

Supplementary Tables

Table S1: A list of T-test qualified differentially expressed root proteins actively participating in protein-protein interactions in tolerant line KH-65.

S. No.	Root Proteins	Protein code	Biological process	Common or unique proteins*	Abundance Ratio (log2): (KH-Test) / (KH-Control)	Up-or-Downregulated
Cluster I: Interaction of two proteins from one biological process						
1.	GrpE protein homolog	Traes_5BL_10BF821D1.2	Protein folding	Common protein	-1.53	↓
2.	J domain-containing protein	Traes_1AS_488596E82.1	Protein folding	Common protein	-1.44	↓
Cluster II: Interaction of three proteins from two biological process						
3.	Rab18s	Traes_2DL_110BF5A9F.1	Intra cellular protein transport	Unique protein	-0.39	↓

4.	Small GTP-binding protein	rab 2	Intra cellular protein transport	Unique protein	-0.26	↓
5.	Guanosine nucleotide diphosphate dissociation inhibitor	Traes_1AL_FA3BAA63F.1	Vesicle mediated transport	Common protein	-0.78	↓
Cluster III: Interaction of nine proteins from two biological process						
6.	Protein VACUOLELESS1	Traes_3AL_A744FA135.1	Intra cellular protein transport	Unique protein	-2.86	↓
7.	CNH domain-containing protein	Traes_4AL_96E6567CA.1	Intra cellular protein transport	Unique protein	3.45	↑
8.	GTPase SAR 1	Traes_5BS_23ED32DC9.1	Intra cellular protein transport	Common protein	0.33	↑
9.	Putative SNAP receptor protein	Traes_2DL_173667245.1	Intra cellular protein transport	Unique protein	0.59	↑

10.	t-SNARE coiled-coil homology domain- containing protein	Traes_5AS_238F990CC.2	Intra cellular protein transport	Common proteins	-1.1	↓
11.	Vacuolar protein sorting- associated protein 41 homolog	Traes_2AL_0B9E1F386.1	Vesicle mediated transport	Unique protein	6.64	↑
12.	t-SNARE coiled-coil homology domain- containing protein	Traes_5BL_588743D55.1	Vesicle mediated transport	Unique proteins	-0.95	↓
13.	Uncharacterized protein belongs to the synaptobrevin family	Traes_3B_9FEF4B33D1.2	Vesicle mediated transport	Unique proteins	-0.95	↓
14.	VAMP like putative proteins belongs to the synaptobrevin family	Traes_3B_2D7D1DD25.1	Vesicle mediated transport	Common protein	0.73	↑
Cluster IV: Interaction of ten proteins from two biological process						

15.	Coatomer subunit alpha	Traes_5AL_E153CEC65.1	Intracellular protein transport	Common protein	1.26	↑
16.	Seed protein B32E	TaSAG2	Intracellular protein transport	Unique protein	-0.93	↓
17.	Coatomer subunit gamma	Traes_1AL_23DCDDCF1.2	Intracellular protein transport	Unique protein	0.27	↑
18.	VHS domain-containing protein	Traes_3AS_026945785.2	Intracellular protein transport	Common protein	6.64	↑
19.	AP-4 complex subunit epsilon	Traes_3B_1DB17F0DF.1	Vesicle mediated transport	Unique protein	0.82	↑
20.	Coatomer subunit beta	Traes_3B_E7D10A09E.2	Vesicle mediated transport	Common protein	0.42	↑
21.	Coatomer subunit alpha	Traes_4DL_852DF544C.1	Vesicle mediated transport	Common protein	0.4	↑
22.	Clathrin heavy chain	Traes_5AL_C22CF596A.1	Vesicle mediated transport	Unique protein	6.64	↑

23.	MHD domain-containing protein	Traes_6BL_470ECDCDF.1	Vesicle mediated transport	Unique protein	1.44	↑
24.	Clathrin light chain	Traes_7BL_241070F8C.2	Vesicle mediated transport	Common protein	-1.52	↓
Cluster V: Interaction of forty one proteins from six biological processPyruvate kinase						
25.	Pyruvate kinase	Traes_5DL_FAF23C705.1	Glycolysis	Unique protein	0.3	↑
26.	Protein transport protein Sec61 subunit beta	Traes_4DS_BCEF8A384.1	Intracellular protein transport process	Common protein	-3.27	↓
27.	Catalase	CAT1	Hydrogen peroxide catabolic process	Common protein	-2.74	↓
28.	Thioredoxin M-type, chloroplastic	Traes_5BS_B72CD04F2.1	Hydrogen peroxide catabolic process	Unique protein	-3.56	↓
29.	Not3 domain-containing protein	Traes_1AL_C550E0E88.1	Transcription	Unique protein	-2.24	↓

30.	Auxin-responsive protein	Traes_5BL_EC006AD0C.1	Transcription	Unique protein	6.64	↑
31.	WD_REPEATS_REGION domain-containing protein	Traes_6AS_1A54BB177.1	Transcription	Unique protein	6.64	↑
32.	TOPLESS	TPL	Transcription	Common protein	1.73	↑
33.	Heat shock protein 90	Traes_5BL_0F3A986F9.2	Protein folding	Common protein	-0.42	↓
34.	T-complex protein 1 subunit gamma	Traes_7BL_9B64DB4A7.1	Protein folding	Unique protein	-1.17	↓
35.	Protein disulfide-isomerase	PDI2	Protein folding	Common protein	-1.7	↓
36.	HATPase_c domain- containing protein	Traes_5DS_AC5D29D23.1	Protein folding	Unique protein	0.13	↑
37.	RPOLD domain-containing protein	Traes_4BL_1638411DC.2	Translation	Unique protein	-4.99	↓
38.	Ribosomal_S10 domain- containing protein	Traes_5DS_BFF4B778D.1	Translation	Common protein	-1.61	↓
39.	Ribosomal_S13_N domain- containing protein	Traes_7DL_62F01AA40.1	Translation	Common protein	-0.98	↓

40.	Ribosomal_L2_C domain-containing protein	Traes_5BS_A651F57B9.1	Translation	Common protein	0.13	↑
41.	Ribosomal protein S20	Traes_2AL_16CF7A3BA.1	Translation	Common protein	-1.08	↓
42.	S4 RNA-binding domain-containing protein	Traes_2DS_6E564A7CF.1	Translation	Common protein	0.85	↑
43.	Ribosomal_L28e domain-containing protein	Traes_3DL_E7983BF89.1	Translation	Common protein	-1.68	↓
44.	Ribosomal protein L3-A3	RPL3-A3	Translation	Common protein	0.61	↑
45.	Tr-type G domain-containing protein	GBP-1	Translation	Common protein	-0.31	↓
46.	Ribosomal protein L17	Traes_6DL_2C820896C.1	Translation	Common protein	-0.73	↓
47.	Ribosomal protein L3	RPL3-B1	Translation	Common protein	0.53	↑
48.	Putative ribosomal protein S18	Traes_5BL_1A355FBC5.1	Translation	Common protein	-0.99	↓
49.	30S ribosomal protein S2, chloroplastic	EPITAEP00000010057	Translation	Common protein	-3.65	↓

50.	30S ribosomal protein S19, chloroplastic	Traes_3DL_262C70465.1	Translation	Common protein	-3.17	↓
51.	2-Cys peroxiredoxin BAS1, chloroplastic	Traes_2BL_E6F86DAFA.1	Translation	Unique protein	-2.91	↓
52.	50S ribosomal protein L33, chloroplastic	Traes_5DS_FAF0D3449.1	Translation	Common protein	-2.9	↓
53.	30S ribosomal protein S14, chloroplastic	rps14	Translation	Common protein	-4.3	↓
54.	30S ribosomal protein S16, chloroplastic	rps16	Translation	Common protein	-1.01	↓
55.	40S ribosomal protein	Traes_1AS_E58B0B23A.2	Translation	Common protein	-0.48	↓
56.	60S ribosomal protein L18a	Traes_1AL_6FE68F3A5.2	Translation	Common protein	0.86	↑
57.	Ribosomal_L14e domain- containing protein	Traes_2AL_9C3A0E71F.1	Translation	Common protein	-0.7	↓
58.	TFIIB-type domain- containing protein	Traes_5AL_C2F7885B5.2	Transcription	Unique protein	0.1	↑

59.	Ribos_L4_asso_C domain-containing protein	Traes_5BL_D699B2815.1	Translation	Common protein	-1.22	↓
60.	Ribosomal protein L15	Traes_2AS_76163A005.1	Translation	Common protein	1.65	↑
61.	Ribosomal_L23eN domain-containing protein	Traes_2AL_396E0F5A3.2	Translation	Common protein	-0.29	↓
62.	Ribosomal protein L19	Traes_2DS_2697C9D0A.1	Translation	Common protein	-3.7	↓
63.	Ribosomal_S7 domain-containing protein	Traes_3B_98DEE2D2A.1	Translation	Common protein	-0.51	↓
64.	Ribosomal_L18_c domain-containing protein	Traes_5AL_3517C0CE2.1	Translation	Common protein	-1.33	↓
65.	KOW domain-containing protein	Traes_3B_FC13C246C1.3	Translation	Common protein	-1.55	↓

*Unique protein: Unique in KH-65; Common Protein : Present in both the lines

Table S2: A list of T-test qualified differentially expressed root proteins actively participating in protein-protein interactions in sensitive line PBW-373.

S. No.	Root Proteins	Protein code	Biological process	Common or unique proteins*	Abundance Ratio (log2): (PBW-373,Test) / (PBW-373, Control)	Up-or-Downregulated
Cluster I: Interaction of two proteins						
1.	GrpE protein homolog	Traes_5BL_10BF821D1.2	Protein folding	Common protein	-2.42	↓
2.	J domain-containing protein	Traes_1AS_488596E82.1	Protein folding	Common protein	-1.92	↓
Cluster II: Interaction of three proteins						
3.	Clathrin light chain	Traes_7BL_241070F8C.2	Intracellular protein transport	Common protein	-2.53	↓

4.	Clathrin heavy chain	Traes_5AL_C22CF596A.1	Intracellular protein transport	Common protein	0.76	↑
5.	VHS domain- containing protein	Traes_3AS_026945785.2	Intracellular protein transport	Common protein	-0.02	↓
Cluster III: Interaction of three proteins from two different metabolic process						
6.	VAMP-like protein	Traes_3B_2D7D1DD25.1	Vesicle mediated transport	Common protein	-3.09	↓
7.	VACUOLELESS1	Traes_3AL_A744FA135.1	Intra cellular protein transport	Unique protein	-1.47	↓
8.	t-SNARE coiled-coil homology domain- containing protein	Traes_5AS_238F990CC.2	Intra cellular protein transport	Common protein	-0.89	↓
Cluster IV: Interaction of four proteins from two different metabolic pathways						
9.	Coatomer subunit alpha	Traes_4DL_852DF544C.1	Vesicle mediated transport	Common protein	0.78	↑

10.	AP-1 complex subunit gamma	Traes_7DS_2D5054AF7.2	Intra cellular protein transport	Unique protein	6.64	↑
11.	Coatomer subunit alpha	Traes_5AL_E153CEC65.1	Intra cellular protein transport	Common protein	1.16	↑
12.	Coatomer subunit beta	Traes_3B_E7D10A09E.2	Intra cellular protein transport	Common protein	1.18	↑
Cluster V: Interaction of 31 proteins from four different metabolic process						
13.	Phosphotransferase	Traes_1DS_F0DB03FEA.1	glycolysis	Common protein	1.43	↑
14.	TOPLESS	TPL	transcription	Common protein	0.91	↑
15.	Protein transport protein Sec61 subunit beta	Traes_4DS_BCEF8A384.1	Intracellular protein transport	Common protein	-1.91	↓
16.	Heat shock protein 90	Traes_5BL_0F3A986F9.2	Protein folding	Common protein	-0.53	↓

17.	HATPase_c domain-containing protein	Traes_5DS_AC5D29D23.1	Protein folding	Common protein	-3.98	↓
18.	30S ribosomal protein S2, chloroplastic	EPITAEP00000010057	Translation	Common protein	-2.58	↓
19.	30S ribosomal protein S19, chloroplastic	Traes_3DL_262C70465.1	Translation	Common protein	6.64	↑
20.	50S ribosomal protein L33, chloroplastic	Traes_5DS_FAF0D3449.1	Translation	Common protein	-2.9	↓
21.	30S ribosomal protein S14, chloroplastic	rps14	Translation	Common protein	-4.3	↓
22.	30S ribosomal protein S16, chloroplastic	rps16	Translation	Common protein	-1.01	↓
23.	Ribosomal_L14e domain-containing protein	Traes_2AL_9C3A0E71F.1	Translation	Common protein	-0.7	↓

24.	60S ribosomal protein L18a	Traes_1AL_6FE68F3A5.2	Translation	Common protein	-0.89	↓
25.	Ribos_L4_asso_C domain-containing protein	Traes_5BL_D699B2815.1	Translation	Common protein	-1.22	↓
26.	Ribosomal protein L15	Traes_2AS_76163A005.1	Translation	Common protein	1.05	↓
27.	SYP71 protein	Traes_5DS_BFF4B778D.1	Translation	Unique protein	0.68	↑
28.	Ribosomal protein L3-A3	RPL3-A3	Translation	Common protein	0.74	↑
29.	GTP-binding protein	GBP-1	Translation	Common protein	-1.13	↓
30.	RPOLD domain-containing protein	Traes_4BL_1638411DC.2	Translation	Common protein	5.7	↑

31.	Ribosomal protein L17	Traes_6DL_2C820896C.1	Translation	Common protein	-1.34	↓
32.	Ribosomal protein L3	RPL3-B1	Translation	Common protein	1.49	↑
33.	Putative ribosomal protein S18	Traes_5BL_1A355FBC5.1	Translation	Common protein	-2.15	↓
34.	Ribosomal protein S20	Traes_2AL_16CF7A3BA.1	Translation	Common protein	-1.61	↓
35.	S4 RNA-binding domain-containing protein	Traes_2DS_6E564A7CF.1	Translation	Common protein	-1.41	↓
36.	Ribosomal_L28e domain-containing protein	Traes_3DL_E7983BF89.1	Translation	Common protein	-2.6	↓

37.	Ribosomal_L2_C domain-containing protein	Traes_5BS_A651F57B9.1	Translation	Common protein	-1.02	↓
38.	Ribosomal_S13_N domain-containing protein	Traes_7DL_62F01AA40.1	Translation	Common protein	-2.07	↓
39.	RRF domain-containing protein	Traes_2AL_D00BA883E.1	Translation	Unique protein	-4.29	↓
40.	Ribosomal_L23eN domain-containing protein	Traes_2AL_396E0F5A3.2	Translation	Common protein	-0.36	↓
41.	Ribosomal protein L19	Traes_2DS_2697C9D0A.1	Translation	Common protein	-4.34	↓
42.	Ribosomal_S7 domain-containing protein	Traes_3B_98DEE2D2A.1	Translation	Common protein	-1.06	↓

43.	KOW domain- containing protein	Traes_3B_FC13C246C1.3	Translation	Common protein	-1.9	↓
*Unique protein: Unique in PBW-373; Common Protein : Present in both the lines						