

Figure S1. DON-inducible expression of *HvGST13* gene in FHB-resistant barley cultivar Sirius O.525

		<u>Glutathione S-transferase. N terminal</u>	
OsGSTF4	MAGEGKLRVYGMALSANVVRVATVLNEKGLDFDLVPVDLRTAAHKQPHFLALNPFPGQIP		60
HvGST13	----MAPMKLYGMMLSPNVTRVATVLNELGLDFEFVSVDLRTGAHKQPDFLKLNPFPGQIP		56
TaGSTF5	----MAPIKLYGMMLSANVTRVTTLNELGLEFDFVDVLDLRTGAHKHPDFLKLNPFPGQIP		56
AtGSTF13	-----MAMKLYGDEM SACVARVLLCLHEKNTEFELVPVNLFACHHKLPSFLSMNPFPGKVP		55
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OsGSTF4	VLQDGDEVLY ES RAINRYIATKYKAEGADLLPAEAS--PAKLEVWLEVESHFFYP AISGL		118
HvGST13	ALQDGDEVV ES RAINRYIATKYGAAE--LLP--TP--SAKLEVWLEVESHFFYPVVAL		110
TaGSTF5	ALQDGDEVV ES RAINRYIATKYGA-S--LLP--TP--SAKLEAWLEVESHFFYPARTL		109
AtGSTF13	ALQDDDLTL ES RAITAYIAEKHRDKGTDLTRHEDPKEAAIVKLWSEVEAHFFNP AISAV		115
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		<u>Glutathione S-transferase. C terminal</u>	
OsGSTF4	VFQLLIKPLL-GGATDAAVDEHAAALAQVLDVYDAHLA-GSRYLAGNRFSLADANHMSY		176
HvGST13	VYELLIKPML-GAPTDAAEVNKNAADLDKLLDVYEAHLAAGNKYLAGDAFTLADANHMSY		169
TaGSTF5	VYELVIKPML-GAPTDAAEVDKNAADLAKLLDVYEAHLAAGNKYLAGDAFPLADANHMSY		168
AtGSTF13	IHQIIVVPLQ-GESPNAIVEENLENLKGKILDVYEERLG-KTKYLAGDTYTLADLHHVPY		173
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OsGSTF4	LLFLSKTPMAELVAFRPHVKAWWDDISSRPAWKKTAAAIFFPPA--		220
HvGST13	LFMLTKSPKADLVASRPHVKAWWDEISARPAWAKTVASIPPLPGV-		214
TaGSTF5	LFMLTKSPKADLVASRPHVKAWWEEISARPAWAKTVASIPPLPAV-		213
AtGSTF13	TYFYMKTIHAGLINDRPNVKAWWEDLCSRPAFLKVSPLGTVAPTTN		219
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Figure S2. Amino acid alignment of barley HvGST13, rice OsGSTF4, wheat TaGSTF5 and Arabidopsis AtGSTF13 using Clustal Omega.

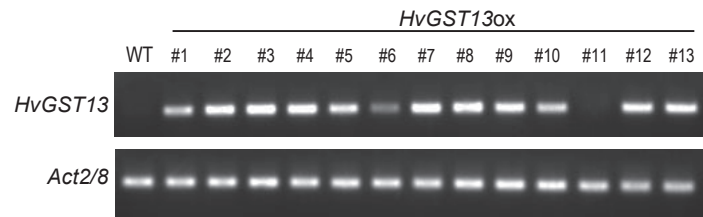


Figure S3. RT-PCR of wild type and 13 candidates of *HvGST13ox* transgenic Arabidopsis plants.