | -                | -        | -       | -                         | -                                         | +                    | -                    | -                    |
| 324                            | -                | +        | -       | -                         | -                                         | +                    | -                    | -                    |
|    |   |   |   |   |   |   |   |
|----|---|---|---|---|---|---|---|
| 333 | - | - | + | + | - | + | + |
| 344 | + | - | + | - | - | + | - |
| 345 | - | - | - | - | - | - | - |
| 351 | + | - | + | + | - | + | + |
| 364 | - | - | + | - | - | + | - |
| 366 | - | - | + | - | - | + | - |
| 373 | - | + | - | + | - | - | + |
| 395 | - | + | - | - | + | - | - |
| 397 | + | + | - | + | - | + | - |
| 398 | - | + | + | - | - | + | - |
| 403 | - | - | - | - | - | - | + |
| 410 | + | - | - | + | - | - | + |
| 429 | + | - | - | + | - | + | - |
| 433 | - | - | - | - | - | - | + |
| 436 | + | - | - | - | - | - | + |
| 443 | - | - | - | - | - | + | - |
| 447 | + | - | - | - | - | - | + |
| 450 | + | - | - | - | - | - | + |
| 455 | - | - | - | + | - | + | - |
| 458 | + | - | - | + | + | + | - |
| 464 | - | + | - | - | - | + | - |
| 481 | - | - | - | - | + | - | - |
| 486 | - | - | - | - | - | + | - |
| 492 | + | - | - | - | + | - | - |
| 496 | - | - | - | - | - | - | - |
| 509 | - | - | + | + | - | - | - |
| 522 | + | + | + | - | + | + | - |
| 531 | + | - | + | - | - | + | - |
| 545 | + | - | - | + | + | + | - |
| 551 | - | + | + | - | - | - | - |
| 581 | + | + | - | - | + | + | - |
| 585 | + | - | + | - | + | + | - |
| 590 | + | + | - | - | - | - | + |
| 591 | - | - | - | - | - | + | - |
| 595 | - | + | + | - | + | - | - |
| 671 | + | + | + | - | + | + | - |
| 679 | + | - | + | + | + | - | - |
| 690 | + | - | - | - | - | + | - |
| 694 | - | - | - | - | - | + | - |
| 696 | + | + | + | - | - | - | - |
| 700 | + | + | - | + | - | - | + |
| 710 | + | + | - | - | + | - | + |
| 723 | + | - | - | - | + | - | - |
| 730 | + | + | - | + | + | - | + |
| 733 | + | - | + | + | + | - | + |
| 736 | - | + | - | - | - | + | - |
| 737 | + | - | + | - | - | + | - |
| 754 | - | - | - | + | + | - | + |
|    | 776 | 779 | 796 | 798 | 814 |
|----|-----|-----|-----|-----|-----|
|    | -   | +   | -   | -   | -   |
| 779| +   | -   | -   | -   | -   |
| 796| +   | -   | -   | -   | +   |
| 798| +   | +   | -   | -   | -   |
| 814| +   | +   | +   | +   | +   |

+ = Presence of the colonial bentgrass allele for a given candidate gene marker; - = absence of the colonial bentgrass allele for a given candidate gene marker.