Genome-Wide Association Study of Major Agronomic Traits in Foxtail Millet (*Setaria italica* L.) Using ddRAD Sequencing

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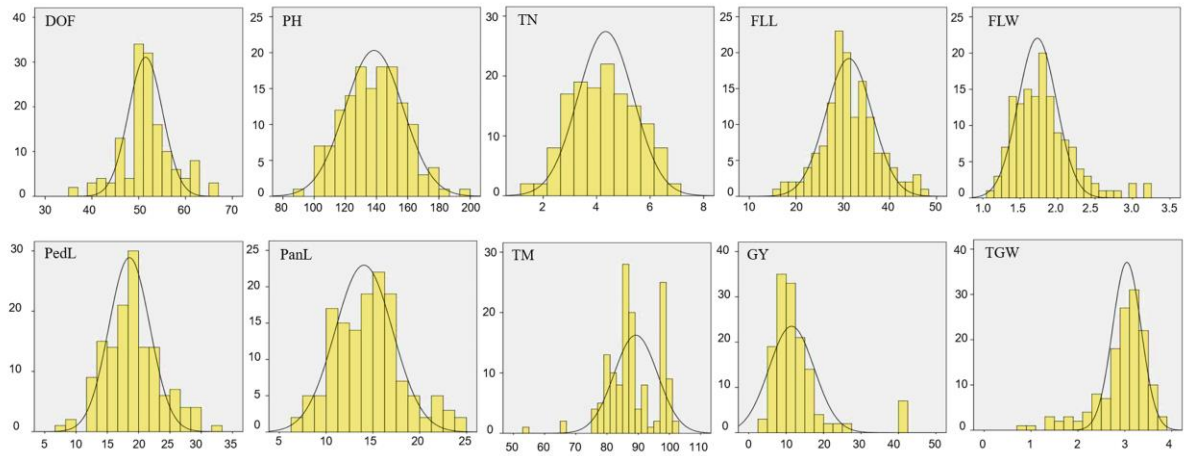
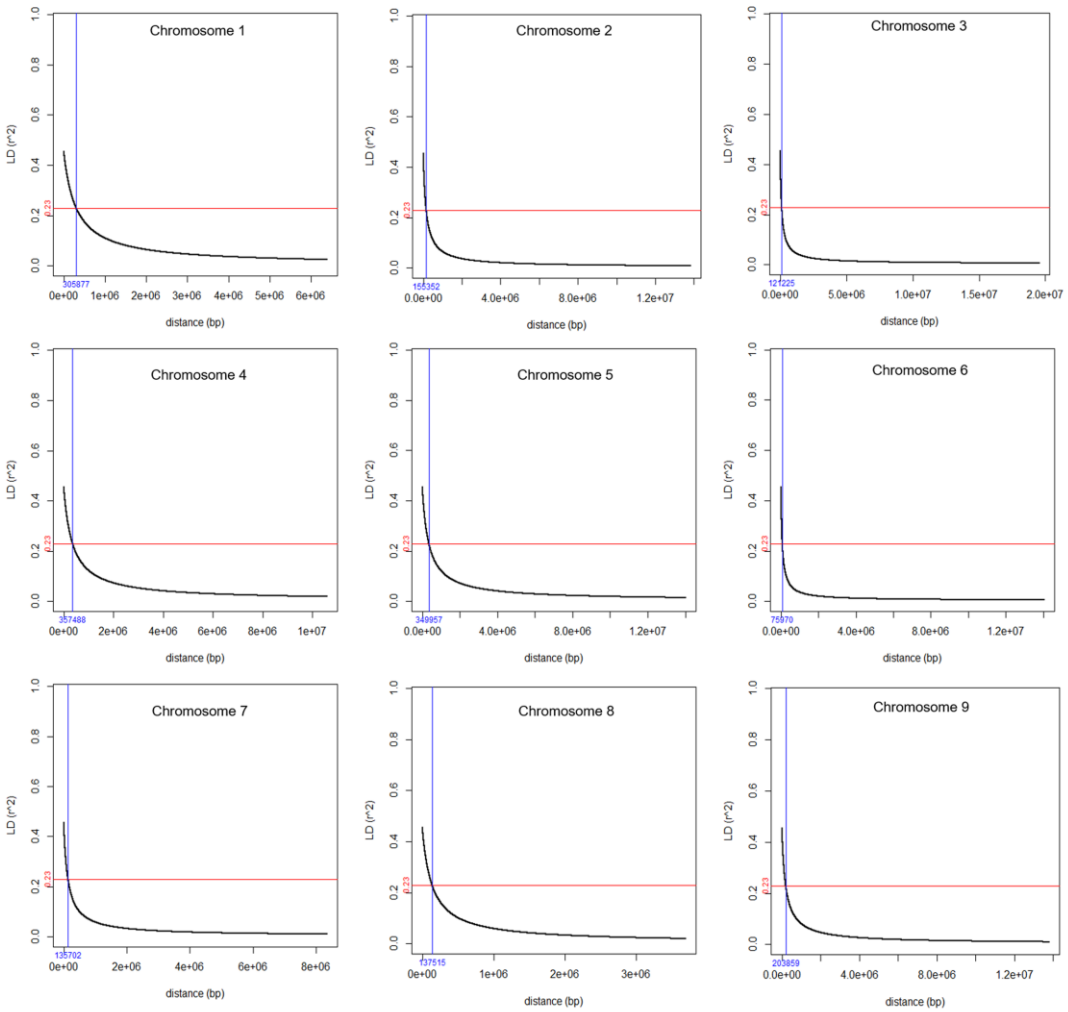
Supplementary Figure 1. Frequency distribution of 10 agronomic traits in 142 foxtail millet genotypes used for GWAS. The x-axis represents the trait value and the y-axis represents frequency. Days to flowering (DOF), plant height (PH), tiller number (TN), flag leaf length (FLL), flag leaf width (FLW), peduncle length (PedL), panicle length (PanL), tiller maturity (TM), grain yield (GY), and 1000 grain weight (TGW).



Supplementary Figure 2. Linkage disequilibrium (LD) decay plots for nine foxtail millet. x-axis represents distance (bases) between SNPs and y-axis represents LD value (r^2; 0.0, 0.2, 0.4, 0.6, 0.8, 1.0). Horizontal and vertical lines represent half LD and LD decay distance respectively.



Supplementary Table 1. Descriptive statistics including minimum, maximum, mean and standard deviation (SD) for ten agronomic traits in 142 foxtail millet genotypes.

Trait	Minimum	Maximum	Mean	SD
DOF (days)	36.0	65.0	51.4	5.6
PH (cm)	89.7	194.0	138.4	19.6
TN (number)	1.4	6.8	4.3	1.2
FLL (cm)	16.6	47.3	31.4	6.0
FLW (cm)	1.1	3.2	1.8	0.4
PedL (cm)	6.9	31.7	19.0	4.4
PanL (cm)	6.6	24.4	14.6	3.7
TM (days)	54.0	101.0	87.8	8.0
GY (g)	4.0	42.3	12.8	7.8
TGW (g)	0.8	3.8	2.9	0.6

Supplementary Table 2. Karl Pearson's coefficient of correlation for all possible pairs involving ten traits.

Traits	DOF	PH	TN	FLL	FLW	PedL	PanL	TM	GY	TGW
DOF	1	.124	.059	-.056	.025	-.085	-.150	.200*	.054	.097
PH		1	.090	.275**	.082	.188*	.258**	.380**	.043	.065
TN			1	.113	.103	-.207*	.125	.108	.381**	-.220**
FLL				1	.471**	-.028	.436**	-.009	.331**	-.214*
FLW					1	-.246**	.361**	-.113	.537**	-.433**
PedL						1	.136	.146	-.267**	.323**
PanL							1	-.055	.436**	-.238**
TM								1	-.132	.276**
GY									1	-.458**
TGW										1

* and ** represent 0.05 and 0.001 level of significance.