

Table 1 Analysis of variance for combining ability in derived F₁ crosses for different quantitative characters

Source	d.f.	Mean sum of squares													
		See (kg d cotton yield /ha)	Plant height (cm)	No. of monopodia	No. of sympodia	No. of bolls	Mean boll weight (g)	Reproductive Points on sympodia	Length of sympodia at 50 % height (cm)	Seed index (g)	Ginning outturn (%)	Lint index (g)	Photosynthetic rate (μmol CO ₂ m ⁻² s ⁻¹)	Stomatal condu ctance ((μmol m ⁻² s ⁻¹)	Transpiration rate (mmol H ₂ O m ⁻² s ⁻¹)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Replications	1	1085229.86**	650.39	1.96**	303.32**	1484.54**	8.37**	5.41**	139.39	69.82**	2.79	77.99**	51.29**	0.034**	74.75**
Crosses	111	215277.08*	350.53*	0.20**	7.96	89.14**	0.28**	1.10**	60.89*	3.61**	15.61**	1.70**	90.50**	0.12**	4.24**
Line Effect	27	422120.75**	428.64	0.18	6.40	64.35*	0.28**	1.86**	72.82	2.66	22.45*	2.13	114.71	0.15	3.44
Tester Effect	3	354355.88**	182.50	0.14	3.65	120.97**	0.07*	0.92	10.10	6.04	11.93	2.25	79.13	0.16	13.04*
Line x Tester Effect	81	141178.12*	330.71	0.21**	8.64	96.23**	0.29**	0.86**	58.79	3.84**	13.46	1.54**	82.85**	0.11**	4.18**
Error	111	149093.70	238.15	0.06	8.58	81.66	0.28	0.24	43.06	0.89	9.69	0.66	5.39	0.00	0.61

Note: * Significant at P = 0.05 ** Significant at P = 0.01