

An Improved Expectation-Maximization Bayesian Algorithm for GWAS

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List of included materials:

Supplementary Table S1

Supplementary Figure S1, S2, S3, S4, S5

Table S1. The identified Genes of two traits SDV and FT10 in Arabidopsis by using the emBBI, emBB, emRR, emML, emBL and emBA methods.

Trait	Chr.	Position	Gene	Method	Trait	Chr.	Position	Gene	Method
SDV	1	5270657	<i>AT1G15330</i>	emBL	FT10	1	17441772	<i>AT1G47485</i>	emML
	2	9309523	<i>AT2G21870</i>	emBA		1	23678090	<i>AT1G63820</i>	emML
	3	3564586	<i>AT3G11330</i>	emBBI		2	13867372	<i>AT2G32700</i>	emRR
	3	493156	<i>AT3G02380</i>	emBL			13887175		
	4	10994321	<i>AT4G20400</i>	emBL		2	13887175	<i>AT2G32788</i>	emRR
	5	6848660	<i>AT5G20280</i>	emBBI			13895635		
	5	8577492	<i>AT5G24930</i>	emBBI		2	9309523	<i>AT2G21870</i>	emBL
	5	26794176	<i>AT5G67180</i>	emRR		2	9965680	<i>AT2G23380</i>	emML
FT10	1	3852453	<i>AT1G11410</i>	emRR			9966962		
	1	9073534	<i>AT1G26220</i>	emBB		3	3287424	<i>AT3G10490</i>	emBB
		9072307		emML		3	7194150	<i>AT3G20580</i>	emBBI
	1	24214426	<i>AT1G65240</i>	emBBI,		4	16287768	<i>AT4G33980</i>	emBA
	1	29289569	<i>AT1G77860</i>	emBBI		5	17469249	<i>AT5G43510</i>	emBA
			<i>AT1G77950</i>			5	5218864	<i>AT5G16020</i>	emBB
	1	4344546	<i>AT1G12790</i>	emBL		5	6135296	<i>AT5G18480</i>	emBB
		4347478				5	3521883	<i>AT5G11110</i>	emBBI
	1	5266491	<i>AT1G15330</i>	emBL		5	6851199	<i>AT5G20280</i>	emBBI
	1	5573238	<i>AT1G16340</i>	emBL					

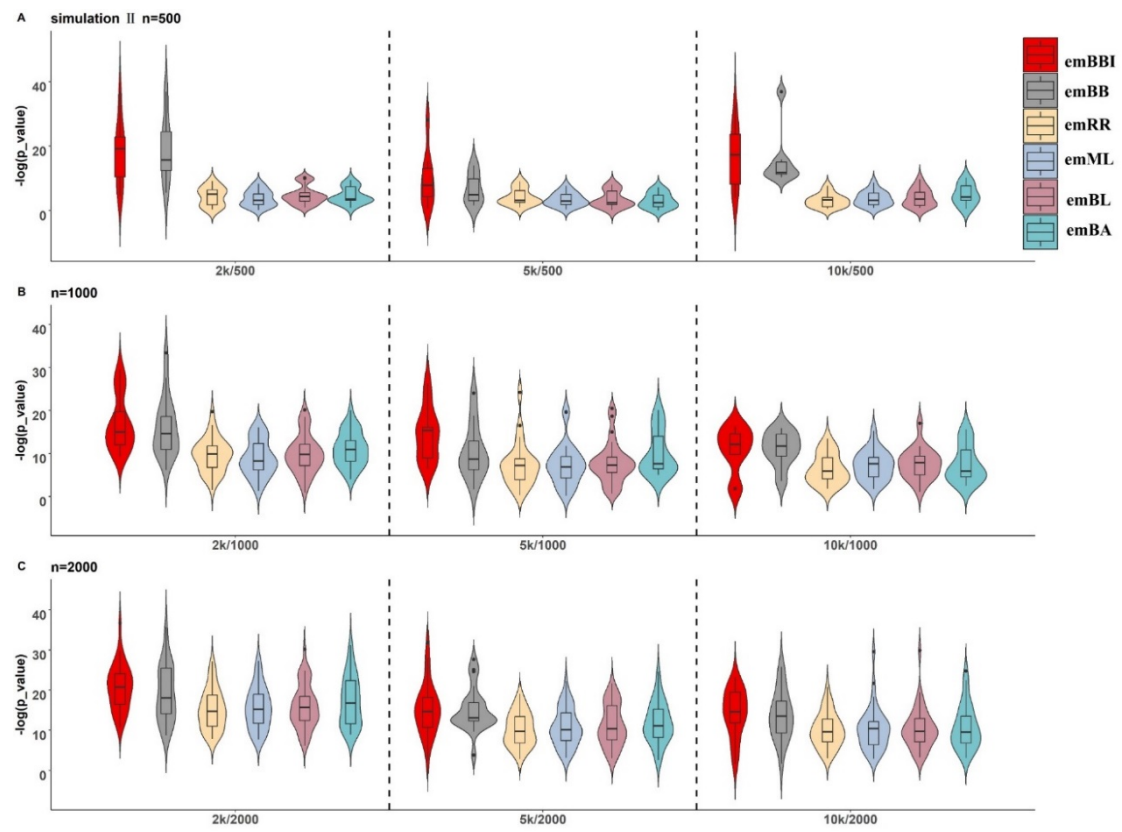


Figure S1. Violin plots of LOD test p -value in simulation II .

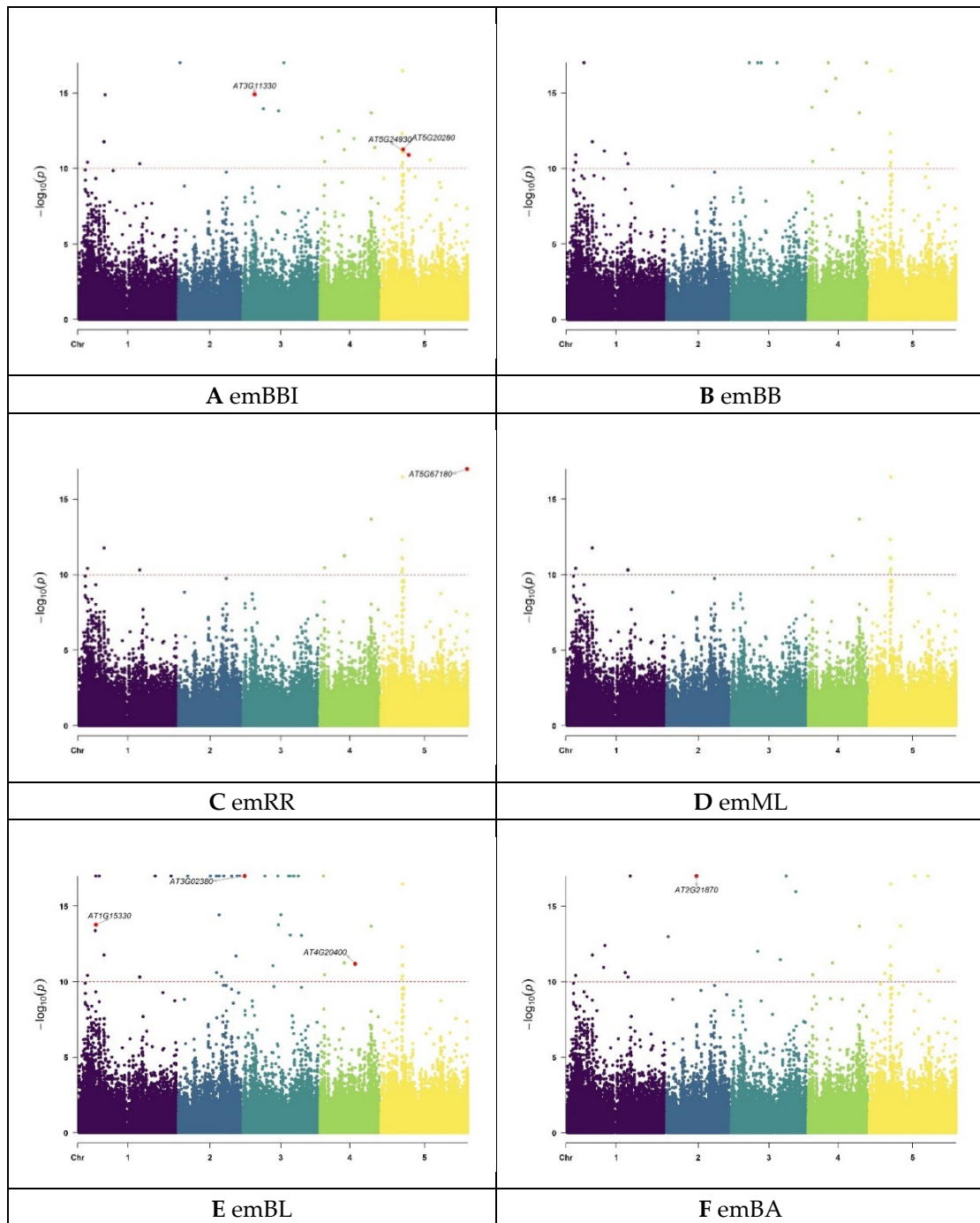


Figure S2. Manhattan plot for the trait SDV by six methods.

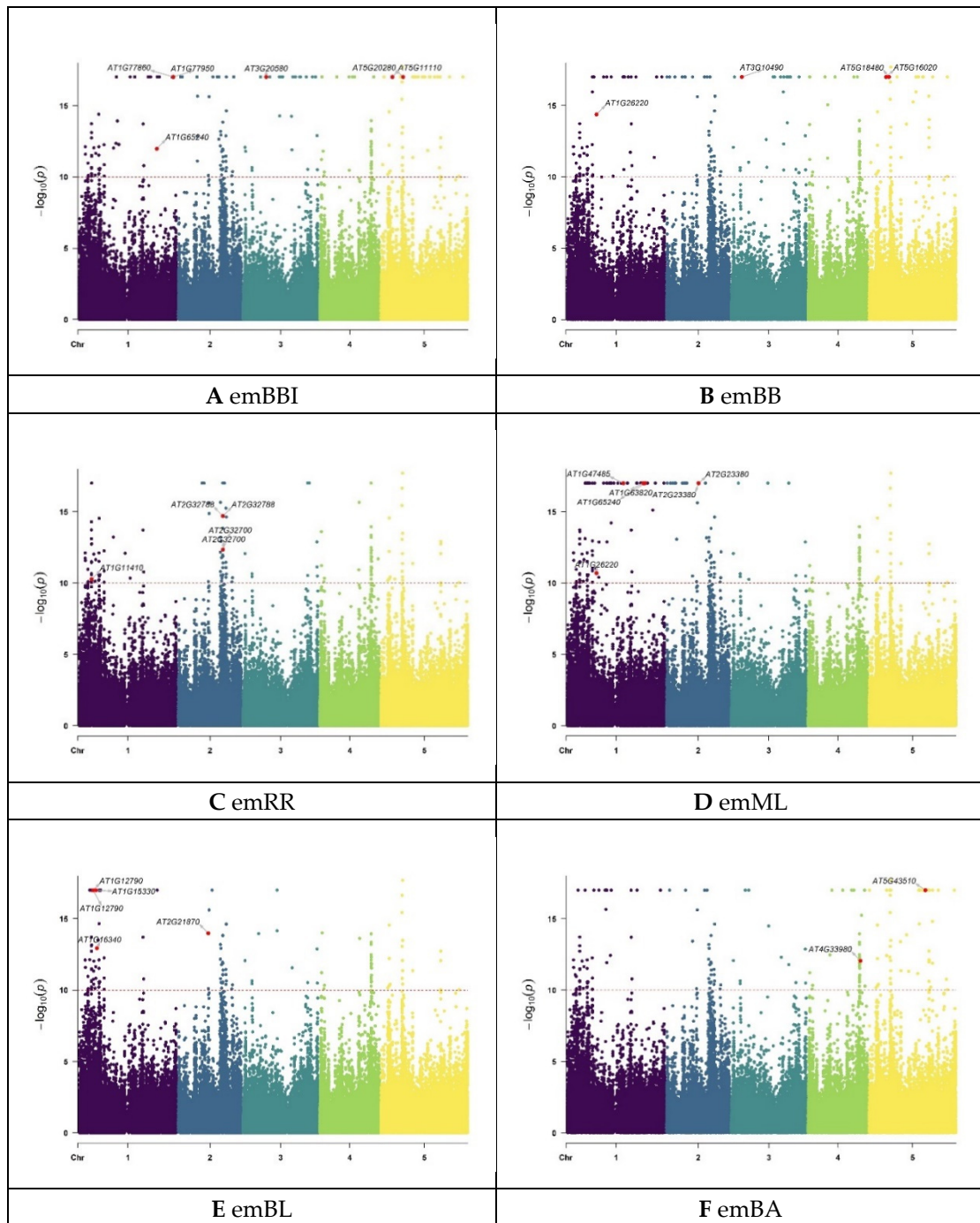


Figure S3. Manhattan plot for the trait FT10 by six methods.

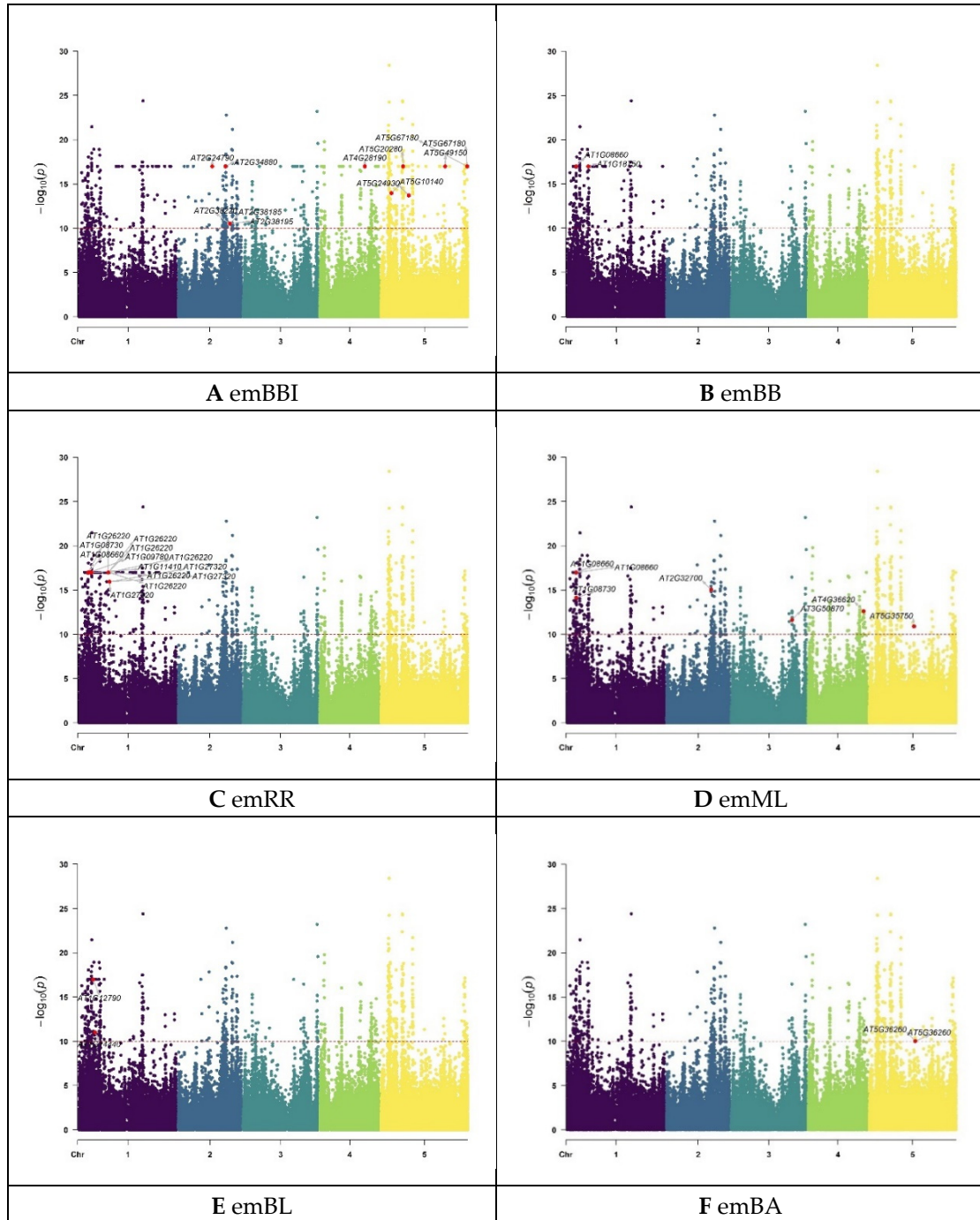
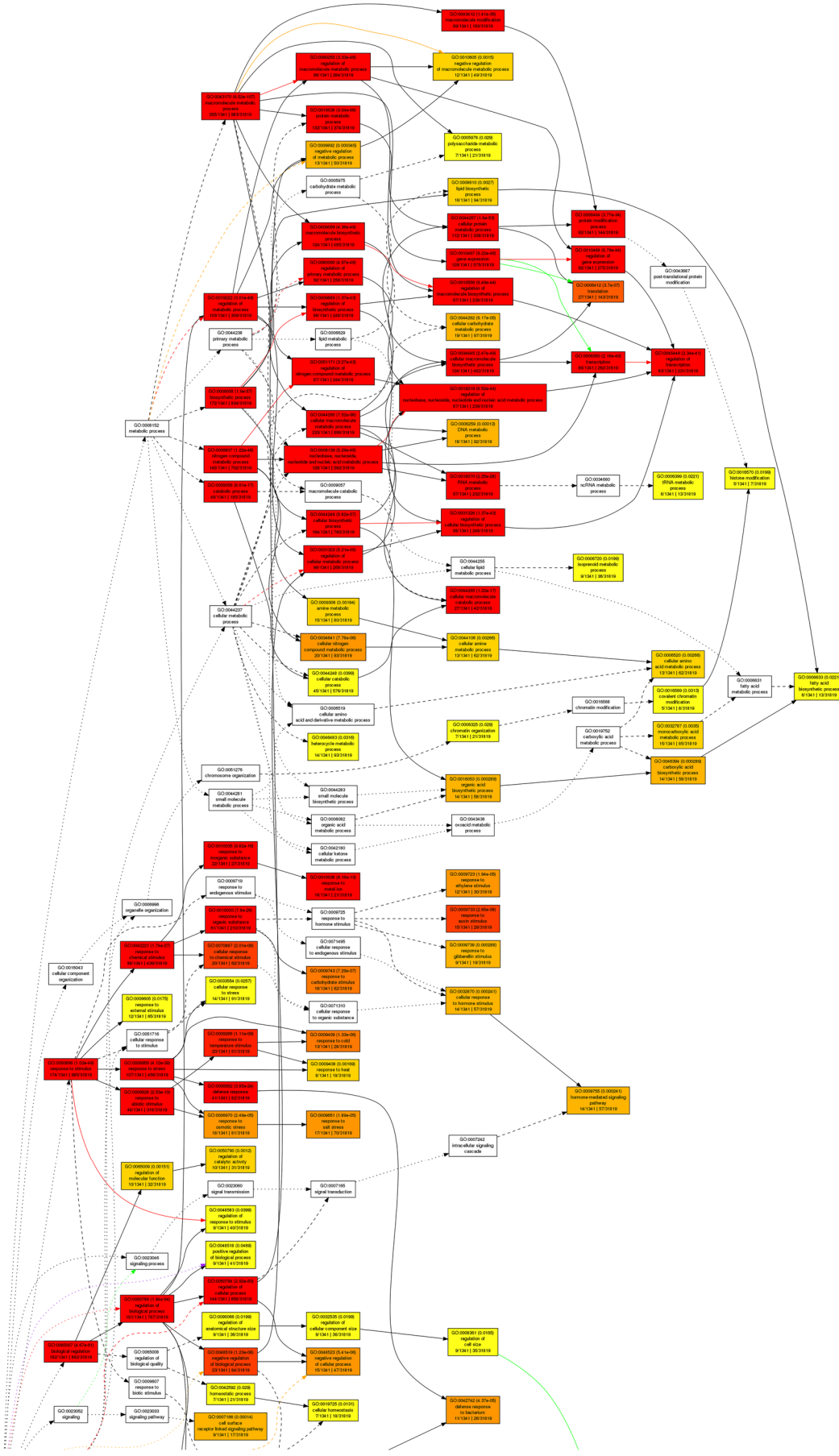
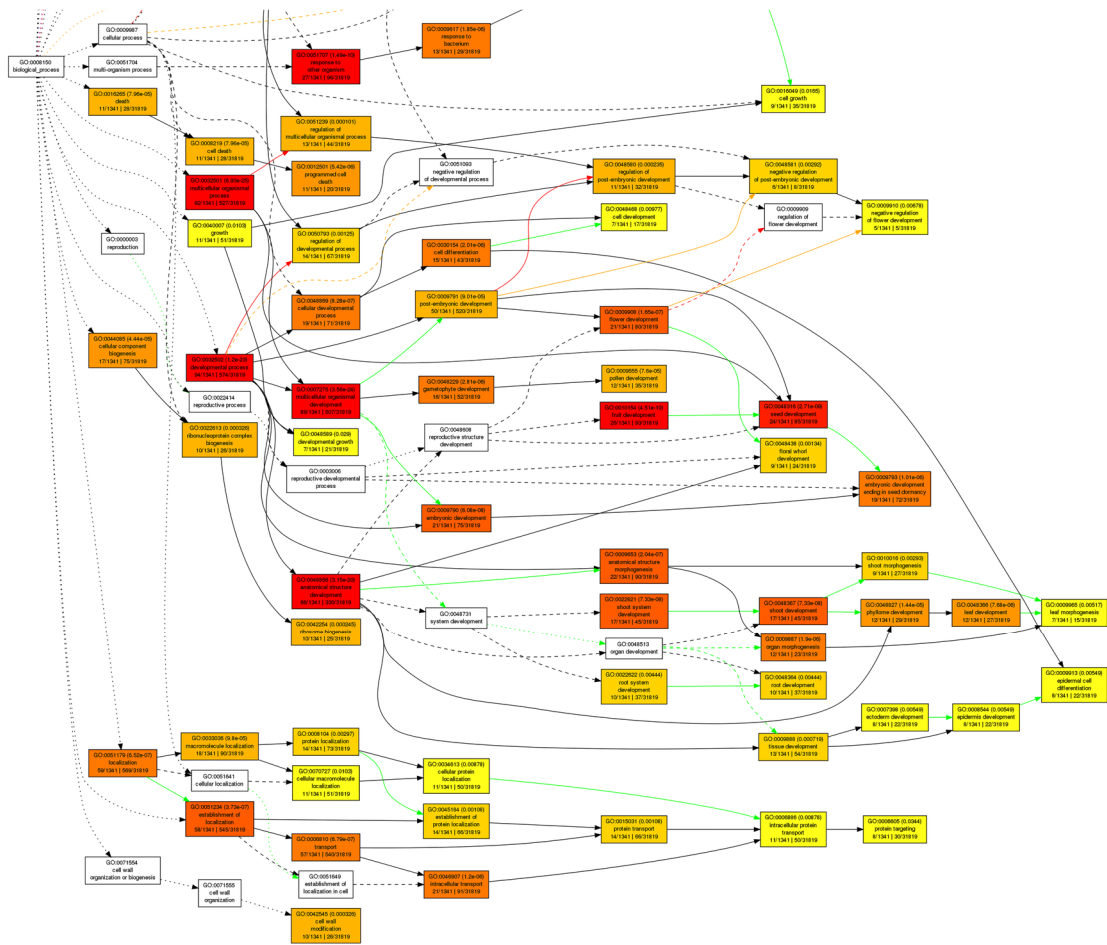


Figure S4. Manhattan plot for the trait FT22 by six methods.

A





B

