Supplementary material

Assessment of Genetic Parameters, Agro-Morphologic Stability and Clustering Pattern of Promising Candidate Basmati Rice (*Oryza sativa* L.) Lines

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Supplementary Table 1: *Mean performance of tested genotypes for ten agro-morphological traits.*

S.N.	Lines	PH (cm)	DM	No. of tillers/ plant	Panicles/ meter square	No. of grains/ panicle	PL (cm)	TGW (g)	Yield (t/ha)	Husk (%)	RP (%)
1	PK9444-8-1-2	126 ^{bcd}	101 ^{fg}	19 ^{abcde}	380 ^{de}	100 ^{efg}	23.22 ^{def}	20.00 ^{c}	5.73 ^{b}	19.7 ^{a}	69.7 ^{a}
2	PK9966-10-1	116 ^{efghi}	109 ^{abc}	25 ^{a}	490 ^{a}	80 ^{hi}	21.51 ^{ef}	19.00 ^{c}	4.84 ^{def}	18.7 ^{a}	69.3 ^{a}
3	PK10029-13-2-1	136 ^{a}	107 ^{cdef}	20 ^{abcde}	390 ^{de}	93 ^{g}	24.15 ^{cdef}	19.00 ^{c}	5.35 ^{bc}	20.3 ^{a}	70.3 ^{a}
4	PK10324-1-1	111 ^{hi}	103 ^{efg}	18 ^{abcde}	360 ^{ef}	95 ^{fg}	25.05 ^{bcde}	21.00 ^{c}	6.18 ^{a}	19.0 ^{a}	70.3 ^{a}
5	PK10967-30-1	114 ^{ghi}	100 ^{g}	19 ^{abcde}	370 ^{ef}	71 ^{jk}	19.05 ^{f}	21.33 ^{bc}	4.68 ^{defg}	18.7 ^{a}	67.0 ^{a}
6	PKBB15 -116	109 ^{i}	104 ^{defg}	21 ^{abc}	420 ^{bc}	109 ^{d}	28.05 ^{abcd}	19.33 ^{c}	3.44 ^{k}	19.3 ^{a}	67.3 ^{a}
7	PK8892	120 ^{defg}	107 ^{cde}	21 ^{abc}	430 ^{b}	137 ^{b}	29.90 ^{abc}	22.00 ^{abc}	3.92 ^{ij}	20.0 ^{a}	67.0 ^{a}
8	RRI-3	120 ^{defg}	110 ^{abc}	20 ^{abcd}	400 ^{cd}	102 ^{def}	25.78 ^{bcde}	20.67 ^{c}	4.35 ^{gh}	19.3 ^{a}	68.7 ^{a}
9	PKPB-8	115 ^{fghi}	109 ^{bcd}	17 ^{abcde}	330 ^{gh}	77 ^{hij}	25.30 ^{bcdef}	23.00 ^{abc}	4.42 ^{gh}	19.7 ^{a}	68.7 ^{a}
10	Punjab Basmati	109 ^{ij}	104 ^{defg}	21 ^{ab}	360 ^{ef}	148 ^{a}	32.40 ^{a}	19.67 ^{c}	4.55 ^{efg}	17.7 ^{a}	67.3 ^{a}
11	Chenab Basmati	119 ^{defgh}	110 ^{abc}	14 ^{de}	280 ^{h}	154 ^{a}	31.51 ^{ab}	20.00 ^{c}	4.99 ^{cd}	19.0 ^{a}	68.0 ^{a}
12	Kissan Basmati	101 ^{j}	96 ^{h}	18 ^{abcde}	350 ^{fg}	103 ^{de}	28.05 ^{abcd}	23.33 ^{ab}	4.30 ^{ghi}	19.7 ^{a}	67.3 ^{a}
13	Super Basmati*	124 ^{bcde}	113 ^{ab}	22 ^{ab}	430 ^{b}	82 ^{h}	25.35 ^{bcdef}	19.67 ^{c}	3.68 ^{jk}	18.7 ^{a}	68.7 ^{a}

14	Basmati 515*	129 abc	113 a	21 ab	400 cd	128 c	30.75 ab	18.67 c	3.85 j	18.0 a	68.3 a
15	PK 1121 aromatic*	112 hi	113 ab	17 bcde	330 gh	76 hij	28.05 abcd	24.67 a	4.32 ghi	19.7 a	66.0 a
16	PK 10436-2-1-1	130 ab	110 abc	16 bcde	320 gh	66 k	22.59 def	22.00 abc	4.35 gh	19.7 a	68.3 a
17	PK10437-14-2-1	135 a	113 a	13 e	260 h	72 jk	21.10 ef	22.33 abc	4.05 hij	19.3 a	69.0 a
18	PK 10683-12-1	122 cdef	111 abc	20 abcd	370 ef	73 ijk	23.15 def	20.67 c	4.52 fg	18.7 a	66.3 a
19	PK 10355-13-2-1	125 bcd	107 cde	17 bcde	340 fg	80 hi	24.65 bcdef	20.00 c	4.94 de	18.0 a	67.7 a
20	PK 10434-6-2-1	126 bcd	110 abc	14 cde	280 h	68 k	23.40 def	20.67 c	4.64 defg	19.3 a	68.7 a

*Genotypes sharing same alphabets in columns are non-significantly different (α = 0.05) from each other for that trait. *check varieties*

Supplementary Table 2: *Correlation coefficient analysis of among studied agro-physiological traits of promising Basmati rice lines during the three consecutive years of study i.e. 2016, 2017 and 2018.*

Variables		PH	DM	TPP	PL	NP	GPP	TGW	Yield	HP
DM	r^2	0.535								
	p	< 0.0001								
TPP	r^2	-0.201	-0.057							
	p	0.123	0.664							
PL	r^2	-0.319	-0.041	0.132						
	p	0.013	0.756	0.315						
NP	r^2	-0.158	-0.102	0.733	0.047					
	p	0.229	0.437	< 0.0001	0.723					
GPP	r^2	-0.254	-0.146	0.210	0.772	0.144				
	p	0.050	0.265	0.107	< 0.0001	0.271				
TGW	r^2	-0.337	-0.140	-0.235	0.029	-0.318	-0.215			
	p	0.009	0.287	0.071	0.825	0.013	0.098			
Yield	r^2	0.042	-0.333	-0.109	-0.233	-0.141	-0.053	-0.115		
	p	0.752	0.009	0.405	0.073	0.284	0.685	0.383		
HP	r^2	0.048	-0.016	-0.058	-0.139	-0.042	-0.097	0.279	0.007	
	p	0.715	0.906	0.661	0.290	0.748	0.463	0.031	0.961	
RP	r^2	0.201	-0.023	-0.020	-0.146	0.051	-0.051	-0.195	0.288	-0.074
	p	0.123	0.864	0.878	0.266	0.696	0.698	0.135	0.026	0.575

r*²: *Correlation coefficient;* p: *probability of confidence;* PH: *Plant height;* DM: *Days to maturity;* NTP: *Number of tillers per plant;* PL: *Panicle length;* NP: *Number of panicles per plant;* NGP: *Number of grains per panicle;* TGW: *Thousand grain weight;* HP: *Husk percentage;* RP: *Milling recovery percentage;* GY: *Grain yield.

Links Researchers