MONTHLY REPORT OF

PLANT BREEDING & GENETICS SECTION, CENTRAL COTTON RESEARCH INSTITUTE, MULTAN FOR THE MONTH OF SEPTEMBER, 2026

The following operations were performed in research experiments during the month under report.

Sr. No.	Section	Name of Incharge/Staff	Activity	Experiment Title	Progress
1.	Plant Breeding & Genetics	**Dr. Muhammad Idrees Khan**, SSO/Head Scientific Officers = 3 Supporting Staff = 9	CCRIM/PBG/ 2026/ 01.	**Varietal trial-1-3** **Evaluation Bt. strains against commercial varieties.**	The boll data were recorded and average is given in Table-1.
			02.	**Micro-Varietal Trial-1-4** **Evaluation of newly bulked Bt. strains against commercial varieties.**	The boll data were recorded and average is given in Table-1.
			03.	**Standard Varietal Trials 1&2** **Evaluation of commercial Bt. & non-Bt. varieties at CCRI Multan condition**	The boll data were recorded and average is given in Table-1.
			04.	**F_1 Hybrids B-1 to B-3 To raise F2 population for further selection according to desirable traits**	The cultural & plant protection practices are in progress.
			05.	**F2-5 generation Block 1-3 to select the segregates for further Filial generation according the desirable traits.**	The cultural & plant protection practices are in progress.
			06.	**Early generation seed (Bt.) To produce pre-basic seed of approved commercial varieties of CCRI, Multan (Bt. CIM-990, Bt. CIM-663, Bt. CIM-785, Bt. CIM-343)**	The cultural & plant protection practices are in progress.
			07.	**Bulk Varieties (Bt. CIM-990, Bt. CIM-810)**	The cultural & plant protection practices are in progress.
			08.	**Maintenance of genetic stock**	The cultural & plant protection practices are in progress.
			09.	**Fresh crosses**	The cultural & plant protection practices are in progress.
			10.	**Miscellaneous (organic cotton trial)**	The cultural & plant protection practices are in progress.

1/10/2026.

Head

Plant Breeding & Genetics

Table-1 Data of Number of Boll per Plant in Different Varietal Trials of Plant Breeding & Genetics Section, CCRI, Multan

Sr. No.	Experiments	Sowing date	Varieties									
1.	Varietal Trial-1	10/03	CM-1	CM-2	CM-3	CM-4	CM-5	CM-6	CM-7	CM-8	CM-9	CM-10
			36.4	18.4	44.2	31.2	45.6	32.2	18.6	33.8	22.2	39.0
2.	Varietal Trial-2	10/03	CM-11	CM-12	CM-13	CM-14	CM-15	CM-16	CM-17	CM-18	CM-19	CM-20
			15.8	31.0	26.2	38.4	30.2	34.0	32.2	35.2	48.0	42.6
3.	Varietal Trial-3	10/03	CM-21	CM-22	CM-23	CM-24	CM-25	CM-26	CM-27	CM-28	CM-29	CM-30
			44.4	52.0	43.2	51.8	57.2	53.2	43.8	47.6	42.4	33.0
4.	Micro-Varietal Trial-1	9/03	MV-1	MV-2	MV-3	MV-4	MV-5	MV-6	MV-7	MV-8	MV-9	CIM-990
			33.4	38.0	35.8	40.8	38.8	39.4	30.4	37.0	41.2	31.6
5.	Micro-Varietal Trial-2	28/04	MV-10	MV-11	MV-12	MV-13	MV-14	MV-15	MV-16	MV-17	MV-18	CIM-990
			45.0	26.4	39.4	23.2	33.2	28.6	24.0	38.2	44.0	54.8
6.	Micro-Varietal Trial-3	23/04	MV-19	MV-20	MV-21	MV-22	MV-23	MV-24	MV-25	MV-26	CIM-990	
			20.4	34.6	30.4	60.0	47.2	53.8	34.4	57.6	29.4	
7.	Micro-Varietal Trial-4	23/04	MV-27	MV-28	MV-29	MV-30	MV-31	MV-32	MV-33	CIM-990		
			40.8	51.4	29.6	35.0	27.2	30.6	34.4	39.6		
8.	Standard Varietal Trial-1 Non Bt. Varieties	15/5	CIM-496	CIM-482	CIM-573	CIM-608	CIM-610	CIM-620	CIM-717	Cyto-124		
			14.0	11.3	9.7	10.1	14.1	13.5	15.5	18.5		
9.	Standard Varietal Trial-2 Bt. Varieties	18/5	CIM-343	CIM-663	CIM-785	CIM-762	CIM-792	CIM-801	CIM-775			
			20.7	22.2	19.8	21.1	19.9	20.2	20.3			

VT-1

Maximum no of bolls were observed in CM-5 (45.6) followed by CM-3 (44.2) as compared to check CIM-990 (39.0).

VT-2

Maximum no of bolls were observed in CM-19 (48.0) followed by CM-14 (38.4) as compared to check CIM-990(42.6).

VT-3

Maximum no of bolls were observed in CM-25 (57.2) followed by CM-26 (53.2) as compared to check CIM-990 (33.0).

MVT-1

Maximum no of bolls were observed in MV-9 (41.2) followed by MV-4 (40.8) as compared to check CIM-990 (31.6).

MVT-2

Maximum no of bolls were observed in MV-10 (45.0) followed by MV-18 (44.0) as compared to check CIM-990 (54.8).

MVT-3

Maximum no of bolls were observed in MV-22 (60.0) followed by MV-26 (57.6) as compared to check CIM-990 (29.4).

MVT-4

Maximum no of bolls were observed in MV-28 (51.4) followed by MV-27 (40.8) as compared to check CIM-990 (39.6).

S. TheScoop

Details of EGS-2026

Field No	Variety	Area	Date of sowing	Remarks	General observation
3/9	Bt. CIM-990	1.5	26-04-2026	Germination was good, and the crop remained healthy up to the first picking. The line has big bolls and good lodging resistance. It is a single-gene line.	All fields were severely damaged by dusky bug infestation and are now under severe infestation of pink bollworm. Spraying was scheduled only after the crop had already become heavily infested. Traps were installed for monitoring whitefly and pink bollworm; however, the trap capsules were not replaced at the prescribed intervals. Gum application was also not repeated as required, which may have reduced the effectiveness of the traps. Based on the current condition of the seed, poor seed germination is expected in the next season. **Note:** Approximately 25 acres of breeding crop have been severely damaged by dusky bug and pink bollworm infestations. The resulting economic loss may be assessed and quantified by the designated committee.
4/28	CIM-785	1.5	13-05-2026	Sowing was delayed due to the late harvesting of wheat and the subsequent land preparation. However, all necessary preparations for sowing were completed by February.	
4/31	CIM-343	1.5	07-05-2026	The crop was sown late and was severely affected by jassid infestation. Entomological observations indicated very poor resistance to jassids, and the crop exhibited significant stunting.	
4/32	CIM-663	1.5	07-05-2026	Germination was very low in the BNS block. The previous year's crop had been severely damaged by dusky bug infestation and inadequate pest management. Seed vigor was also very low, which contributed to poor germination.	

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