

Supplementary Tables

Supplementary Table 1. Mean squares of analysis of variance of the morphological traits of SA induced mutants of rice

SOV	df	PH	TTH ⁻¹	ETH ⁻¹	DF	DM	PL	PBP ⁻¹	SBP ⁻¹	TGP ⁻¹	FGP ⁻¹	GW	GL	GB	SYH ⁻¹	GYH ⁻¹	HI (%)
Replication	2	32.17	158.51	293.12	54.66	75.75	2.25	17.77	197.32	2220.66	2087.38	0.02	0.15	0.02	34.55	5.58	11.60
Genotype	100	351.92**	76.48**	46.99**	37.76**	33.45**	12.50**	8.79**	51.81**	2874.31**	1969.07**	0.08**	0.49*	0.02**	153.46**	32.80**	17.31**
Error	200	23.47	7.31	6.48	5.69	4.57	7.90	2.33	8.54	500.41	451.17	0.01	0.34	0.01	25.50	8.73	9.49
CV (%)		5.43	10.66	13.04	2.21	1.59	12.68	17.06	14.76	19.00	23.15	4.19	7.24	5.29	14.11	17.70	9.69
SD		11.50	5.59	4.67	4.08	3.82	3.06	2.14	4.91	36.03	31.06	0.17	0.63	0.13	8.24	4.08	3.48
SEG		3.96	2.21	2.08	1.95	1.74	2.30	1.25	2.39	18.26	17.34	0.07	0.48	0.10	4.12	2.41	2.52

SOV: Source of variation; CV: Coefficient of variation; SD: Standard deviation; SEG: Standard error of genotypes; *: Significant at $p \leq 0.05$; **: Significant at $p \leq 0.01$; PH: Plant height (cm); TTH⁻¹: Total tillers per hill; ETH⁻¹: Effective tillers per hill; DF: Days to flowering; DM: Days to maturity; PL: Panicle length (cm); PBP⁻¹: Primary branches per panicle; SBP⁻¹: Secondary branches per panicle; TGP⁻¹: Total grains per panicle; FGP⁻¹: Filled grains per panicle; GW: 100 grain weight (g); GL: Grain length (mm); GB: Grain breadth (mm); SYH⁻¹: Straw yield per hill (g); GYH⁻¹: Grain yield per hill (g); HI (%): Harvest index (%).

Supplementary Table 2. Estimation of genetic parameters of the sixteen morphological traits among SA induced mutants of rice

Trait	Mean	SEm	MSg	MSe	GV	PV	ECV (%)	GCV (%)	PCV (%)	h ² _b (%)	GA	GA (%)
PH	89.22	2.80	351.92	23.47	109.48	132.95	5.43	11.73	12.92	82.35	19.56	21.92
TTH ⁻¹	25.36	1.56	76.48	7.31	23.06	30.37	10.66	18.94	21.73	75.92	8.62	33.99
ETH ⁻¹	19.52	1.47	46.99	6.48	13.50	19.98	13.04	18.82	22.90	67.56	6.22	31.87
DF	108.04	1.38	37.76	5.69	10.69	16.38	2.21	3.02	3.75	65.25	5.44	5.04
DM	134.30	1.23	33.45	4.57	9.63	14.19	1.57	2.31	2.81	67.83	5.26	3.92
PL	22.17	1.62	12.50	7.90	1.53	9.43	12.68	5.58	13.85	16.24	1.03	4.63
PBP ⁻¹	8.95	0.88	8.79	2.33	2.15	4.49	17.06	16.39	23.66	48.01	2.09	23.39
SBP ⁻¹	19.80	1.69	51.82	8.54	14.43	22.97	14.76	19.18	24.20	62.81	6.20	31.31
TGP ⁻¹	117.71	12.92	2874.31	500.41	791.30	1291.71	19.00	23.90	30.53	61.26	45.36	38.53
FGP ⁻¹	91.76	12.26	1969.07	451.17	505.97	957.14	23.15	24.51	33.71	52.86	33.69	36.71
GW	1.98	0.05	0.08	0.01	0.02	0.03	4.19	7.76	8.82	77.38	0.28	14.05
GL	8.11	0.34	0.49	0.34	0.05	0.39	7.24	2.75	7.75	12.58	0.16	2.01
GB	2.26	0.07	0.02	0.01	0.003	0.02	5.29	2.21	5.73	14.88	0.04	1.75
SYH ⁻¹	35.78	2.92	153.46	25.50	42.65	68.15	14.11	18.25	23.07	62.59	10.64	29.75
GYH ⁻¹	16.70	1.71	32.80	8.73	8.02	16.75	17.70	16.96	24.51	47.88	4.04	24.18
HI (%)	31.81	1.78	17.31	9.49	2.60	12.10	9.69	5.07	10.94	21.53	1.54	4.85

PH: Plant height (cm); TTH⁻¹: Total tillers per hill; ETH⁻¹: Effective tillers per hill; DF: Days to flowering; DM: Days to maturity; PL: Panicle length (cm); PBP⁻¹: Primary branches per panicle; SBP⁻¹: Secondary branches per panicle; TGP⁻¹: Total grains per panicle; FGP⁻¹: Filled grains per panicle; GW: 100 grain weight (g); GL: Grain length (mm); GB: Grain breadth (mm); SYH⁻¹: Straw yield per hill (g); GYH⁻¹: Grain yield per hill (g); HI (%): Harvest index (%); SEm: Standard error of mean; MSg: Mean square of genotype; MSe: Mean square of error; GV: Genotypic variance; PV: Phenotypic variance; GCV: Genotypic coefficient of variance; PCV: Phenotypic coefficient of variance; h²_b: Heritability (broad sense); GA: Genetic advance; GA (%): Genetic advance as percentage of mean

Supplementary Table 3. Genotypic correlation (r_g , above diagonal) and phenotypic correlation (r_p , below diagonal) for the morphological traits of SA induced mutants

Traits	PH	TTH ⁻¹	ETH ⁻¹	DF	DM	PL	PBP ⁻¹	SBP ⁻¹	TGP ⁻¹	FGP ⁻¹	GW	GL	GB	SYH ⁻¹	GYH ⁻¹	HI (%)
PH	1.000	0.029	-0.004	0.139	0.301**	0.278**	0.056	0.354*	0.208*	0.191	-0.087	0.374**	0.490**	-0.069	-0.143	-0.190
TTH ⁻¹	0.028	1.000	1.003**	-0.027	-0.062	-0.025	0.579**	0.447**	0.148	0.213*	-0.122	0.682**	0.087	0.058	0.014	-0.226*
ETH ⁻¹	-0.004	0.896**	1.000	0.001	-0.091	-0.164	0.564**	0.351**	0.068	0.136	-0.153	0.562**	0.019	0.066	0.005	-0.243*
DF	0.137*	0.003	0.027	1.000	0.585**	0.362**	0.006	-0.103	-0.186	-0.136	0.022	-0.291**	-0.404**	0.037	-0.058	-0.165
DM	0.225**	-0.028	-0.045	0.406**	1.000	0.552**	0.111	0.249*	0.358**	0.427**	0.020	0.002	0.204*	-0.016	0.009	0.081
PL	0.130*	-0.029	-0.012	0.132*	0.174**	1.000	0.193	0.360**	0.210*	0.109	0.128	0.126	0.564**	0.103	0.146	-0.005
PBP ⁻¹	0.052	0.331**	0.349**	-0.019	0.043	-0.028	1.000	0.393**	0.316**	0.334**	-0.161	0.512**	-0.084	0.232*	0.166	-0.232
SBP ⁻¹	0.244**	0.352**	0.289**	-0.103	0.189**	0.073	0.199**	1.000	0.590**	0.468**	0.012	0.969**	0.496**	0.153	0.136	-0.096
TGP ⁻¹	0.150**	0.128*	0.089	-0.101	0.221**	0.028	0.189**	0.388**	1.000	0.965**	0.077	0.847**	0.225*	0.185	0.264**	0.193
FGP ⁻¹	0.117*	0.127*	0.109	-0.057	0.245**	-0.012	0.194**	0.314**	0.875**	1.000	0.009	0.761**	0.213*	0.146	0.265**	0.269**
GW	-0.069	-0.104	-0.130*	0.032	0.010	0.066	-0.150**	-0.014	0.040	0.006	1.000	-0.124	0.225*	0.282**	0.275**	-0.074
GL	0.134*	0.225**	0.215**	-0.078	0.026	-0.023	0.130*	0.260**	0.279**	0.227**	-0.089	1.000	0.215*	0.047	0.070	0.045
GB	0.191**	0.112	0.097	-0.075**	0.103	-0.020	0.051	0.146*	0.111	0.124*	0.033	0.108	1.000	0.011	0.241*	0.369**
SYH ⁻¹	-0.052	0.113*	0.113*	-0.006	0.021	0.056	0.096	0.130*	0.137*	0.117*	0.182**	0.065	0.055	1.000	0.889**	-0.375**
GYH ⁻¹	-0.088	0.070	0.111	-0.039	0.028	0.025	0.101	0.115*	0.255**	0.300**	0.125*	0.135*	0.131*	0.722**	1.000	0.074
HI (%)	-0.070	-0.086	-0.022	-0.036	0.033	-0.036	-0.020	-0.018	0.173**	0.265**	-0.072	0.087	0.123*	-0.219**	0.489**	1.000

PH: Plant height (cm); TTH⁻¹: Total tillers per hill; ETH⁻¹: Effective tillers per hill; DF: Days to flowering; DM: Days to maturity; PL: Panicle length (cm); PBP⁻¹: Primary branches per panicle; SBP⁻¹: Secondary branches per panicle; TGP⁻¹: Total grains per panicle; FGP⁻¹: Filled grains per panicle; GW: 100 grain weight (g); GL: Grain length (mm); GB: Grain breadth (mm); SYH⁻¹: Straw yield per hill (g); GYH⁻¹: Grain yield per hill (g); HI (%): Harvest index (%); **: significant at 1% level, *: significant at 5% level.