

Table 1. Correlation matrix between the dry matter partitioning and yield components in 15 cm spacing (above diagonal) and 10 May sowing (below diagonal).

	PH	BN	BW	RDW	VDW	RVR	CGR50	CGR100	CGR150	RGR50	RGR100	RGR150	SC
PH		0.91**	-0.84**	0.96**	-0.07 ^{ns}	-0.22 ^{ns}	0.65**	0.62**	0.75**	0.77**	-0.65**	0.09 ^{NS}	0.94**
BN	0.72**		-0.89**	0.79**	-0.47*	0.19 ^{ns}	0.29 ^{NS}	0.24 ^{NS}	0.82**	0.46*	-0.34 ^{NS}	0.46*	0.98**
BW	-0.47*	-0.95**		-0.71**	0.38 ^{ns}	-0.14 ^{ns}	-0.34 ^{NS}	-0.25 ^{NS}	-0.53**	-0.51*	0.47*	-0.22 ^{NS}	-0.84**
RDW	0.99**	0.76**	-0.53*		0.14 ^{ns}	0.42*	0.8**	0.77**	0.74**	0.89**	-0.80**	-0.06 ^{NS}	0.86**
VDW	0.94**	0.67**	-0.43*	0.99**		-0.86**	-0.90**	0.11 ^{NS}	-0.75**	0.75**	0.86**	0.09 ^{NS}	-0.86**
RVR	0.44*	0.80**	-0.78**	0.52*	0.39 ^{NS}		0.98**	0.30 ^{NS}	-0.98**	0.96**	-0.61**	-0.81**	0.98**
CGR50	0.97**	0.60*	-0.36 ^{NS}	0.96**	0.99**	0.87**		0.25 ^{NS}	0.95**	-0.91**	-0.65**	0.35 ^{NS}	0.25 ^{NS}
CGR100	0.99**	0.61*	-0.34 ^{NS}	0.97**	0.98**	0.36 ^{NS}	0.98**		0.42*	-0.28 ^{NS}	0.56*	0.89**	0.42*
CGR150	0.63**	0.93**	-0.89**	0.72**	0.61**	0.27 ^{NS}	0.52*	0.53*		-0.97**	-0.48*	0.56*	-0.97**
RGR50	0.98**	0.53*	-0.32 ^{NS}	0.97**	0.99**	0.93**	0.99**	0.99**	0.54*		-0.97**	-0.48**	0.56**
RGR100	-0.37**	-0.23 ^{NS}	0.21 ^{NS}	-0.37 ^{NS}	-0.45*	0.33 ^{NS}	-0.53*	-0.33 ^{NS}	-0.17 ^{NS}	-0.44*		0.57*	-0.44**
RGR150	0.39 ^{NS}	0.85**	-0.89**	0.49*	0.36 ^{NS}	0.29 ^{NS}	0.24 ^{NS}	0.27 ^{NS}	0.95**	0.24 ^{NS}	0.06 ^{NS}		0.42*
SC	0.69**	1.00**	-0.95**	0.73**	0.64**	0.81**	0.57*	0.58*	0.90**	0.55*	-0.19 ^{NS}	0.84**	

PH= (Plant height), BN= (Boll number), BW= (Boll weight), RDW= (Root dry matter), VDW= (Vegetative dry matter), RVR (Reproductive vegetative ratio, CGR50=(Crop Growth Rate after 50 days), CGR100=(Crop Growth Rate after 100 days), CGR150= (Crop Growth Rate after 150 days), RGR50= (Relative Growth Rate after 50 days), RG100=(Relative Growth Rate after 100 days), RG150= (Relative Growth Rate after 100 days), SC=(Seed Cotton Yield)

Table 2. Path analysis for high seed cotton yield under 10-May sowing, the values in bold are direct effects of the traits on seed cotton yield.

	PH	BN	BW	RDW	VDW	RVR	CGR50	CGR100	CGR150	RGR50	RGR100	RGR150
PH	-0.03	0.30	-0.38	-0.52	-0.27	2.89	-4.82	5.62	1.78	-2.72	1.43	-2.60
BN	-0.02	0.42	-0.77	-0.40	-0.18	5.26	3.46	-2.98	2.63	-1.64	0.89	-5.68
BW	0.01	-0.40	0.81	0.28	0.12	-5.13	1.79	-1.93	-2.52	0.89	-0.81	5.94
RDW	-0.03	0.32	-0.43	-0.52	-0.27	3.42	-4.77	5.51	2.04	-2.69	1.43	-3.27
VDW	-0.02	0.28	-0.35	-0.52	-0.27	2.56	-4.92	5.56	1.73	-2.74	1.74	-2.40
RVR	-0.01	0.33	-0.63	-0.27	-0.11	6.57	2.46	2.04	-1.24	-0.86	-1.27	-6.21
CGR50	-0.03	0.25	-0.29	-0.50	-0.27	1.64	5.68	-2.74	1.47	5.56	2.04	-1.60
CGR100	-0.03	0.25	-0.27	-0.50	-0.27	2.37	-4.87	-4.97	1.50	-2.74	1.27	-1.80
CGR150	-0.02	0.39	-0.72	-0.37	-0.17	5.72	-2.59	3.01	2.83	-1.50	0.66	-6.34
RGR50	-0.03	0.22	-0.26	-0.50	-0.27	2.04	-4.92	5.62	1.53	-2.77	1.70	-1.80
RGR100	0.01	-0.10	0.17	0.19	0.12	2.17	2.64	-1.87	-0.48	1.22	-3.86	-0.40
RGR150	-0.01	0.35	-0.72	-0.26	-0.10	6.11	-1.19	1.53	2.69	-0.67	-0.23	-6.68

PH= (Plant height), BN= (Boll number), BW= (Boll weight), RDW= (Root dry matter), VDW= (Vegetative dry matter), RVR (Reproductive vegetative ratio, CGR50=(Crop Growth Rate after 50 days), CGR100= (Crop Growth Rate after 100 days), CGR150= (Crop Growth Rate after 150 days), RGR50= (Relative Growth Rate after 50 days), RG100=(Relative Growth Rate after 100 days), RG150= (Relative Growth Rate after 100 days)

Table 3. Path analysis for high seed cotton yield under 15cm spacing, the values in bold are direct effects of the traits on seed cotton yield.

	PH	BN	BW	RDW	VDW	RVR	CGR50	CGR100	CGR150	RGR50	RGR100	RGR150
PH	0.02	-1.85	1.19	3.82	-0.02	0.13	0.26	-1.34	0.63	-1.01	-0.80	-0.08
BN	0.02	-2.03	1.26	3.14	-0.14	-0.11	0.12	-0.52	0.68	-0.60	-0.42	-0.41
BW	-0.01	1.81	-1.42	-2.82	0.12	0.08	-0.14	0.54	-0.44	0.67	0.58	0.19
RDW	0.02	-1.60	1.01	3.98	0.04	0.25	0.32	-1.67	-1.17	0.62	-0.98	0.05
VDW	0.00	0.95	-0.54	0.56	0.31	0.57	0.27	-1.60	-0.29	-0.71	-0.70	0.81
RVR	0.00	-0.39	0.20	-1.67	-0.29	-0.60	-0.35	1.95	0.09	0.99	0.92	-0.76
CGR50	0.01	-0.59	0.48	3.18	0.21	0.52	0.40	-2.12	0.25	-1.29	-1.18	0.54
CGR100	0.01	-0.49	0.35	3.06	0.23	0.54	0.39	-2.16	0.21	-1.25	-1.12	0.57
CGR150	0.01	-1.67	0.75	2.94	-0.11	-0.07	0.83	-0.54	0.12	-0.55	-0.34	-0.49
RGR50	0.01	-0.93	0.72	3.54	0.17	0.45	0.39	-2.06	-1.32	0.35	-1.19	0.42
RGR100	-0.01	0.69	-0.67	-3.18	-0.17	-0.45	1.23	1.97	-0.23	1.28	-0.39	-0.50
RGR150	0.00	-0.93	0.31	-0.24	-0.28	-0.52	-0.24	1.41	0.47	0.63	0.70	-0.88

PH= (Plant height), BN= (Boll number), BW= (Boll weight), RDW= (Root dry matter), VDW= (Vegetative dry matter), RVR (Reproductive vegetative ratio, CGR50=(Crop Growth Rate after 50 days), CGR100=(Crop Growth Rate after 100 days), CGR150= (Crop Growth Rate after 150 days), RGR50= (Relative Growth Rate after 50 days), RG100=(Relative Growth Rate after 100 days), RG150= (Relative Growth Rate after 100 days)