|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Supplementary Table 2: Summary of significantly associated QTLs and SNPs with Tiller angle detected by GWA mapping** | | | | | | |
| Chromosome | GWAS-QTL | SNP | *P*.value | -LOG10(*P*) | Gene with signal in promoter | Gene with signal in CDS region |
| 1 | *qTA1-1* | 21,952,887 | 5.14394E-05 | 4.288704 |  | LOC\_Os01g39050 |
| 21,954,204 | 7.52328E-05 | 4.123593 |  | LOC\_Os01g39050 |
| 22,061,079 | 8.56099E-05 | 4.067476 |  |  |
| 22,114,322 | 7.99476E-05 | 4.097194 |  |  |
| 22,126,817 | 5.99891E-05 | 4.221928 |  | LOC\_Os01g39310 |
| 22,127,773 | 2.69027E-05 | 4.570204 |  | LOC\_Os01g39310 |
| 22,182,701 | 5.13861E-05 | 4.289154 |  |  |
| 22,268,141 | 7.7687E-05 | 4.109652 | LOC\_Os01g39510 |  |
| 22,282,165 | 4.95864E-05 | 4.304637 |  |  |
| 22,285,282 | 6.36682E-05 | 4.196077 |  |  |
| 22,308,055 | 8.48164E-05 | 4.07152 |  |  |
| 22,309,307 | 4.44703E-05 | 4.35193 |  |  |
| 22,312,205 | 6.24076E-05 | 4.204762 |  |  |
| 22,378,797 | 8.46999E-05 | 4.072117 | LOC\_Os01g39680 |  |
| 22,379,048 | 5.09188E-06 | 5.293122 | LOC\_Os01g39680 |  |
| 22,383,767 | 2.73069E-05 | 4.563728 | LOC\_Os01g39690 |  |
| 22,384,003 | 3.87903E-05 | 4.411277 | LOC\_Os01g39690 |  |
| 22,436,318 | 7.07092E-05 | 4.150524 |  |  |
| *qTA1-2* | 24,781,381 | 6.60243E-05 | 4.180296 |  |  |
| 24,786,440 | 7.33695E-05 | 4.134484 |  | LOC\_Os01g43350 |
| 24,788,280 | 5.57183E-05 | 4.254002 | LOC\_Os01g43350 |  |
| 24,788,684 | 4.13913E-05 | 4.383091 | LOC\_Os01g43350 |  |
| 24,789,800 | 8.73945E-05 | 4.058516 | LOC\_Os01g43350 |  |
| 24,803,653 | 6.63585E-05 | 4.178103 |  |  |
| 24,803,665 | 5.76999E-05 | 4.238825 |  |  |
| 24,803,678 | 6.5039E-05 | 4.186826 |  |  |
| 24,803,684 | 9.31225E-05 | 4.030945 |  |  |
| 24,806,391 | 9.94265E-05 | 4.002498 |  |  |
| 24,806,709 | 3.29874E-05 | 4.481652 | LOC\_Os01g43370 |  |
| 24,809,669 | 9.8453E-05 | 4.006771 | LOC\_Os01g43370 |  |
| 24,813,140 | 5.36014E-05 | 4.270824 |  | LOC\_Os01g43370 |
| 24,813,375 | 7.72473E-05 | 4.112117 |  | LOC\_Os01g43370 |
| 24,813,664 | 8.03887E-05 | 4.094805 |  | LOC\_Os01g43380 |
| 24,820,796 | 3.80418E-05 | 4.419739 |  |  |
| 24,827,150 | 6.83288E-05 | 4.165396 |  |  |
| 24,861,471 | 7.61079E-05 | 4.118571 |  |  |
| 24,870,572 | 7.70592E-05 | 4.113175 |  |  |
| 24,876,033 | 1.04966E-05 | 4.978953 |  |  |
| 24,876,080 | 3.28845E-06 | 5.483009 |  |  |
| 24,876,092 | 7.37201E-05 | 4.132414 |  |  |
| 24,876,096 | 9.46041E-05 | 4.02409 |  |  |
| 24,876,123 | 1.62023E-05 | 4.790423 |  |  |
| 24,876,136 | 7.91598E-06 | 5.101495 |  |  |
| 24,877,594 | 5.23271E-05 | 4.281273 |  |  |
| 24,878,096 | 4.26534E-05 | 4.370046 |  |  |
| 24,879,589 | 2.69197E-05 | 4.569929 |  |  |
| 24,880,918 | 2.51526E-06 | 5.599417 |  |  |
| 24,886,838 | 1.97231E-05 | 4.705025 |  |  |
| 24,887,286 | 1.65313E-06 | 5.781692 |  |  |
| 24,888,040 | 3.38657E-05 | 4.47024 |  |  |
| 24,888,307 | 7.96685E-06 | 5.098713 |  |  |
| 24,888,314 | 1.83377E-05 | 4.736656 |  |  |
| 24,889,195 | 6.81678E-06 | 5.166421 |  |  |
| 24,896,475 | 9.16951E-05 | 4.037654 |  |  |
| 24,900,605 | 6.07654E-05 | 4.216344 |  |  |
| 24,910,458 | 1.88972E-05 | 4.723603 |  |  |
| 24,973,834 | 2.03819E-06 | 5.690755 |  |  |
| 25,029,148 | 1.73023E-05 | 4.761895 |  |  |
| 2 | *qTA2-1* | 829,685 | 3.60288E-05 | 4.44335 |  |  |
| 865,426 | 9.81864E-05 | 4.007949 |  |  |
| 869,792 | 8.58734E-05 | 4.066141 | LOC\_Os02g02470 |  |
| 870,392 | 4.90013E-05 | 4.309792 | LOC\_Os02g02470 |  |
| *qTA2-2* | 8,686,587 | 3.33E-05 | 4.47786 |  |  |
| 8,699,730 | 8.39E-05 | 4.076416 | LOC\_Os02g15510 |  |
| 8,706,015 | 2.21E-05 | 4.655152 |  |  |
| 8,709,000 | 6.49E-05 | 4.187526 | LOC\_Os02g15530 |  |
| 8,709,080 | 1.49E-05 | 4.827627 | LOC\_Os02g15530 |  |
| 8,709,101 | 1.70E-05 | 4.76957 | LOC\_Os02g15530 |  |
| 8,709,646 | 1.00E-05 | 4.997968 |  |  |
| *qTA2-3* | 16,631,825 |  | 4.564341 |  |  |
| 16,631,827 |  | 4.124104 |  |  |
| 16,766,562 |  | 4.21267 |  |  |
| *qTA2-4* | 17,094,194 | 0.0000139 | 4.856985 |  |  |
| 18,029,920 | 0.0000311 | 4.50724 |  |  |
| 18,029,927 | 0.0000825 | 4.083546 |  |  |
| 18,056,292 | 0.00000547 | 5.262013 |  |  |
| 18,056,343 | 0.0000222 | 4.653647 |  |  |
| *qTA2-5* | 18,702,054 |  | 4.178601 |  |  |
| 18,713,584 |  | 4.048377 |  |  |
| 18,715,375 |  | 4.194069 |  |  |
| 18,715,498 |  | 4.467098 |  |  |
| 18,717,183 |  | 4.04988 |  | LOC\_Os02g31230 |
| 18,717,275 |  | 4.032642 |  | LOC\_Os02g31230 |
| 18,717,777 |  | 4.187227 | LOC\_Os02g31230 |  |
| 18,756,578 |  | 4.101695 |  |  |
| 18,785,862 |  | 4.33845 | LOC\_Os02g31310 |  |
| 18,789,028 |  | 5.610496 | LOC\_Os02g31320 |  |
| *qTA2-6* | 29,221,199 | 5.11E-05 | 4.291542 |  |  |
| 29,229,194 | 7.46E-05 | 4.127052 | LOC\_Os02g47790 |  |
| 29,266,391 | 5.88E-05 | 4.230625 | LOC\_Os02g47840 |  |
| 29,293,710 | 4.11E-05 | 4.386543 | LOC\_Os02g47890 |  |
| 29,311,370 | 3.84E-05 | 4.415632 |  |  |
| 29,311,375 | 4.53E-05 | 4.343425 |  |  |
| 29,314,857 | 4.60E-05 | 4.337496 |  |  |
| 29,318,559 | 9.60E-05 | 4.017938 | LOC\_Os02g47920 |  |
| 29,407,400 | 8.39E-05 | 4.076396 | LOC\_Os02g48040 |  |
| 3 | *qTA3-1* | 25,263,068 | 0.0000494 | 4.306273 | LOC\_Os03g44800 |  |
| 25,269,508 | 0.0000603 | 4.219683 |  |  |
| 25,273,455 | 0.0000286 | 4.543634 | LOC\_Os03g44810 |  |
| 25,322,801 | 0.0000993 | 4.003051 |  |  |
| 25,384,773 | 0.0000508 | 4.294136 |  |  |
| 25,384,919 | 0.0000339 | 4.4698 |  |  |
| 25,422,986 | 0.00000536 | 5.270835 |  | LOC\_Os03g45040 |
| 25,423,816 | 0.0000678 | 4.16877 |  | LOC\_Os03g45040 |
| *qTA3-2* | 26,263,239 | 0.0000908 | 4.041914 |  |  |
| 26,264,160 | 0.0000852 | 4.06956 |  | LOC\_Os03g46440 |
| 26,277,587 | 0.000059 | 4.229148 | LOC\_Os03g46450 |  |
| 26,277,666 | 0.0000335 | 4.474955 | LOC\_Os03g46450 |  |
| 26,280,051 | 0.0000821 | 4.085657 |  |  |
| 26,287,530 | 0.0000937 | 4.02826 |  |  |
| 26,313,715 | 0.000033 | 4.481486 | LOC\_Os03g46500 |  |
| *qTA3-3* | 33,198,645 | 9.18763E-05 | 4.036797 | LOC\_Os03g58260 |  |
| 33,199,574 | 4.32676E-05 | 4.363837 | LOC\_Os03g58260 |  |
| 33,199,696 | 9.21944E-05 | 4.035296 |  | LOC\_Os03g58260 |
| *qTA3-4* | 35,856,297 | 8.38E-05 | 4.076848 |  |  |
| 35,858,744 | 6.55E-05 | 4.183431 |  |  |
| 35,861,067 | 8.26E-05 | 4.083056 | LOC\_Os03g63470 |  |
| 35,863,137 | 2.83E-05 | 4.547513 |  |  |
| 35,869,430 | 8.99E-05 | 4.046226 |  |  |
| 35,918,334 | 8.60E-05 | 4.065553 |  |  |
| 4 | *qTA4-1* | 654,721 | 3.21401E-05 | 4.492953 |  |  |
| 656,591 | 9.80928E-05 | 4.008363 | LOC\_Os04g02060 |  |
| 723,871 | 1.22289E-05 | 4.912613 | LOC\_Os04g02060 |  |
| 724,006 | 3.38723E-05 | 4.470155 | LOC\_Os04g02160 |  |
| *qTA4-2* | 896,483 | 9.99586E-05 | 4.00018 | LOC\_Os04g02460 |  |
| 913,650 | 7.09547E-05 | 4.149019 | LOC\_Os04g02510 |  |
| 921,112 | 0.0000558 | 4.253366 |  |  |
| 957,065 | 0.0000404 | 4.393619 |  |  |
| 957,066 | 8.76115E-05 | 4.057439 |  |  |
| 957,174 | 0.0000901 | 4.045275 |  |  |
| 972,323 | 5.93259E-05 | 4.226755 | LOC\_Os04g02590 |  |
| 972,402 | 5.74686E-05 | 4.24057 | LOC\_Os04g02590 |  |
| *qTA4-3* | 1886204 | 8.60804E-05 | 4.065096 |  |  |
| 1887871 | 5.3157E-05 | 4.27444 |  |  |
| 1902732 | 3.79242E-05 | 4.421083 |  |  |
| 1979550 | 7.90153E-05 | 4.102289 |  |  |
| 5 | *qTA5-1* | 17,795,916 | 9.72E-06 | 5.01225 | LOC\_Os05g30730 |  |
| 17,795,918 | 1.58E-05 | 4.802602 | LOC\_Os05g30730 |  |
| 17,874,942 | 8.75E-05 | 4.058225 |  |  |
| 17,958,179 | 4.29E-05 | 4.367148 |  |  |
| 17,958,702 | 9.18E-05 | 4.037169 |  |  |
| 17,990,662 | 9.44E-05 | 4.025067 |  |  |
| 17,990,663 | 9.44E-05 | 4.025067 |  |  |
| 17,991,367 | 4.18E-05 | 4.379134 |  |  |
| 17,991,379 | 4.18E-05 | 4.379134 |  |  |
| 18,061,792 | 9.82E-05 | 4.007872 |  | LOC\_Os05g31070 |
| *qTA5-2* | 18,485,378 | 6.24E-05 | 4.205094 | LOC\_Os05g31740 |  |
| 18,560,589 | 9.53E-05 | 4.020734 |  |  |
| 18,567,409 | 9.48E-05 | 4.022996 | LOC\_Os05g31890 |  |
| 18,607,726 | 7.84E-05 | 4.105748 | LOC\_Os05g31940 |  |
| 18,609,139 | 5.82E-05 | 4.235066 |  |  |
| 18,611,109 | 7.10E-05 | 4.148501 | LOC\_Os05g31950 |  |
| 18,615,457 | 6.21E-05 | 4.207073 |  |  |
| 18,618,689 | 6.41E-05 | 4.193107 |  |  |
| 18,637,524 | 5.88E-05 | 4.230644 |  |  |
| 18,638,179 | 5.43E-05 | 4.265447 |  |  |
| 18,638,185 | 7.99E-05 | 4.097485 |  |  |
| 18,647,394 | 5.45E-05 | 4.263445 |  |  |
| 18,650,208 | 7.26E-05 | 4.138985 |  | LOC\_Os05g31990 |
| 18,656,208 | 6.89E-05 | 4.161607 |  | LOC\_Os05g32010 |
| 18,660,477 | 7.81E-05 | 4.107626 |  |  |
| 18,660,482 | 2.75E-05 | 4.56048 |  |  |
| 18,668,045 | 1.85E-05 | 4.732122 | LOC\_Os05g32040 |  |
| 18,674,793 | 8.61E-05 | 4.064982 |  | LOC\_Os05g32050 |
| 18,676,549 | 7.19E-05 | 4.143183 |  | LOC\_Os05g32050 |
| 18,684,943 | 6.84E-05 | 4.165012 |  | LOC\_Os05g32060 |
| 18,687,465 | 6.05E-05 | 4.218493 |  |  |
| 18,689,016 | 4.08E-05 | 4.389392 |  |  |
| 18,702,963 | 8.40E-05 | 4.075976 |  |  |
| 18,709,357 | 6.37E-05 | 4.196093 |  |  |
| *qTA5-3* | 19,108,377 | 3.73E-05 | 4.427865 |  |  |
| 19,108,380 | 6.28E-05 | 4.201774 |  |  |
| 19,210,385 | 9.27E-05 | 4.032745 | LOC\_Os05g32790 |  |
| 6 | *qTA6* | 26,086,626 | 5.39E-05 | 4.268657 |  | LOC\_Os06g43384 |
| 26,086,998 | 8.42E-05 | 4.074845 |  | LOC\_Os06g43384 |
| 26,087,025 | 4.48E-05 | 4.348938 |  | LOC\_Os06g43384 |
| 26,090,822 | 7.35E-05 | 4.133561 | LOC\_Os06g43410 |  |
| 26,092,647 | 7.14E-05 | 4.146017 |  | LOC\_Os06g43410 |
| 26,092,691 | 4.67E-05 | 4.330312 |  | LOC\_Os06g43410 |
| 26,092,692 | 3.02E-05 | 4.520514 |  | LOC\_Os06g43410 |
| 26,092,695 | 4.13E-05 | 4.384292 |  | LOC\_Os06g43410 |
| 26,127,844 | 5.52E-05 | 4.25802 |  |  |
| 8 | *qTA8-1* | 20,689,044 | 3.30E-05 | 4.480957 |  |  |
| 20,689,379 | 4.63E-05 | 4.33466 |  |  |
| 20,689,480 | 4.91E-05 | 4.30872 |  |  |
| 20,689,817 | 1.87E-05 | 4.727036 |  |  |
| 20,690,040 | 1.64E-05 | 4.784209 |  |  |
| 20,696,741 | 7.66E-05 | 4.115894 |  |  |
| *qTA8-2* | 20,802,316 | 1.15058E-06 | 5.939083 |  |  |
| 20,802,333 | 5.33851E-05 | 4.27258 |  |  |
| 20,806,567 | 5.90383E-06 | 5.228866 | LOC\_Os08g33350 |  |
| 20,942,923 | 8.33656E-05 | 4.079013 |  |  |
| 20,995,468 | 5.28866E-05 | 4.276654 | LOC\_Os08g33620 |  |
| *qTA8-3* | 28,326,448 | 7.74E-05 | 4.111106 | LOC\_Os08g45120 |  |
| 28,326,881 | 1.00E-04 | 4.000071 | LOC\_Os08g45120 |  |
| 28,327,637 | 4.20E-05 | 4.37721 |  | LOC\_Os08g45120 |
| 28,438,469 | 9.78E-05 | 4.009601 |  |  |
| 9 | *qTA9-1* | 1,070,773 | 7.26E-05 | 4.139351 |  |  |
| 1,099,460 | 7.95E-05 | 4.099795 |  |  |
| 1,193,941 | 7.09E-05 | 4.149133 |  |  |
| *qTA9-2* | 1,313,684 | 8.12E-05 | 4.090419 |  |  |
| 1,375,953 | 5.18E-05 | 4.2855 |  |  |
| 1,399,262 | 7.34E-05 | 4.134554 |  |  |
| 1,399,263 | 9.31E-05 | 4.030869 |  |  |
| 1,437,256 | 4.17E-05 | 4.37937 |  |  |
| 1,478,117 | 8.95E-05 | 4.048271 |  | LOC\_Os09g03100 |
| 1,486,009 | 6.33E-05 | 4.198934 |  |  |
| 1,495,271 | 5.39E-05 | 4.268206 | LOC\_Os09g03130 |  |
| 1,506,412 | 6.43E-05 | 4.191905 | LOC\_Os09g03140 |  |
| 1,563,441 | 9.97E-05 | 4.001471 |  |  |
| 1,703,261 | 8.29E-05 | 4.081417 | LOC\_Os09g03460 |  |
| 1,739,357 | 8.31E-05 | 4.080464 | LOC\_Os09g03540 |  |
| 1,841,204 | 5.26E-05 | 4.279268 |  |  |
| 1,853,710 | 5.89E-05 | 4.229612 |  |  |
| 1,899,656 | 9.93E-05 | 4.003136 |  |  |
| 1,978,884 | 6.48E-05 | 4.188193 |  | LOC\_Os09g03870 |
| 2,070,634 | 3.16E-05 | 4.499927 |  | LOC\_Os09g04030 |
| 2,146,097 | 4.99E-05 | 4.302284 |  | LOC\_Os09g04130 |
| 2,178,490 | 8.39E-05 | 4.076171 |  |  |
| 2,207,902 | 7.28E-05 | 4.138045 |  | LOC\_Os09g04200 |
| *qTA9-3* | 2,407,587 | 3.66E-05 | 4.436895 |  |  |
| 2,483,524 | 5.73E-05 | 4.241873 |  |  |
| 2,516,331 | 1.58E-05 | 4.800788 |  |  |
| 2,533,331 | 9.19E-05 | 4.036611 | LOC\_Os09g04750 |  |
| *qTA9-4* | 2,936,852 | 5.67E-05 | 4.246734 | LOC\_Os09g06250 |  |
| 2,980,680 | 3.16E-05 | 4.500194 |  |  |
| 2,981,789 | 8.93E-05 | 4.049248 |  |  |
| 2,981,984 | 5.87E-05 | 4.231351 |  |  |
| 3,030,973 | 8.65E-05 | 4.062734 | LOC\_Os09g06430 |  |
| 3,180,164 | 7.44E-05 | 4.128663 | LOC\_Os09g06690 |  |
| *qTA9-5* | 3,383,859 | 8.09E-05 | 4.092062 |  |  |
| 3,383,978 | 2.87E-05 | 4.541425 |  |  |
| 3,486,825 | 8.66E-05 | 4.062233 |  |  |
| *qTA9-6* | 20,721,611 | 0.0000508 | 4.294136 | LOC\_Os09g35960 |  |
| 20,721,612 | 0.0000521 | 4.283162 | LOC\_Os09g35960 |  |
| 20,730,139 | 0.000026 | 4.585027 |  |  |
| 20,730,563 | 0.0000622 | 4.20621 |  |  |
| 20,730,620 | 0.0000958 | 4.018634 |  |  |
| 20,730,647 | 0.0000727 | 4.138466 |  |  |
| 20,730,665 | 0.0000495 | 4.305395 |  |  |
| 20,730,719 | 0.0000739 | 4.131356 |  |  |
| 20,732,073 | 0.0000894 | 4.048662 |  | LOC\_Os09g35980 |
| 20,733,643 | 0.000096 | 4.017729 |  | LOC\_Os09g35980 |
| 20,734,345 | 0.0000982 | 4.007889 |  | LOC\_Os09g35980 |
| 20,734,901 | 0.0000958 | 4.018634 | LOC\_Os09g35980 |  |
| 20,735,698 | 0.0000972 | 4.012334 | LOC\_Os09g35980 |  |
| 20,737,825 | 0.0000886 | 4.052566 |  | LOC\_Os09g35990 |
| 20,739,041 | 0.0000594 | 4.226214 |  |  |
| 20,739,050 | 0.0000157 | 4.8041 |  |  |
| 20,749,695 | 0.0000266 | 4.575118 | LOC\_Os09g36030, LOC\_Os09g36040 |  |
| 20,749,778 | 0.0000221 | 4.655608 | LOC\_Os09g36030, LOC\_Os09g36040 |  |
| 20,749,797 | 0.0000266 | 4.575118 | LOC\_Os09g36030, LOC\_Os09g36040 |  |
| 10 | *qTA10-1* | 14,191,834 | 4.08443E-05 | 4.388868 | LOC\_Os10g26950 |  |
| 14,253,982 | 4.28946E-05 | 4.367597 | LOC\_Os10g27040 |  |
| 14,330,396 | 9.94705E-06 | 5.002306 | LOC\_Os10g27190 |  |
| 14,330,471 | 9.81641E-05 | 4.008047 | LOC\_Os10g27190 |  |
| 14,400,913 | 5.34704E-05 | 4.271887 | LOC\_Os10g27280 |  |
| 14,401,393 | 8.0783E-05 | 4.09268 | LOC\_Os10g27280 |  |
| 14,401,462 | 4.39681E-05 | 4.356862 | LOC\_Os10g27280 |  |
| 14,414,010 | 5.00658E-06 | 5.300459 |  |  |
| 14,453,192 | 1.84694E-05 | 4.733546 |  |  |
| 14,485,097 | 7.82534E-05 | 4.106497 |  |  |
| 14,525,470 | 6.03785E-05 | 4.219118 |  |  |
| 14,596,751 | 9.2975E-05 | 4.031634 | LOC\_Os10g28094 |  |
| 14,732,773 | 5.78244E-05 | 4.237889 |  |  |
| 14,733,631 | 1.26924E-05 | 4.896456 |  | LOC\_Os10g28320 |
| *qTA10-2* | 20,268,702 | 9.71E-05 | 4.012857 |  |  |
| 20,273,073 | 9.58E-05 | 4.018635 | LOC\_Os10g37860 |  |
| 20,295,300 | 8.07E-05 | 4.093008 |  | LOC\_Os10g37899 |
| *qTA10-3* | 22,774,612 | 4.12E-05 | 4.38529 |  |  |
| 22,776,834 | 3.60E-05 | 4.443572 |  |  |
| 22,781,454 | 3.53E-05 | 4.452003 | LOC\_Os10g42299 |  |
| 22,785,165 | 8.41E-05 | 4.075018 | LOC\_Os10g42320 |  |
| 22,785,823 | 7.38E-05 | 4.132031 | LOC\_Os10g42320 |  |
| 22,786,093 | 8.55E-05 | 4.068153 | LOC\_Os10g42320 |  |
| 22,786,144 | 9.98E-05 | 4.000662 | LOC\_Os10g42320 |  |
| 22,786,938 | 9.91E-05 | 4.003981 |  |  |
| 22,794,987 | 8.80E-05 | 4.055388 | LOC\_Os10g42340 |  |
| 22,799,648 | 2.03E-05 | 4.692888 |  |  |
| 22,823,192 | 9.88E-05 | 4.005154 |  |  |
| 22,824,972 | 2.59E-05 | 4.585972 | LOC\_Os10g42400 |  |
| 22,825,752 | 3.65E-05 | 4.437736 | LOC\_Os10g42400 |  |
| 22,830,879 | 8.90E-05 | 4.050566 |  | LOC\_Os10g42410 |
| 22,836,250 | 7.21E-05 | 4.141795 |  |  |
| 11 | *qTA11-1* | 4,826,905 | 2.01312E-05 | 4.696131 |  |  |
| 4,827,616 | 9.38933E-05 | 4.027366 |  |  |
| 4,827,661 | 8.18956E-05 | 4.086739 |  |  |
| 4,829,384 | 2.59659E-05 | 4.585597 |  |  |
| 4,829,616 | 9.15287E-05 | 4.038443 |  |  |
| *qTA11-2* | 13,090,765 | 4.96E-05 | 4.304533 |  |  |
| 13,126,022 | 9.99E-05 | 4.000426 |  |  |
| 13,171,938 | 9.46E-05 | 4.024207 |  |  |
| 12 | *qTA12-1* | 3,258,584 | 9.48E-05 | 4.023406 |  | LOC\_Os12g06690 |
| 3,261,158 | 7.41E-05 | 4.129986 | LOC\_Os12g06700 |  |
| 3,262,149 | 6.13E-05 | 4.212823 |  | LOC\_Os12g06700 |
| 3,264,498 | 5.67E-05 | 4.246054 |  |  |
| 3,279,089 | 2.60E-05 | 4.585799 | LOC\_Os12g06740 |  |
| 3,303,833 | 7.76E-05 | 4.110097 | LOC\_Os12g06800 |  |
| 3,329,842 | 2.18E-05 | 4.661201 | LOC\_Os12g06850 |  |
| 3,377,738 | 9.06E-05 | 4.042769 |  |  |
| 3,377,739 | 8.63E-05 | 4.06382 |  |  |
| 3,386,449 | 4.25E-05 | 4.371644 | LOC\_Os12g06930 |  |
| 3,392,736 | 8.89E-05 | 4.051232 | LOC\_Os12g06940 |  |
| 3,410,215 | 9.19E-05 | 4.036716 |  |  |
| 3,415,969 | 2.26E-05 | 4.646588 |  |  |
| 3,415,976 | 7.63E-05 | 4.11767 |  |  |
| 3,416,930 | 6.27E-05 | 4.202514 |  |  |
| 3,449,092 | 7.64E-05 | 4.116836 |  |  |
| 3,454,364 | 8.96E-05 | 4.047517 | LOC\_Os12g07050 |  |
| 3,474,983 | 9.43E-05 | 4.025322 |  |  |
| 3,476,764 | 8.33E-05 | 4.079105 |  |  |
| 3,477,713 | 7.66E-05 | 4.115689 |  |  |
| 3,509,703 | 9.97E-05 | 4.001303 | LOC\_Os12g07150 |  |
| 3,522,558 | 9.09E-05 | 4.041254 | LOC\_Os12g07170 |  |
| 3,529,032 | 8.50E-05 | 4.070568 | LOC\_Os12g07180 |  |
| 3,539,326 | 9.77E-05 | 4.009889 |  |  |
| *qTA12-2* | 9,262,194 | 5.99E-05 | 4.222482 |  |  |
| 9,333,394 | 8.74E-05 | 4.058707 |  |  |
| 9,337,250 | 9.30E-05 | 4.031691 |  |  |
| *qTA12-3* | 9,606,800 | 1.91E-05 | 4.718121 |  |  |
| 9,736,891 | 2.35E-05 | 4.628838 | LOC\_Os12g17020 |  |
| 9,755,631 | 8.55E-05 | 4.06825 |  | LOC\_Os12g17050 |
| *qTA12-4* | 21,851,124 | 7.48169E-05 | 4.126 | LOC\_Os12g35860 |  |
| 21,901,194 | 0.0000382 | 4.417937 |  |  |
| 21,901,701 | 0.0000883 | 4.054039 |  |  |
| 21,902,019 | 0.0000778 | 4.10902 |  |  |
| 21,905,686 | 0.0000043 | 5.366532 |  |  |
| 21,905,942 | 0.0000782 | 4.106793 |  |  |
| 21,906,404 | 0.0000818 | 4.087247 |  |  |
| 21,913,994 | 1.99788E-05 | 4.699431 |  |  |
| 21,919,334 | 2.89396E-05 | 4.538507 |  |  |
| 21,919,435 | 4.08337E-05 | 4.388982 |  |  |
| 21,919,965 | 6.86524E-05 | 4.163344 |  |  |
| 22,039,168 | 3.32298E-05 | 4.478472 |  |  |
| 22,039,304 | 4.09214E-05 | 4.38805 |  |  |
| 22,047,563 | 0.0000606 | 4.217527 | LOC\_Os12g36030 |  |