

Table 3 QTL for yield and yield-related traits detected in the BC₃F₁ and BC₃F₃ populations

| QTL | Chr. | Marker Interval | BC ₃ F ₁ families in Guangzhou 2007 | | | BC ₃ F ₃ families in Guangzhou 2008 | | |
|-----------------------------|-----------|-----------------|---|-----------------|--------------------|---|-----------------|--------------------|
| | | | LOD score | Additive effect | R ² (%) | LOD score | Additive effect | R ² (%) |
| Spikelet number per panicle | | | | | | | | |
| <i>qSN-2-1</i> | 2 | RM110-RM211 | 2.63 | 22.93 | 6.11 | | | |
| <i>qSN-4-1</i> | 4 | RM518-RM1223 | | | | 3.08 | 20.05 | 18.17 |
| <i>qSN-6-1</i> | 6 | RM1161-RM3 | 2.23 | -17.49 | 3.74 | | | |
| <i>qSN-7-1</i> | 7 | RM82-RM1134 | 2.58 | -17.40 | 5.60 | 3.04 | -11.86 | 17.76 |
| <i>qSN-10-1</i> | 10 | RM467-RM5629 | | | | 3.59 | 33.10 | 31.01 |
| <i>qSN-11-1</i> | 11 | RM332-RM3701 | | | | 2.98 | 21.79 | 25.21 |
| Grain number per panicle | | | | | | | | |
| <i>qGN-2-1</i> | 2 | RM110-RM211 | 3.10 | 22.72 | 8.36 | | | |
| <i>qGN-10-1</i> | 10 | RM7492-RM222 | 2.73 | -20.53 | 6.07 | | | |
| <i>qGN-10-2</i> | 10 | RM222-RM4915 | 3.14 | -22.59 | 9.94 | 3.61 | -37.13 | 11.25 |
| <i>qGN-11-1</i> | 11 | RM332-RM3701 | | | | 2.56 | 18.77 | 21.51 |
| <i>qGN-11-2</i> | 11 | RM287-RM209 | | | | 2.40 | 18.81 | 8.14 |
| 1000-grain weight | | | | | | | | |
| <i>qGWt-3-1</i> | 3 | RM175-RM517 | 3.42 | 2.43 | 15.10 | | | |
| <i>qGWt-4-1</i> | 4 | RM401-RM518 | 4.50 | 1.36 | 10.7 | 2.68 | 0.58 | 6.33 |
| <i>qGWt-4-2</i> | 4 | RM1223-RM2441 | | | | 2.62 | 0.30 | 4.74 |
| <i>qGWt-5-1</i> | 5 | RM509-RM440 | 11.73 | 2.49 | 28.67 | | | |
| <i>qGWt-5-2</i> | 5 | RM440-RM534 | 10.06 | 2.08 | 26.29 | | | |
| <i>qGWt-6-1</i> | 6 | RM5814-RM1031 | 2.20 | -0.72 | 3.96 | | | |
| <i>qGWt-6-2</i> | 6 | RM1031-RM494 | 2.37 | -0.78 | 3.77 | | | |
| <i>qGWt-11-1</i> | 11 | RM332-RM3701 | 8.27 | 5.56 | 24.28 | | | |
| <i>qGWt-11-2</i> | 11 | RM287-RM209 | 3.31 | 1.22 | 8.56 | 3.24 | 15.1 | 15.18 |
| <i>qGWt-11-3</i> | 11 | RM229-RM254 | 3.84 | 1.46 | 12.90 | | | |
| Spikelet density | | | | | | | | |
| <i>qSD-4-1</i> | 4 | RM518-RM1223 | | | | 6.50 | 0.98 | 22.23 |
| <i>qSD-5-1</i> | 5 | RM289-RM509 | 2.04 | -0.74 | 4.25 | | | |
| <i>qSD-6-1</i> | 6 | RM510-RM253 | 2.30 | 0.64 | 3.87 | 4.35 | 0.80 | 19.82 |
| <i>qSD-10-1</i> | 10 | RM467-RM5629 | | | | 3.30 | 0.56 | 22.39 |