

Table 1 Comparison of variability between single cross and double cross F₄ and F₅ populations for twelve quantitative characters

Character	Populations	Mean	Range	Gcv (%)	Pcv (%)	Heritability (%)	Ga	Gam (%)
Days to first flowering	SCF4	43.59	34.0–49.0	2.56	2.64	73	1.68	3.85
	DCF4	42.52	30.0–52.0	2.79	3.12	80	2.20	5.17
	SCF5	43.44	34.0–46.0	3.90	4.29	82	3.06	7.04
	DCF5	42.14	32.0–49.0	4.38	4.78	74	1.73	4.10
Days to 50% flowering	SCF4	48.63	45.0–54.0	1.86	2.10	78	1.61	3.31
	SCF5	48.37	46.0–52.0	3.88	4.27	82	3.47	7.17
	DCF5	49.16	44.0–56.0	4.36	4.61	82	2.08	4.23
	DCF4	49.00	43.0–59.0	1.96	2.24	76	1.78	3.63
Plant height	SCF4	87.15	45.0–97.4	11.79	11.81	99	8.58	9.86
	DCF4	95.85	45.0–135.6	17.39	17.42	99	14.55	15.28
	SCF5	87.30	45.0–93.0	6.99	7.34	90	11.80	13.52
	DCF5	96.95	45.0–127.0	8.11	8.42	83	4.98	5.14
No. branches per plant	SCF4	2.65	0.0–5.0	25.78	26.27	96	1.42	53.58
	DCF4	2.60	0.0–7.0	24.24	24.44	98	1.14	43.84
	SCF5	2.70	0.0–5.0	25.07	28.16	79	1.01	37.41
	DCF5	2.67	0.0–5.0	31.02	32.37	92	1.4	52.43
Internodal length	SCF4	7.68	6.0–12.0	10.04	10.11	99	1.57	20.44
	DCF4	6.65	6.0–14.0	20.63	20.68	99	2.86	43.00
	SCF5	7.42	6.0–9.0	16.57	18.15	83	2.25	30.32
	DCF5	7.05	5.0–11.0	21.22	25.56	89	0.96	13.62
Fruit weight	SCF4	16.01	9.0–20.0	11.67	12.45	82	2.37	14.80
	DCF4	15.75	8.0–23.0	12.13	13.86	76	3.44	21.84
	SCF5	15.64	9.5–18.2	10.22	12.16	70	2.84	18.16
	DCF5	16.53	8.0–17.5	11.43	13.24	81	2.11	12.77
Fruit length	SCF4	12.55	8.0–16.5	9.63	11.91	65	1.94	15.46
	DCF4	12.80	7.0–18.0	12.94	14.17	77	2.07	16.17
	SCF5	12.64	8.0–14.5	12.20	13.87	77	3.14	24.84
	DCF5	13.44	7.5–14.11	20.33	22.14	83	1.99	14.80

Continuing table 1

Character	Populations	Mean	Range	Gcv (%)	Pcv (%)	Heritability (%)	Ga	Gam (%)
Fruit diameter	SCF4	1.99	1.3–2.4	9.76	11.11	77	0.26	13.07
	DCF4	1.82	1.2–2.6	14.40	16.10	80	0.39	21.43
	SCF5	2.05	1.5–2.4	11.54	14.06	67	0.27	13.17
	DCF5	1.90	0.98–2.65	10.06	11.05	83	0.28	14.74
Number of seeds per fruit	SCF4	63.85	52.0–69.0	4.63	4.97	86	5.67	8.88
	DCF4	63.73	51.0–76.0	4.65	5.18	80	5.34	8.38
	SCF5	62.79	54.0–69.0	8.40	8.92	88	10.35	16.48
	DCF5	63.62	54.0–73.0	9.66	9.97	85	4.42	6.96
100–seed weight	SCF4	6.43	5.0–8.0	9.63	10.52	83	1.18	18.35
	DCF4	6.35	4.0–8.0	11.61	12.86	81	1.37	21.57
	SCF5	6.40	5.5–7.0	8.72	8.72	88	1.11	17.34
	DCF5	6.67	5.0–8.5	8.77	9.07	86	0.48	7.21
Number of fruits per plant	SCF4	18.27	8.0–35.0	20.45	22.42	83	6.86	33.66
	DCF4	18.99	9.0–40.0	24.52	25.69	59	4.73	22.30
	SCF5	20.38	8.0–32.0	18.20	19.36	88	6.58	36.02
	DCF5	21.21	8.0–39.0	20.55	23.33	73	4.91	25.86
Fruit yield per plant	SCF4	294.76	135.0–520.5	17.45	18.96	85	102.11	34.64
	DCF4	304.66	123.0–670.5	20.50	23.75	60	78.78	25.86
	SCF5	306.36	159.0–510.6	17.13	18.42	87	97.02	31.66
	DCF5	316.11	165.0–629.2	22.49	25.98	75	115.46	36.52