

Supplementary Table 1 Interaction effect of spacing and different levels of fertility yield and its related horticultural traits and returns

Trait	Year	Treatment	30 cm × 10 cm	45 cm × 10 cm	60 cm × 10 cm	CD
Number of pods/plant	2019–20	100% fertility level	15.80	19.88	23.34	0.52
		75% fertility level	14.33	17.33	20.66	
		125% fertility level	15.67	19.00	24.43	
		50% N through FYM + 50% N through urea + 100% PK	14.60	19.10	22.50	
	2020–21	100% fertility level	12.63	18.83	21.23	0.47
		75% fertility level	12.50	16.53	19.30	
		125% fertility level	14.13	18.10	22.53	
		50% N through FYM + 50% N through urea + 100% PK	14.90	19.27	19.60	
	Pooled	100% fertility level	14.22	19.36	22.29	0.30
		75% fertility level	13.42	16.93	19.98	
		125% fertility level	14.90	18.55	23.48	
		50% N through FYM + 50% N through urea + 100% PK	14.75	19.18	21.05	
Pod yield/plant	2019–20	100% fertility level	63.20	114.29	121.39	2.58
		75% fertility level	57.33	99.67	107.41	
		125% fertility level	62.67	109.25	127.05	
		50% N through FYM + 50% N through urea + 100% PK	58.40	109.83	117.00	
	2020–21	100% fertility level	50.53	108.29	110.41	2.39
		75% fertility level	50.00	95.07	100.36	
		125% fertility level	56.53	104.08	117.17	
		50% N through FYM + 50% N through urea + 100% PK	59.60	110.78	101.92	
	Pooled	100% fertility level	56.87	111.29	115.90	1.57
		75% fertility level	53.67	97.37	103.89	
		125% fertility level	59.60	106.66	122.11	
		50% N through FYM + 50% N through urea + 100% PK	59.00	110.30	109.46	
Pod yield/ha	2019–20	100% fertility level	147.46	177.78	141.61	4.43
		75% fertility level	133.78	155.03	125.31	
		125% fertility level	146.22	169.94	148.22	
		50% N through FYM + 50% N through urea + 100% PK	136.26	170.83	136.49	
	2020–21	100% fertility level	117.91	168.45	128.81	3.87
		75% fertility level	116.67	147.88	117.08	
		125% fertility level	131.91	161.89	136.69	
		50% N through FYM + 50% N through urea + 100% PK	139.06	172.32	118.90	
	Pooled	100% fertility level	132.69	173.11	135.21	2.41
		75% fertility level	125.22	151.45	121.19	
		125% fertility level	139.06	165.91	142.46	
		50% N through FYM + 50% N through urea + 100% PK	137.66	171.58	127.70	
Seed yield/plant	2019–20	100% fertility level	8.04	12.92	14.95	0.40
		75% fertility level	7.11	10.13	11.68	
		125% fertility level	7.68	11.53	12.75	
		50% N through FYM + 50% N through urea + 100% PK	7.18	9.27	11.94	
	2020–21	100% fertility level	7.04	12.47	13.46	0.56
		75% fertility level	6.98	10.39	10.67	
		125% fertility level	7.28	11.98	12.74	
		50% N through FYM + 50% N through urea + 100% PK	6.11	9.61	9.67	
	Pooled	100% fertility level	7.54	12.69	14.20	

Supplementary Table 1 (Concluded)

Trait	Year	Treatment	30 cm × 10 cm	45 cm × 10 cm	60 cm × 10 cm	CD
Gross return (₹ in lakhs/ha)	2019–20	75% fertility level	7.05	10.26	11.17	0.25
		125% fertility level	7.48	11.75	12.75	
		50% N through FYM + 50% N through urea + 100% PK	6.65	9.44	10.80	
		100% fertility level	4.48	5.39	4.30	
	2020–21	75% fertility level	4.07	4.70	3.80	0.13
		125% fertility level	4.44	5.15	4.50	
		50% N through FYM + 50% N through urea + 100% PK	4.14	5.17	4.14	
		100% fertility level	3.59	5.11	3.91	
	Pooled	75% fertility level	3.55	4.49	3.55	0.12
		125% fertility level	4.01	4.92	4.15	
		50% N through FYM + 50% N through urea + 100% PK	4.22	5.22	3.60	
		100% fertility level	4.03	5.25	4.11	
Net return (₹ in lakhs/ha)	2019–20	75% fertility level	3.81	4.59	3.68	0.07
		125% fertility level	4.23	5.04	4.32	
		50% N through FYM + 50% N through urea + 100% PK	4.18	5.20	3.87	
		100% fertility level	3.43	4.34	3.26	
	2020–21	75% fertility level	3.03	3.67	2.77	0.12
		125% fertility level	3.38	4.09	3.43	
		50% N through FYM + 50% N through urea + 100% PK	3.09	4.13	3.09	
		100% fertility level	2.54	4.06	2.87	
	Pooled	75% fertility level	2.52	3.45	2.52	0.07
		125% fertility level	2.95	3.85	3.09	
		50% N through FYM + 50% N through urea + 100% PK	3.17	4.17	2.56	
		100% fertility level	2.99	4.20	3.06	
Benefit cost ratio	2019–20	75% fertility level	2.78	3.56	2.64	0.13
		125% fertility level	3.17	3.97	3.26	
		50% N through FYM + 50% N through urea + 100% PK	3.13	4.15	2.83	
		100% fertility level	3.28	4.15	3.11	
	2020–21	75% fertility level	2.93	3.54	2.68	0.11
		125% fertility level	3.19	3.86	3.24	
		50% N through FYM + 50% N through urea + 100% PK	2.96	3.95	2.96	
		100% fertility level	2.43	3.88	2.74	
	Pooled	75% fertility level	2.43	3.34	2.43	0.17
		125% fertility level	2.78	3.63	2.91	
		50% N through FYM + 50% N through urea + 100% PK	3.03	3.99	2.45	
		100% fertility level	2.85	4.01	2.92	
		75% fertility level	2.68	3.44	2.56	0.17
		125% fertility level	2.98	3.75	3.07	
		50% N through FYM + 50% N through urea + 100% PK	2.99	3.97	2.70	