

Supplementary table 1. Mean performance of BC₂F₃ lines for yield and related traits

S. No.	Plant identity	DIF	DFF	DM	PH	TT	PT	PL	FG	TW	KL	KB	LB	GPY
1	BC ₂ F ₃ (a)- 3-2	88.00	93.00	127.00	100.75*	11.00	10.00	24.00	259.00	12.08	4.99	1.28	3.90	29.10 ^{¶†}
2	BC ₂ F ₃ (a)- 3-5	87.00	92.00*	127.00	95.65*	11.00	10.00	25.45	262.00	11.87	4.38	1.43	3.07	29.32 ^{¶†}
3	BC ₂ F ₃ (a)- 3-14	86.00	91.00*	124.00	99.85*	12.00	11.00	24.90	280.00	12.24	4.76	1.36	3.51	30.59 ^{**¶†}
4	BC ₂ F ₃ (a)- 3-17	91.00	94.00	127.00	103.10	10.00	9.00	20.95	216.00	10.52	4.51	1.36	3.31	24.34
5	BC ₂ F ₃ (a)- 3-20	89.00	93.00	128.00	107.30	10.00	9.00	19.25	241.00	10.31	4.71	1.47	3.21	22.80
6	BC ₂ F ₃ (a)- 3-22	90.00	93.00	125.00	95.85*	12.00	10.00	23.30	256.00	12.03	4.65	1.49	3.13	27.18 [†]
7	BC ₂ F ₃ (a)- 3-24	88.00	93.00	128.00	102.00	10.00	9.00	20.20	220.00	10.72	4.59	1.47	3.11	23.08
8	BC ₂ F ₃ (a)- 3-26	91.00	94.00	126.00	100.95*	11.00	8.00	22.15	240.00	10.79	4.55	1.42	3.21	22.57
9	BC ₂ F ₃ (a)- 3-27	90.00	94.00	129.00	102.50	10.00	9.00	22.00	239.00	10.41	4.50	1.47	3.06	29.25 ^{¶†}
10	BC ₂ F ₃ (a)- 3-28	89.00	93.00	127.00	102.15	10.00	9.00	22.85	221.00	11.12	4.87	1.27	3.83	24.36
11	BC ₂ F ₃ (a)- 3-30	90.00	95.00	127.00	105.95	11.00	9.00	19.25	213.00	10.42	5.02	1.18	4.25	23.79
12	BC ₂ F ₃ (a)- 3-35	89.00	94.00	126.00	105.85	10.00	9.00	19.60	226.00	11.24	4.76	1.52	3.13	24.44
13	BC ₂ F ₃ (a)- 3-47	89.00	94.00	126.00	105.40	10.00	9.00	19.05	245.00	10.61	4.37	1.44	3.03	22.32
14	BC ₂ F ₃ (a)- 3-51	90.00	94.00	128.00	107.90	11.00	9.00	20.90	235.00	10.93	4.60	1.43	3.23	22.73
15	BC ₂ F ₂ (a)- 3-52	85.00	91.00*	124.00	99.25*	12.00	10.00	24.13	269.00	10.88	4.67	1.47	3.18	32.82 ^{**¶†}
16	BC ₂ F ₃ (a)- 3-54	89.00	94.00	126.00	103.45	10.00	10.00	20.55	217.00	10.79	4.53	1.34	3.38	23.25
17	BC ₂ F ₃ (a)- 3-60	88.00	94.00	122.00	104.85	11.00	10.00	24.70	230.00	11.22	4.58	1.38	3.31	26.80 [†]
18	BC ₂ F ₃ (a)- 3-61	86.00	91.00*	128.00	97.75*	12.00	10.00	25.45	264.00	10.91	5.09	1.32	3.86	28.84 ^{¶†}
19	BC ₂ F ₃ (a)- 3-63	84.00	90.00*	124.00	95.65*	11.00	10.00	25.35	270.00	10.73	4.98	1.21	4.12	32.78 ^{**¶†}
20	BC ₂ F ₃ (a)- 3-64	83.00	92.00*	121.00	99.83*	11.00	11.00	25.10	272.00	11.27	4.37	1.44	3.03	32.91 ^{**¶†}
21	BC ₂ F ₃ (a)- 3-66	90.00	94.00	125.00	103.95	10.00	9.00	21.00	236.00	10.51	5.03	1.22	4.12	23.70
22	BC ₂ F ₃ (a)- 3-71	89.00	94.00	128.00	109.25	10.00	9.00	21.50	217.00	10.5	5.11	1.23	4.15	23.56
23	BC ₂ F ₃ (a)- 3-74	87.00	92.00*	124.00	99.00*	11.00	10.00	24.55	272.00	11.69	5.10	1.27	4.02	30.51 ^{**¶†}

S. No.	Plant identity	DIF	DFE	DM	PH	TT	PT	PL	FG	TW	KL	KB	LB	GPY
24	BC ₂ F ₃ (a)- 3-83	85.00	94.00	122.00	94.25*	11.00	9.00	23.90	239.00	12.31	5.11	1.35	3.79	26.95 [†]
25	BC ₂ F ₃ (a)- 3-84	85.00	93.00	122.00	96.35*	11.00	10.00	23.80	263.00	12.00	5.12	1.25	4.10	32.02 ^{**†}
26	BC ₂ F ₃ (a)- 3-94	88.00	94.00	127.00	102.45	9.00	10.00	22.50	230.00	10.90	5.09	1.22	4.17	22.55
27	BC ₂ F ₃ (a)- 3-99	89.00	94.00	127.00	100.55*	10.00	9.00	19.95	225.00	10.38	5.09	1.27	4.01	24.56
28	BC ₂ F ₃ (a)- 3-103	89.00	95.00	127.00	104.25	10.00	9.00	19.75	230.00	11.10	4.76	1.52	3.13	21.95
29	BC ₂ F ₃ (a)- 3-104	83.00	88.00*	124.00	100.85*	11.00	9.00	25.30	270.00	12.56	4.37	1.44	3.03	26.04
30	BC ₂ F ₃ (a)- 3-107	84.00	89.00*	124.00	99.45*	11.00	10.00	24.10	277.00	11.00	4.60	1.43	3.23	31.71 ^{**†}
31	BC ₂ F ₃ (a)- 3-108	88.00	95.00	126.00	102.30	10.00	9.00	19.85	220.00	10.89	4.67	1.47	3.18	24.01
32	BC ₂ F ₃ (a)- 3-111	90.00	94.00	129.00	107.90	10.00	9.00	22.50	218.00	10.90	4.53	1.34	3.38	23.76
33	BC ₂ F ₃ (a)- 3-119	89.00	95.00	127.00	102.75	10.00	9.00	22.45	227.00	10.53	4.58	1.38	3.31	23.19
34	BC ₂ F ₃ (a)- 3-120	85.00	90.00*	122.00	97.80*	11.00	10.00	23.85	253.00	11.04	4.70	1.14	4.12	25.94
35	BC ₂ F ₃ (a)- 3-128	87.00	92.00*	126.00	104.40	11.00	9.00	22.05	226.00	11.00	4.90	1.18	4.15	23.02
36	BC ₂ F ₃ (a)- 3-134	85.00	90.00*	128.00	98.75*	12.00	10.00	24.00	272.00	10.46	4.88	1.17	4.17	28.59 [†]
37	BC ₂ F ₃ (a)- 3-137	89.00	93.00	127.00	107.75	10.00	9.00	20.65	225.00	10.73	5.07	1.36	3.73	24.69
38	BC ₂ F ₃ (a)- 3-148	84.00	92.00*	123.00	99.75*	12.00	10.00	25.35	281.00	10.55	5.14	1.25	4.11	32.02 ^{**†}
39	BC ₂ F ₃ (a)- 3-150	87.00	92.00*	127.00	104.90	10.00	9.00	20.95	226.00	11.03	4.65	1.49	3.13	24.01
40	BC ₂ F ₃ (a)- 3-154	90.00	95.00	126.00	101.50	10.00	9.00	21.45	230.00	10.30	4.59	1.47	3.11	23.52

S. No.	Plant identity	DIF	DFE	DM	PH	TT	PT	PL	FG	TW	KL	KB	LB	GPY
41	BC ₂ F ₃ (a)- 3-167	85.00	91.00*	122.00	99.13*	12.00	11.00	25.13	282.00	11.99	5.04	1.27	3.97	32.77*††
42	BC ₂ F ₃ (a)- 3-171	83.00	90.00*	122.00	97.95*	12.00	10.00	25.75	287.00	11.87	5.07	1.23	4.12	31.37*††
43	BC ₂ F ₃ (a)- 3-179	88.00	94.00	127.00	102.10	10.00	9.00	19.25	227.00	10.89	4.65	1.49	3.13	24.08
44	BC ₂ F ₃ (a)- 3-183	86.00	91.00*	123.00	97.80*	12.00	11.00	24.20	272.00	11.58	4.59	1.47	3.11	30.51*††
45	BC ₂ F ₃ (a)- 3-187	87.00	92.00*	125.00	95.15*	11.00	9.00	24.80	272.00	11.93	4.55	1.42	3.21	26.71†
46	BC ₂ F ₃ (a)- 3-190	90.00	95.00	126.00	102.05	10.00	9.00	21.05	223.00	10.92	4.50	1.47	3.06	24.45
47	BC ₂ F ₃ (a)- 3-199	88.00	93.00	127.00	102.05	10.00	9.00	20.45	216.00	10.34	4.76	1.52	3.13	22.79
48	BC ₂ F ₃ (a)- 3-205	85.00	95.00	123.00	99.80*	11.00	9.00	24.90	261.00	10.78	4.84	1.58	3.06	26.84†
49	BC ₂ F ₃ (a)- 3-208	83.00	89.00*	124.00	98.90*	11.00	9.00	23.20	266.00	12.69	4.38	1.43	3.07	25.86
50	BC ₂ F ₃ (a)- 3-219	86.00	92.00*	123.00	98.30*	12.00	11.00	24.77	283.00	11.68	4.76	1.36	3.51	32.05*††
51	BC ₂ F ₃ (a)- 3-220	89.00	92.00*	126.00	107.90	10.00	9.00	18.25	220.00	11.23	4.51	1.36	3.31	24.34
52	BC ₂ F ₃ (a)- 3-221	87.00	93.00	124.00	98.90*	12.00	10.00	26.30	279.00	12.50	4.71	1.47	3.21	24.81
53	BC ₂ F ₃ (a)- 3-226	88.00	93.00	126.00	103.80	10.00	10.00	18.85	220.00	10.61	5.08	1.40	3.63	22.94
54	BC ₂ F ₃ (a)- 3-228	89.00	94.00	127.00	104.95	10.00	10.00	19.35	213.00	10.61	4.90	1.17	4.19	23.45
55	BC ₂ F ₃ (a)- 3-233	89.00	95.00	127.00	100.25*	10.00	10.00	19.15	228.00	10.90	4.80	1.18	4.07	23.25
56	BC ₂ F ₃ (a)- 3-235	89.00	93.00	130.00	97.95*	11.00	10.00	24.55	262.00	11.59	5.00	1.19	4.20	28.23††

Mean	88.00	93.00	125.00	101.62	11.00	10.00	22.46	245.00	11.11	4.76	4.76	1.36	3.53
Telangana Sona	86.00	92.00	124.00*	99.32*	12.00	10.00	25.50	270.00	12.55	4.37	1.19	3.67	25.25
10-3	96.00	103.00	130.00	85.75	10.00	9.00	20.8	93.00	24.17	6.47	2.39	2.74	20.00
KNM 1638	93.00	101.00	130.00	104.7	12.00	11.00	25.00	300.00	15.00	6.17	2.49	2.48	27.85
JGL 3844	89.00	97.00	123.00	102.75	12.00	11.00	23.75	279.00	13.9	5.83	2.22	2.63	23.9
CD	2.93	3.00	1.75	4.09	0.85	0.88	2.53	31.27	1.18	0.25	0.13	0.32	2.56
CV (%)	1.67	1.62	0.69	1.97	3.96	4.56	5.50	6.27	5.15	2.39	5.38	3.88	4.89

* - Days to 50% flowering less or on par with Telangana Sona

* - Plant height less or on par with Telangana Sona

* - Statistically significant higher yield than KNM 1638

† - Statistically significant higher yield than Telangana Sona

‡ - Statistically significant higher yield than JGL 3844