

Supplemental Table S1: A list of candidate genes identified in the region between wheat markers GENE-1856_1005 and Tdurum_contig57914_1144 to *Brachypodium* and rice orthologues.

Wheat reference sequence 3B [†]	Annotation	<i>Brachypodium</i>	Rice gene
TRAES_3BF171700060CFD (23,561,709-23,566,344)	Putative 66 kDa stress protein	BRADI2G01827	OS01G0125800
TRAES_3BF171700050CFD (23,572,599-23,577,153)	Ubiquitin-conjugating enzyme-like	BRADI2G01840	OS01G0125900
TRAES_3BF171700040CFD (23,580,257-23,585,325)	Cellulose synthase-like protein H1	BRADI5G10130 [§]	(OS04G0429500, OS04G0429600) [§]
TRAES_3BF171700030CFD (23,622,341-23,623,690)	Pseudogene	-	-
TRAES_3BF171700020CFD (23,812,080-23,813,477)	UDP-glucosyl transferase family protein	BRADI4G14500 [§]	OS11G0599200 [§]
TRAES_3BF171700010CFD (23,867,290-23,868,693)	Pseudogene (UDP-glucosyl transferase family protein)	-	-
TRAES_3BF169900010CFD (23,951,036-23,954,320)	Plastid transcriptionally active 16	BRADI2G30400	OS05G0291700 [§]
TRAES_3BF169900020CFD (24,030,208-24,031,629)	Mitogen-activated protein kinase kinase kinase A	BRADI2G47480	OS01G0699100
TRAES_3BF278600010CFD (24,275,004-24,275,531)	Pseudogene (NB-ARC domain)	-	-
TRAES_3BF051800010CFD (24,420,020-24,423,952)	Non-intrinsic ABC protein 6	BRADI2G01870	OS01G0127300
TRAES_3BF051800020CFD (24,430,182-24,430,970)	Cellular and retroviral pepsin-like aspartate proteases	-	-
TRAES_3BF052200060CFD (24,454,789-24,456,012)	Cellular and retroviral pepsin-like aspartate proteases	-	-
TRAES_3BF052200050CFD (24,462,937-24,463,725)	Cellular and retroviral pepsin-like aspartate proteases	-	-
TRAES_3BF052200040CFD (24,469,956-24,473,774)	Non-intrinsic ABC protein 6	BRADI2G01870	OS01G0127300
TRAES_3BF052200030CFD (24,577,584-24,580,977)	F-box domain containing protein	-	-
TRAES_3BF052200020CFD (24,599,335-24,600,853)	Pseudogene	-	-
TRAES_3BF052200010CFD (24,616,567-24,618,043)	F-box domain containing protein	-	-
TRAES_3BF168400330CFD (24,667,764-24,669,594)	Pseudogene (Patatin-like phospholipase)	-	-
TRAES_3BF168400320CFD (24,764,689-24,766,067)	Patatin-like phospholipase	(BRADI3G37990, BRADI3G38280) [§]	(OS08G0376500, OS08G0376550, OS08G0476900, OS08G0477100) [§]
TRAES_3BF168400310CFD (24,771,307-24,772,089)	Bowman-Birk type trypsin inhibitor	BRADI2G01910	OS01G0127600
TRAES_3BF168400300CFD (24,787,538-24,789,045)	F-box domain containing protein	-	-
TRAES_3BF168400290CFD (24,825,412-24,825,678)	Hypothetical protein	-	-
TRAES_3BF168400280CFD (24,859,394-24,860,334)	Bowman-Birk type trypsin inhibitor	BRADI2G01920, BRADI2G01927	OS01G0127600
TRAES_3BF168400270CFD (24,909,643-24,910,710)	Tetraketide alpha-pyrone reductase 2	BRADI2G01900	OS01G0127500
TRAES_3BF168400260CFD (24,926,408-24,927,133)	Bowman-Birk type trypsin inhibitor	BRADI2G01910 (BRADI3G37990, BRADI3G38280) [§]	OS01G0127600 (OS08G0376500, OS08G0376550, OS08G0476900, OS08G0477100) [§]
TRAES_3BF168400250CFD (24,942,563-24,944,372)	Patatin-like phospholipase	-	-
TRAES_3BF168400240CFD (24,951,956-24,952,351)	Hypothetical protein (Bowman-Birk type trypsin inhibitor)	-	-
TRAES_3BF168400230CFD (24,954,739-24,955,400)	Bowman-Birk type trypsin inhibitor	BRADI2G01920, BRADI2G01927	OS01G0127600
TRAES_3BF168400220CFD (24,977,041-24,977,489)	Bowman-Birk type trypsin inhibitor	BRADI2G01920, BRADI2G01927	OS01G0127600
TRAES_3BF168400210CFD (25,078,501-25,079,423)	Bowman-Birk type trypsin inhibitor	BRADI2G01920, BRADI2G01927	OS01G0127600
TRAES_3BF168400200CFD (25,090,011-25,090,735)	Hypothetical protein (Bowman-Birk type trypsin inhibitor)	-	-
TRAES_3BF168400190CFD (25,108,826-25,109,411)	Bowman-Birk type trypsin inhibitor	BRADI2G01920, BRADI2G01927	OS01G0127600
TRAES_3BF168400180CFD (25,185,616-25,190,338)	Pseudogene (NB-ARC domain)	-	-
TRAES_3BF168400170CFD (25,194,649-25,194,819)	Pseudogene	-	-
TRAES_3BF168400160CFD (25,194,923-25,195,348)	Bowman-Birk type trypsin inhibitor	BRADI2G01920, BRADI2G01927	OS01G0127600
TRAES_3BF168400150CFD (25,247,277-25,247,708)	Hypothetical protein (putative ripening related protein)	-	-
TRAES_3BF168400140CFD (25,256,688-25,257,825)	DnaQ-like 3'-5' exonuclease domain protein	-	-
TRAES_3BF168400130CFD (25,330,294-25,330,719)	Putative ripening related protein	-	-
TRAES_3BF168400120CFD (25,364,439-25,364,864)	Putative ripening related protein	-	-
TRAES_3BF168400110CFD (25,366,512-25,366,907)	Pseudogene	-	-
TRAES_3BF168400100CFD (25,369,939-25,370,373)	Putative ripening related protein	-	-
TRAES_3BF168400090CFD (25,408,446-25,408,874)	Putative ripening related protein	-	-

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TRAES_3BF168400080CFD (25,423,470-25,423,901)	Putative ripening related protein	-	-
TRAES_3BF168400070CFD (25,428,473-25,428,952)	Hypothetical protein (Bowman-Birk type trypsin inhibitor)	-	-
TRAES_3BF168400060CFD (25,440,121-25,441,603)	Bowman-Birk type trypsin inhibitor	BRADI2G01920, BRADI2G01927	OS01G0127600
TRAES_3BF168400050CFD (25,455,601-25,456,072)	Hypothetical protein (Bowman-Birk type trypsin inhibitor)	-	-
TRAES_3BF168400040CFD (25,479,317-25,479,801)	Putative pathogenesis related protein	BRADI2G08707 BRADI2G01920, BRADI2G01927	OS01G0248300, OS01G0248500
TRAES_3BF168400030CFD (25,495,506-25,497,509)	Bowman-Birk type trypsin inhibitor	BRADI2G01927	OS01G0127600
TRAES_3BF168400020CFD (25,500,425-25,500,871)	Hypothetical protein	-	-
TRAES_3BF168400010CFD (25,505,278-25,505,940)	Bowman-Birk type trypsin inhibitor	BRADI2G01920, BRADI2G01927	OS01G0127600
TRAES_3BF169800010CFD (25,540,516-25,541,697)	Patatin-like phospholipase	(BRADI3G37990, BRADI3G38280) [§]	(OS08G0376500, OS08G0376550, OS08G0476900, OS08G0477100) [§]
TRAES_3BF208400010CFD (25,553,895-25,554,728)	Pseudogene (Jacalin-like lectin domain)	-	-
TRAES_3BF208400020CFD (25,562,912-25,563,905)	Pseudogene (Pollen allergen)	-	-
TRAES_3BF208400030CFD (25,564,908-25,566,088)	Jacalin lectin family protein	-	-
TRAES_3BF208400040CFD (25,568,982-25,570,162)	Jacalin lectin family protein	-	-
TRAES_3BF034000060CFD (25,677,929-25,680,368)	Pseudogene (Protein kinase domain)	-	-
TRAES_3BF034000050CFD (25,722,459-25,726,726)	Pseudogene (Mannose-6-phosphate isomerase 1)	BRADI2G01950	OS01G0127900

[†]Annotated protein-coding genes present between the *Brachypodium* and rice orthologs to GENE-1856_1005 (BRADI2G01827/OS01G0125800) and Tdurum_contig57914_1144 (BRADI2G01950/OS01G0127900). Parenthesis indicates genomic regions on chromosome 3B in base pair.

[§]*Brachypodium* and rice genes identified on nonorthologous chromosomes. “-” means could not find a match.