

**No. F. PCCC-DR-550(NCVT)/2019/568
Government of Pakistan
Ministry of National Food Security & Research
Pakistan Central Cotton Committee
Directorate of Agriculture Research

Multan, 20th July, 2020

Subject: 2019-NCVT – Final Field Trial and Biochemical Test Results

Dear All,

Please find attached the Final “2019 National Coordinated Varietal Trial (NCVT)” results of 102 strains tested in the field trials in 15 different Agro-ecological zones of the National Cotton Belt. Some changes in the results of Set-A & B have been made that were due to some error in adding the data of one location and it was highlighter and corrected later on. Results of some companies have been halted due to non-payment of due testing fees which may be decoded and released once fees from them are received.

2. Errors and Omissions are still accepted and your valuable inputs and suggestions to improve the National Cotton Varietal Testing Program in black and white are always welcomed.

We are grateful to all public and private sector breeders/companies for their good cooperation and collaboration in conducting all these tests and trials in best national interest.

Yours truly,



(Dr. Tassawar Hussain Malik)
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Enclosed: 2019 NCVT/BCT results as a pdf file (20 pages)

Distribution: All concerned.

Information: VP, PCCC, Multan/Islamabad.

Ministry of National Food Security & Research
Pakistan Central Cotton Committee (PCCC), Multan
Directorate of Agriculture Research
2019- NCVT Field Trial Results

Annexure-I: Average Seed-Cotton/Phutti Yield (kg/hectare) of Set-A at Provinces and Country Levels (Descending Order on Pakistan Basis)

Sr.	Code	Denomination	PUNJAB							SINDH				BALOCHISTAN				KPK	*PAKISTAN		
			CCRI	ICI	CRS	CRS	CRS	CRS	Punjab	CCRI	CRS	CRS	ARI	Sindh	CRS	CRS	ARI	Balochistan	CRS		
			Multan	Multan	Bur	Sahiwal	Khanpur	Vehari	Fabad	Average	Sakrand	Ghotki	M.P.K	T.Jam	Average	Lashella	Sibbi	Khuzdar	Average	D.I. Khan	Average
1	PC-1919	Saim-102	2042	3525	986	3213	2712	1468	2600	2348	2286	2571	1746	2260	3945	2739	3608	3431	1905	2519	
2	PC-1916	Tahafuz-12 (C-II)	2061	2492	1422	3175	2489	1488	2851	2283	2560	2431	1942	1965	2475	2738	2010	2858	2535	1766	2350
3	PC-1902	Weal-AG-30(CKC)	1541	3272	1114	3099	2388	1450	2546	2197	2116	1513	2960	2153	2886	2968	2514	3201	2894	1630	2296
4	PC-1913	Diamond-2	1806	2830	1011	2872	2106	1070	2474	2024	1506	1827	2272	2044	1912	4055	3220	3951	3742	1343	2292
5	PC-1912	Tahafuz-15	1953	2611	1178	3704	2032	1261	2295	2148	2333	2143	2810	2246	2383	2704	2192	2781	2559	2014	2284
6	PC-1911	Tassco-112	1692	2832	1012	3024	2018	1277	2116	1996	2114	1630	2690	2316	2188	3306	2110	3395	2937	1498	2202
7	PC-1924	NS-211	2306	2523	1498	2268	2614	1064	2152	2061	1712	2292	2810	1799	2153	3044	1958	3082	2695	1708	2189
8	PC-1908	PC-1908	1389	2314	986	3628	2452	838	3228	2119	1533	1384	3049	2211	2044	2602	2619	2617	2613	1401	2150
9	PC-1923	PC-1923	1965	2213	1114	3061	2222	1603	2689	2124	2100	1723	2212	1430	1866	2644	2184	2678	2502	1934	2118
10	PC-1905	Weal-AG-10	1786	2307	1037	2948	2039	1118	1900	1876	1842	1714	2930	1694	2045	2957	2562	3048	2856	1411	2086
11	PC-1918	Sayban-209	1708	3026	1127	2721	2006	1205	2277	2010	1792	2105	2451	2164	2128	2167	2287	2239	2231	1530	2054
12	PC-1901	Weal-AG-201(C-II)	1723	2660	1140	2343	2189	1297	2044	1914	1990	840	2511	1412	1688	2821	2982	2886	2896	1172	2001
13	PC-1917	Suncorp(C-II)	2014	2802	1434	2268	1853	1089	1918	1911	1947	1330	2541	1488	1827	2475	2330	2508	2438	1956	1997
14	PC-1904	Weal-AG-7	1945	2381	1114	3024	1926	1170	2151	1959	2017	1559	2631	1814	2005	2202	2385	2234	2274	1275	1989
15	PC-1906	Weal-AG-9	2447	2292	1306	2079	2168	2546	1255	2013	887	651	3169	1851	1640	1862	2070	3693	2542	1537	1988
16	PC-1921	Rohi-1	1514	1231	1408	2835	1929	820	1847	1655	1925	1467	2601	1691	1921	2896	2535	2961	2797	2127	1986
17	PC-1907	PC-1907	1760	2067	870	3326	1732	1141	1972	1838	2004	1321	2690	2098	2028	2476	2794	2518	2596	978	1983
18	PC-1915	CIM-602 (B-Standard)	1498	1598	1088	2494	1602	1044	2618	1706	2156	972	2421	2265	1954	2836	2386	2899	2707	1582	1964
19	PC-1914	Suncorp-3	1336	1520	1114	2268	2106	1270	2259	1696	2061	1238	2691	1754	1936	2625	2251	2708	2528	1701	1927
20	PC-1920	Rohi-2	1268	1901	1037	2948	1606	1013	2277	1721	1454	1023	2212	1587	1569	2805	2640	2836	2760	1808	1894
21	PC-1910	Tassco-115	1260	1127	666	2116	1546	651	2044	1344	1992	740	3049	2777	2140	3318	2691	3386	3132	833	1880
22	PC-1903	Weal-AG-8	1924	2234	1012	2381	2034	1603	1560	1821	1903	612	2750	1639	1726	2146	2385	2250	2260	1553	1866
23	PC-1922	TJ-King(C-II)	1292	1194	1281	2305	1822	933	2044	1553	1826	606	2810	1506	1687	2700	2614	2736	2683	1982	1843
24	PC-1909	PC-1909	1554	1581	794	2268	1816	871	1793	1525	1498	1143	2451	1617	1677	2478	3342	2529	2783	1181	1794
		Average:	1741	2272	1115	2765	2057	1220	2205	1911	1904	1440	2676	1886	1977	2782	2492	2900	2725	1576	2069

Statistical Analysis Results

1	CD 5%	80	477	339	231	453	373	187	***	473	363	541	421	***	696	259	649	***	205	***
2	CD 1%	107	637	453	308	605	498	250	***	632	485	723	563	***	929	345	867	***	274	***
3	Significance	**	**	**	**	**	**	**	***	**	**	**	**	***	**	**	**	***	**	***
4	CV %	2	12	18	5	13	18	5	***	15	15	12	13	***	15	6	13	***	7	***

Notes:	1	* "Pakistan-Average" has been worked out on the basis averages of all fifteen (15) locations for more accuracy.
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	2	** NCVT "Field trials results should be associated with Fiber-Testing and Biochemical-Testing results of reference labs.
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3	Errors and omissions are accepted. Detailed Final results shall be released in due course.
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(Dr.Tassawar Hussain Malik) Director Research	Page-1/20
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**Pakistan Central Cotton Committee (PCCC), Multan
Directorate of Agriculture Research**

2019- NCVT Field Trial Results

Annexure-II: Average Seed-Cotton/Phutti Yield (kg/hectare) of Set-B at Provinces and Country Levels (Descending Order on Pakistan Basis)

Annexure-II: Average Seed-Cotton/Fruit/Yield (kg/hectare) of Set-B at Provinces and Country Levels (Descending Order on Pakistan Basis)																					
Sr.	Code	Denomination	PUNJAB					SINDH					BALOCHISTAN					KPK CRS D.I. Khan	*PAKISTAN Average		
			CCRI Multan	ICI Multan	CRS B.pur	CRS Sahiwal	CRI Khanpur	CRS Vehari	CRS Fahad	Punjab Average	CCRI Sakrand	CRS Ghotki	CRS M.P.K	ARI T.Jam	Sindh Average	CRS Lasbella	CRS Sibbi			ARI Khuzdar	Balochistan Average
1	PC-1930	Rustam-11	2288	3908	1467	3288	1908	1496	3030	2484	2847	2301	2690	1857	2424	3708	3206	3745	3553	2086	2655
2	PC-1941	BF-1	1986	3120	1348	2570	1840	1192	2152	2030	2211	2377	2690	1687	2241	3288	2970	3334	3197	1556	2288
3	PC-1927	Eye-20	2022	2579	1431	3402	1645	1153	2582	2116	1828	1957	2929	1569	2071	3882	2159	3889	3310	1023	2270
4	PC-1950	NIAB-SANAB-M	2348	2747	1599	3402	1711	1416	3138	2337	2578	2189	2571	1579	2229	2236	1957	2766	2320	1766	2267
5	PC-1942	BS-20	2517	2125	1276	3439	1401	1384	2438	2083	2063	1968	2690	1436	2039	3366	2947	3371	3228	904	2222
6	PC-1945	ASPL-710	1954	2894	1205	3402	1979	1320	2564	2188	1895	1920	3169	1616	2150	2925	2867	2928	2907	649	2219
7	PC-1926	Eye-111	2123	2436	1265	3024	1672	1145	2905	2081	1947	1938	2661	1831	2094	2792	3386	2832	3003	1262	2215
8	PC-1931	ICI-2424	1722	2857	1408	3704	2087	1181	2098	2151	2119	1698	2691	1536	2011	2732	2289	2808	2610	1989	2195
9	PC-1933	YBG-2222(C-II)	1905	2855	1062	2948	1826	1276	2384	2037	1841	2186	2690	1637	2089	3134	2257	3273	2888	1417	2179
10	PC-1947	IR-NIBGE-15	1861	1893	1062	3877	2002	1218	2331	2035	1865	1729	2631	1513	1935	3360	2814	3384	3186	600	2143
11	PC-1925	Eye-22	1938	2606	1432	2608	1491	740	2654	1924	1947	1989	2930	1546	2103	2925	2357	3012	2765	1960	2142
12	PC-1949	IR-NIBGE-13	2200	2627	1265	3855	1841	1374	2277	2206	1960	1485	2571	1674	1923	2523	2641	2571	2578	1201	2138
13	PC-1935	CIM-602 (Bt-Standard)	1986	1895	1074	2986	1364	840	2636	1826	2464	1727	2690	2029	2228	3054	3064	3196	3105	1046	2137
14	PC-1944	Bahar-136	2095	2415	1205	2759	1872	1558	2313	2031	2317	2441	2930	1748	2359	2589	1971	2634	2398	1081	2129
15	PC-1948	IR-NIBGE-14	2125	2357	1241	4120	1654	1427	2169	2156	1956	1857	2511	1493	1954	2589	2392	2661	2547	1181	2116
16	PC-1934	Eagle-4	2138	2507	1157	2835	1999	1124	2654	2059	1947	2446	2690	1505	2147	2242	2390	2331	2321	1340	2087
17	PC-1946	ASPL-709	2049	2596	1241	3024	1716	1352	2672	2093	1940	1588	2690	1157	1844	2995	2039	3024	2686	781	2058
18	PC-1938	Ghauri-2(CKC)	1561	1679	1467	3364	1496	680	2815	1866	1832	1132	2930	1671	1891	2646	2689	2681	2672	1114	1984
19	PC-1943	BS-J5	1600	2143	1193	3024	1311	900	1847	1717	1199	1661	2690	1508	1765	3300	2276	3304	2960	1210	1944
20	PC-1936	Eagle-3	2207	1795	1014	2948	1479	841	2205	1784	2022	1162	2690	1540	1854	2834	2215	2860	2636	1201	1934
21	PC-1932	YBG-2323(CKC)	1836	2223	1026	2797	1874	819	2313	1841	1283	1150	2332	1330	1524	2864	2893	3040	2932	1013	1920
22	PC-1937	Hatf-3(CKC)	1841	2231	1300	2797	1416	859	2474	1845	2010	1186	2750	1502	1862	2179	2778	2257	2405	1068	1910
23	PC-1929	Rustam-Beej-11(C-II)	1879	2238	1062	2381	1848	619	1900	1704	1194	1247	2690	1611	1686	2769	2233	2799	2600	1343	1854
24	PC-1939	Badar-3(C-II)	1351	1108	1169	3213	1784	777	2905	1758	1524	1125	2332	1126	1527	2732	2872	2877	2827	558	1830
25	PC-1940	Badar-4(C-II)	1498	1545	1002	3213	1703	658	2385	1715	1151	653	2571	1598	1493	2792	3023	2787	2867	645	1815
26	PC-1928	Rustam-Beej-111(CKC)	1673	1635	990	3099	1636	567	2331	1704	1239	704	2703	1502	1537	2638	2406	2681	2575	594	1760
		Average:	1950	2347	1229	3157	1714	1074	2468	1991	1892	1685	2697	1569	1961	2888	2580	2963	2811	1176	2093
Statistical Analysis Results																					
1	CD 5%		117	470	176	264	552	342	173	***	619	277	568	393	***	751	212	695	***	203	***
2	CD 1%		156	626	234	352	736	456	231	***	823	369	757	524	***	1001	283	926	***	270	***
3	Significance		**	**	**	**	NS	**	**	***	**	**	NS	*	***	**	**	**	***	**	***
4	CV %		3	12	8	5	19	19	4	***	10	10	12	15	***	15	5	14	***	10	***
Notes:	1	* "Pakistan-Average" has been worked out on the basis averages of all fifteen (15) locations for more accuracy.																		 20th July 2020	
	2	** NCVT "Field trials results should be associated with Fiber-Testing and Biochemical-Testing results of reference labs.																			
	3	Errors and omissions are accepted. Detailed Final results shall be released in due course.																			
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2019- NCVT Field Trial Results

S	C	D	PUNJAB								SINDH					BALOCHISTAN				KPK	*PAKISTAN
			CGPI	LP	GRS	GRS	GRPI	GRS	MLP	P	CGPI	GRS	GRS	ML	P	GRS	GRS	ML	P	GRS	

Statistical Analysis Results																				
1	CD 5%	119	293	215	252	356	360	-	***	530	200	410	880	***	706	186	549	***	178	***
2	CD 1%	159	391	287	337	474	479	-	***	708	267	548	1166	***	943	248	733	***	238	***
3	Significance	**	**	**	**	**	**	-	***	**	**	NS	*	***	**	**	**	**	**	**
4	CV %	3	11	10	4	11	11	-	***	15	7	9	11	***	15	4	11	***	5	***
Notes:	1	* "Pakistan-Average" has been worked out on the basis averages of all fifteen (15) locations for more accuracy.															<u>20th July 2020</u>			
	2	** NCVT "Field trials results should be associated with Fiber-Testing and Biochemical-Testing results of reference labs.																		
	3	Errors and omissions are accepted. Detailed Final results shall be released in due course.																		
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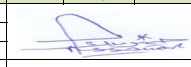
Pakistan Central Cotton Committee (PCCC), Multan

Directorate of Agriculture Research

2019- NCVT Field Trial Results

Annexure-IV: Average Seed-Cotton/Phutti Yield (kg/hectare) of Set-D at Provinces and Country Levels (Descending Order on Pakistan Basis)

Sr.	Code	Denomination	PUNJAB							SINDH					BALUCHISTAN					*PAKISTAN Average
			CCRI Multan	NEELUM Multan	CRS B.pur	JSC Sahiwal	CRS R.Y.Khan	NIBGE Vehari	Punjab Fahad Average	CCRI Sakrand	CRS Ghotki	TASSCO T. A.YAR	SAU T.Jam	Sindh Average	CRS Lasbella	CRS Sibi	ARI Khuzdar	Balochistan Average	KPK CRS D.E. Khan	
1	PC-1988	Bt-CIM-775	3059	3458	1621	3402	2043	1551	1827	2423	2507	1752	2479	2587	2331	3910	2132	3328	2552	2588
2	PC-2000	Sahara-Klean-5	2087	1840	1980	3288	2748	1344	1869	2165	3275	1875	3190	2515	2714	3378	2777	3356	3170	2508
3	PC-1980	CEMB-Klean-Cotton-4	1623	3233	1119	3477	2292	1351	1451	2078	2761	2124	2585	2716	2547	3492	2032	3480	3001	2268
4	PC-1981	CEMB-Klean-Cotton-3	1756	3290	1205	3666	2023	973	2216	2161	2662	1911	2493	2839	2476	2541	3029	2621	2730	2358
5	PC-1979	CEMB-Klean-Cotton-5	1810	2980	1176	3515	2495	1229	1455	2094	2440	2043	2529	2406	2355	3456	2029	3547	3011	2188
6	PC-1978	CEMB-Klean-Cotton-6	1442	3611	1147	3364	2199	1220	1778	2109	2311	2046	2341	2814	2378	3007	2320	3062	2796	2318
7	PC-2001	Sahara-300	1668	2026	1693	3364	2265	1217	2243	2068	2720	2016	2754	1991	2370	2840	2923	2860	2874	2306
8	PC-1996	NIA-88	2013	2478	1147	2494	2678	615	2414	1977	3117	965	2402	2544	2257	3480	2735	3530	3248	2301
9	PC-1990	Bt-CIM-789	1992	3405	961	2910	1239	1266	2127	1986	2151	1889	1918	2149	2027	3486	2863	3476	3275	2285
10	PC-1985	Bt-Cyto-535	1593	2439	1478	3402	1684	1260	1873	1961	2378	2311	2145	1454	2072	3468	1846	3543	2952	2230
11	PC-1986	Bt-Cyto-533	1598	2975	1621	2759	2386	716	2048	2015	2014	1864	2391	1765	2009	2750	2972	2784	2835	2225
12	PC-1983	CRIS-673	2112	3061	1205	2986	2101	1338	1834	2091	2318	1847	2429	1948	2136	2804	2057	2852	2571	2203
13	PC-1989	Bt-Cyto-511	2187	3324	1421	3099	1228	1656	1576	2070	2232	1692	2054	1380	1840	2595	3119	2815	2843	2181
14	PC-1984	CRIS-671	1914	2865	1248	3364	1583	714	1931	1946	1945	2395	2052	2453	2211	2768	1948	2929	2548	2163
15	PC-1987	Bt-CIM-785	1575	2989	975	2835	1614	774	2049	1830	1691	1808	2057	1437	1748	3510	2840	3524	3291	2150
16	PC-1991	Bt-CIM-678	3024	2607	975	2683	896	588	1606	1768	2672	1730	2060	1319	1945	3767	1931	3745	3148	2132
17	PC-1977	MNH-1035	1998	3205	1190	2797	2405	1365	1276	2034	2433	1631	1401	1176	1660	2816	2962	2822	2867	2106
18	PC-1998	CRIS-644	1651	2731	1004	3137	1356	534	1812	1746	2504	1355	2702	2231	2198	2678	2975	2752	2802	2085
19	PC-1995	NIAB-929	2122	2468	1033	3288	2187	1118	2598	2116	2097	1160	1743	1464	1616	2696	2434	2669	2600	2077
20	PC-2002	MZM-7	1585	2676	1421	3515	1906	769	1793	1952	1961	1619	1932	1424	1734	2661	2876	2765	2767	2058
21	PC-1982	CRIS-638	1757	2814	1234	3402	1953	522	1757	1920	2262	2030	1094	1195	1645	2714	3066	2848	2876	2053
22	PC-1976	MNH-1050	1526	2487	1277	2305	2238	649	2176	1808	2266	2108	2033	1721	2032	2571	2736	2585	2631	2041
23	PC-1992	Bt-CIM-303	2041	2578	1076	2872	896	1437	1639	1791	1200	1800	1630	1420	1513	3300	1734	3334	2789	1958
24	PC-1993	CIM-602 (Bt-Standard)	1682	2410	1162	3024	849	751	1751	1661	1982	1046	2640	2126	1949	2702	1814	2742	2419	1889
25	PC-1999	Cyto-226	2081	2319	1750	2305	1719	399	1927	1786	1355	1898	1931	1533	1679	1847	2835	1928	2203	1883
26	PC-1997	PC-1997	1775	2291	1162	2608	1840	837	1386	1700	1253	1032	1306	808	1100	1871	2936	1962	2256	1677
27	PC-1994	Cyto-124 (Non-Bt Standard)	1541	1736	990	1965	1427	188	1914	1394	1237	1549	1792	1497	1519	1877	2139	2010	2009	1583
		Average:	1897	2752	1269	3031	1861	977	1864	1950	2213	1759	2151	1886	2002	2925	2521	2981	2809	2199
Statistical Analysis Results																				
1	CD 5%	77	636	144	297	400	489	149	***	694	217	454	718	***	607	205	500	***	199	***
2	CD 1%	103	848	192	396	533	650	199	***	925	290	605	954	***	810	273	666	***	265	***
3	Significance	**	**	**	**	**	**	**	***	**	**	**	**	***	**	**	**	***	**	***
4	CV %	2	4	6	6	13	16	4	***	19	7	12	12	***	12	4	10	***	5	***
Notes:		1	* "Pakistan-Average" has been worked out on the basis averages of all fifteen (15) locations for more accuracy.																	
		2	** NCVT "Field trials results should be associated with Fiber-Testing and Biochemical-Testing results of reference labs.																	
		3	Errors and omissions are accepted. Detailed Final results shall be released in due course.																	
																(Dr.Tassawar Hussain Malik) Director Research		Page-4/20		



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Pakistan Central Cotton Committee (PCCC), Multan

Directorate of Agriculture Research

2019- NCVT Field Trial Results

Annexure-V: Average Seed-Cotton/Phutti Yield (kg/hectare) of Set A to D (Descending Order on Pakistan Basis)

Sr.	Code	Denomination	PUNJAB							SINDH					BALOCHISTAN					KPK CRS D.I. Khan	*PAKISTAN Average
			CCRI Multan	ICI Multan	CRS B.pur	CRS Sahiwal	CRI Khanpur	CRS Vehari	CRS Fabad	Punjab Average	CCRI Sakrand	CRS Ghotki	CRS M.P.K	ARI T.Jam	Sindh Average	CRS Lasbella	CRS Sibi	ARI Khuzdar	Balochistan Average		
1	PC-1930	Rustam-11	2288	3908	1467	3288	1908	1496	3030	2484	2847	2301	2690	1857	2424	3708	3206	3745	3553	2086	2655
2	PC-1955	NIAB-1011	2408	2929	1360	3477	2487	1267	-	2321	3158	2153	2810	2134	2564	3713	2874	3772	3453	1914	2604
3	PC-1988	Bt-CIM-775	3059	3458	1621	3402	2043	1551	1827	2423	2507	1752	2479	2587	2331	3910	2132	3942	3328	2552	2588
4	PC-1968	GH-Uhad	2481	2334	1336	3477	2198	1331	-	2193	2726	2078	2690	2312	2452	4037	2089	4070	3399	2270	2531
5	PC-1919	Saim-102	2042	3525	986	3213	2712	1468	2600	2364	2438	2286	2571	1746	2260	3945	2739	3608	3431	1905	2519
6	PC-2000	Sahara-Klean-5	2087	1840	1980	3288	2748	1344	1869	2165	3275	1875	3190	2515	2714	3378	2777	3356	3170	2102	2508
7	PC-1966	GH-Hamaliya	2441	1795	1360	3099	2126	1546	-	2061	2994	1901	2451	2538	2471	3587	2048	3595	3077	2594	2434
8	PC-1967	GH-Sultan	2322	1958	1360	3061	2056	1024	-	1964	2629	2467	2750	2299	2536	3535	2181	3526	3081	2548	2408
9	PC-1980	CEMB-Klean-Cotton-4	1623	3233	1119	3477	2292	1351	1451	2078	2761	2124	2585	2716	2547	3492	2032	3480	3001	2268	2400
10	PC-1954	NIAB-135	2453	2175	1408	3364	2338	1515	-	2209	2561	1568	2930	2646	2426	2565	3057	2791	2804	1745	2365
11	PC-1981	CEMB-Klean-Cotton-3	1756	3290	1205	3666	2023	973	2216	2161	2662	1911	2493	2839	2476	2541	3029	2621	2730	2144	2358
12	PC-1979	CEMB-Klean-Cotton-5	1810	2980	1176	3515	2495	1229	1455	2094	2440	2043	2529	2406	2355	3456	2029	3547	3011	2188	2353
13	PC-1916	Tahafuz-12(C-II)	2061	2492	1422	3175	2489	1488	2851	2283	2560	2431	2942	1965	2475	2738	2010	2858	2535	1766	2350
14	PC-1972	FH-Super-Cotton-2017	1935	1691	1635	3213	1989	1280	-	1957	2835	1952	2451	2432	2418	3522	2039	3541	3034	2066	2327
15	PC-1978	CEMB-Klean-Cotton-6	1442	3611	1147	3364	2199	1220	1778	2109	2311	2046	2341	2814	2378	3007	2320	3062	2796	2102	2318
16	PC-2001	Sahara-300	1668	2026	1693	3364	2265	1217	2243	2068	2720	2016	2754	1991	2370	2840	2923	2860	2874	2008	2306
17	PC-1996	NIA-88	2013	2478	1147	2494	2678	615	2414	1977	3117	965	2402	2544	2257	3480	2735	3530	3248	1908	2301
18	PC-1902	Weal-AG-301(CKC)	1541	3272	1114	3099	2358	1450	2546	2197	2116	1513	2960	2153	2186	2968	2514	3201	2894	1630	2296
19	PC-1913	Diamond-2	1806	2830	1011	2872	2106	1070	2474	2024	1506	1827	2272	2044	1912	4055	3220	3951	3742	1343	2292
20	PC-1941	BF-1	1986	3120	1348	2570	1840	1192	2152	2030	2211	2377	2690	1687	2241	3288	2970	3334	3197	1556	2288
21	PC-1990	Bt-CIM-789	1992	3405	961	2910	1239	1266	2127	1986	2151	1889	1918	2149	2027	3486	2863	3476	3275	2441	2285
22	PC-1912	Tahafuz-15	1953	2611	1178	3704	2032	1261	2295	2148	2333	2143	2810	2246	2383	2704	2192	2781	2559	2014	2284
23	PC-1927	Eye-20	2022	2579	1431	3402	1645	1153	2582	2116	1828	1957	2929	1569	2071	3882	2159	3889	3310	1023	2270
24	PC-1950	NIAB-SANAB-M	2348	2747	1599	3402	1711	1416	3138	2337	2578	2189	2571	1579	2229	2236	1957	2766	2320	1766	2267
25	PC-1985	Bt-Cyto-535	1593	2439	1478	3402	1684	1260	1873	1961	2378	2311	2145	1454	2072	3468	1846	3543	2952	2583	2230
26	PC-1986	Bt-Cyto-533	1598	2975	1621	2759	2386	716	2048	2015	2014	1864	2391	1765	2009	2750	2722	2784	2835	2731	2225
27	PC-1942	BS-20	2517	2125	1276	3439	1401	1384	2438	2083	2063	1968	2690	1436	2039	3366	2947	3371	3228	904	2222
28	PC-1945	ASPL-710	1954	2894	1205	3402	1979	1320	2564	2188	1895	1920	3169	1616	2150	2925	2867	2928	2907	649	2219
29	PC-1926	Eye-111	2123	2436	1265	3024	1672	1145	2905	2081	1947	1938	2661	1831	2094	2792	3386	2832	3003	1262	2215
30	PC-1983	CRIS-673	2112	3061	1205	2986	2101	1338	1834	2091	2318	1847	2429	1948	2136	2804	2057	2852	2571	2148	2203
31	PC-1911	Tassco-112	1692	2832	1012	3024	2018	1277	2116	1996	2114	1630	2690	2316	2188	3306	2110	3395	2937	1498	2202
32	PC-1965	RH-670	1636	1478	1288	3553	1707	546	-	1701	2113	1746	2212	3693	2441	3115	2435	3185	2912	2103	2201
33	PC-1931	ICI-2424	1722	2857	1408	3704	2087	1181	2098	2151	2119	1698	2691	1536	2011	2732	2289	2808	2610	1989	2195
34	PC-1924	NS-211	2306	2523	1498	2268	2614	1064	2152	2061	1712	2292	2810	1799	2153	3044	1958	3082	2695	1708	2189
35	PC-1951	NIAB-512	2192	1678	1408	3628	2148	1417	-	2079	2382	1787	2631	2090	2223	2356	2425	2525	2435	1908	2184
36	PC-1989	Bt-Cyto-511	2187	3324	1421	3099	1228	1656	1576	2070	2232	1692	2054	1380	1840	2595	3119	2815	2843	2335	2181
37	PC-1933	YBG-2222(C-II)	1905	2855	1062	2948	1826	1276	2384	2037	1841	2186	2690	1637	2089	3134	2257	3273	2888	1417	2179
38	PC-1973	FH-AM-Cotton-2017	1796	1442	1121	3364	1972	932	-	1771	1527	1888	2332	2536	2071	3306	2813	3336	3152	2078	2175
39	PC-1974	BH-224	2006	1330	1312	3288	2086	1122	-	1857	2256	1411	2332	2064	2016	2991	2719	3299	3003	2090	2165
40	PC-1984	CRIS-671	1914	2865	1248	3364	1583	714	1931	1946	1945	2395	2052	2453	2211	2768	1948	2929	2548	2331	2163
41	PC-1908	PC-1908	1389	2314	986	3628	2452	838	3228	2119	1533	1384	3049	2211	2044	2602	2619	2617	2613	1401	2150
42	PC-1987	Bt-CIM-785	1575	2989	975	2835	1614	774	2049	1830	1691	1808	2057	1437	1748	3510	2840	3524	3291	2573	2150
43	PC-1947	IR-NIBGE-15	1861	1893	1062	3877	2002	1218	2331	2035	1865	1729	2631	1513	1935	3360	2814	3384	3186	600	2143
44	PC-1925	Eye-22	1938	2606	1432	2608	1491	740	2654	1924	1947	1989	2930	1546	2103	2925	2357	3012	2765	1960	2142
45	PC-1949	IR-NIBGE-13	2200	2627	1265	3855	1841	1374	2277	2206	1960	1485	2571	1674	1923	2523	2641	2571	2578	1201	2138
46	PC-1991	Bt-CIM-678	3024	2607	975	2683	896	588	1606	1768	2672	1730	2060	1319	1945	3767	1931	3745	3148	2378	2132
47	PC-1944	Bahar-136	2095	2415	1205	2759	1872	1558	2313	2031	2317	2441	2930	1748	2359	2589	1971	2634	2398	1081	2129
48	PC-1923	PC-1923	1965	2213	1114	3061	2222	1603	2689	2124	2100	1723	2212	1430	1866	2644	2184	2678	2502	1934	2118
49	PC-1948	IR-NIBGE-14	2125	2357	1241	4120	1654	1427	2169	2156	1956	1857	2511	1493	1954	2589	2392	2661	2547	1181	2116
50	PC-1971	FH-155	1749	1832	1372	3288	1859	903	-	1834	2607	2139	2870	2153	2442	2284	2102	2320	2235	2031	2108

Sr.	Code	Denomination	PUNJAB										SINDH				BALUCHISTAN				KPK	*PAKISTAN Average		
			CCRI Multan	ICI Multan	CRS B.pur	CRS Sahiwal	CRS Khanpur	CRS Vehari	CRS Fahad	Punjab Average	CCRI Sakrand	CRS Ghotki	CRS M.P.K	ARI T.Jam	Sindh Average	CRS Lasbella	CRS Sibbi	ARI Khuzdar	Balochistan Average	CRS D.I. Khan				
51	PC-1977	MNH-1035	1998	3205	1190	2797	2405	1365	1276	2034	2433	1631	1401	1176	1660	2816	2962	2822	2867	2115	2106			
52	PC-1975	BH-223	2030	1315	1324	2835	2269	1069	-	1807	1915	1458	2810	2529	2178	2368	2967	2433	2589	2043	2098			
53	PC-1934	Eagle-4	2138	2507	1157	2835	1999	1124	2654	2059	1947	2446	2690	1505	2147	2242	2390	2331	2321	1340	2087			
54	PC-1905	Weal-AG-10	1786	2307	1037	2948	2039	1118	1900	1876	1842	1714	2930	1694	2045	2957	2562	3048	2856	1411	2086			
55	PC-1998	CRIS-644	1651	2731	1004	3137	1356	534	1812	1746	2504	1355	2702	2231	2198	2678	2975	2752	2802	1851	2085			
56	PC-1964	RH-Afan-2	1800	1772	1289	3061	2077	1138	-	1856	2240	1532	2451	2269	2123	2780	1979	2819	2526	1972	2084			
57	PC-1995	NIAB-929	2122	2468	1033	3288	2187	1118	2598	2116	2097	1160	1743	1464	1616	2696	2434	2669	2600	2082	2077			
58	PC-1969	FH-Anmol	2089	1882	1229	2683	1795	1100	-	1796	1815	1839	2451	2309	2104	2954	1698	3088	2580	2064	2071			
59	PC-1958	VH-383	2158	1228	1312	3591	1464	908	-	1777	1851	1677	2332	2027	1972	2590	3117	2675	2794	1934	2062			
60	PC-2002	MZM-7	1585	2676	1421	3515	1906	769	1793	1952	1961	1619	1932	1424	1734	2661	2876	2765	2767	1971	2058			
61	PC-1946	ASPL-709	2049	2596	1241	3024	1716	1352	2672	2093	1940	1588	2690	1157	1844	2995	2039	3024	2686	781	2058			
62	PC-1918	Sayban-209	1708	3026	1127	2721	2006	1205	2277	2010	1792	2105	2451	2164	2128	2167	2287	2239	2231	1530	2054			
63	PC-1982	CRIS-638	1757	2814	1234	3402	1953	522	1757	1920	2262	2030	1094	1195	1645	2714	3066	2848	2876	2151	2053			
64	PC-1976	MNH-1050	1526	2487	1277	2305	2238	649	2176	1808	2266	2108	2033	1721	2032	2571	2736	2585	2631	1930	2041			
65	PC-1959	VH-189	1674	1460	1360	3628	1764	916	-	1800	1735	1776	2571	2475	2139	1901	2854	1963	2239	2227	2022			
66	PC-1901	Weal-AG-201(C-II)	1723	2660	1140	2343	2189	1297	2044	1914	1990	840	2511	1412	1688	2821	2982	2886	2896	1172	2001			
67	PC-1917	Suncrop(C-II)	2014	2802	1434	2268	1853	1089	1918	1911	1947	1330	2541	1488	1827	2475	2330	2508	2438	1956	1997			
68	PC-1970	FH-492	2243	1779	1193	2759	1737	1272	-	1831	2139	1686	2332	2072	2057	1847	2773	2053	2224	2043	1995			
69	PC-1904	Weal-AG-7	1945	2381	1114	3024	1926	1170	2151	1959	2017	1559	2631	1814	2005	2202	2385	2234	2274	1275	1989			
70	PC-1906	Weal-AG-9	2447	2292	1306	2079	2168	2546	1255	2013	887	651	3169	1851	1640	1862	2070	3693	2542	1537	1988			
71	PC-1921	Rohi-1	1514	1231	1408	2835	1929	820	1847	1655	1925	1467	2601	1691	1921	2896	2535	2961	2797	2127	1986			
72	PC-1935	CIM-602 (Bt-Standard)	1764	1761	1040	2873	1374	831	2335	1682	2248	1295	2581	2124	2062	2839	2312	2918	2690	1590	1986			
73	PC-1938	Ghauri-2(CKC)	1561	1679	1467	3364	1496	680	2815	1866	1832	1132	2930	1671	1891	2646	2689	2681	2672	1114	1984			
74	PC-1907	PC-1907	1760	2067	870	3326	1732	1141	1972	1838	2004	1321	2690	2098	2028	2476	2794	2518	2596	978	1983			
75	PC-1992	Bt-CIM-303	2041	2578	1076	2872	896	1437	1639	1791	1200	1800	1630	1420	1513	3300	1734	3334	2789	2419	1958			
76	PC-1943	BS-J5	1600	2143	1193	3024	1311	900	1847	1717	1199	1661	2690	1508	1765	3300	2276	3304	2960	1210	1944			
77	PC-1936	Eagle-3	2207	1795	1014	2948	1479	841	2205	1784	2022	1162	2690	1540	1854	2834	2215	2860	2636	1201	1934			
78	PC-1914	Suncrop-3	1336	1520	1114	2268	2106	1270	2259	1696	2061	1238	2691	1754	1936	2625	2251	2708	2528	1701	1927			
79	PC-1962	SLH-33	1424	1542	1026	3288	1790	810	-	1647	1850	1155	2391	2200	1899	2397	2572	2478	2482	1961	1920			
80	PC-1932	YBG-2323(CKC)	1836	2223	1026	2797	1874	819	2313	1841	1283	1150	2332	1330	1524	2864	2893	3040	2932	1013	1920			
81	PC-1937	Hatf-3(CKC)	1841	2231	1300	2797	1416	859	2474	1845	2010	1186	2750	1502	1862	2179	2778	2257	2405	1068	1910			
82	PC-1953	NIAB-819	1664	1324	1145	3061	1153	766	-	1519	1673	1147	2571	3049	2110	2242	2376	2336	2318	2061	1898			
83	PC-1920	Rohi-2	1268	1901	1037	2948	1606	1013	2277	1721	1454	1023	2212	1587	1569	2805	2640	2836	2760	1808	1894			
84	PC-1999	Cyto-226	2081	2319	1750	2305	1719	399	1927	1786	1355	1898	1931	1533	1679	1847	2835	1928	2203	2425	1883			
85	PC-1956	NIA-89	1403	688	907	1965	1091	650	-	1117	2118	750	2451	3372	2173	2625	3251	3019	2965	2060	1882			
86	PC-1910	Tassco-115	1260	1127	666	2116	1546	651	2044	1344	1992	740	3049	2777	2140	3318	2691	3386	3132	833	1880			
87	PC-1903	Weal-AG-8	1924	2234	1012	2381	2034	1603	1560	1821	1903	612	2750	1639	1726	2146	2385	2250	2260	1553	1866			
88	PC-1952	NIAB-973	1696	1202	883	3288	1187	722	-	1496	1473	913	2571	2498	1864	2176	2947	2321	2481	2102	1856			
89	PC-1929	Rustam-Beej-11(C-II)	1879	2238	1062	2381	1848	619	1900	1704	1194	1247	2690	1611	1686	2769	2233	2799	2600	1343	1854			
90	PC-1922	TJ-King(C-II)	1292	1194	1281	2305	1822	933	2044	1553	1826	606	2810	1506	1687	2700	2614	2736	2683	1982	1843			
91	PC-1961	VH-402	1448	1065	1456	3402	1390	695	-	1576	1572	1113	2452	2161	1825	2314	2119	2353	2262	2259	1843			
92	PC-1939	Badar-3(C-II)	1351	1108	1169	3213	1784	777	2905	1758	1524	1125	2332	1126	1527	2732	2872	2877	2827	558	1830			
93	PC-1940	Badar-4(C-II)	1498	1545	1002	3213	1703	658	2385	1715	1151	653	2571	1598	1493	2792	3023	2787	2867	645	1815			
94	PC-1909	PC-1909	1554	1581	794	2268	1816	871	1793	1525	1498	1143	2451	1617	1677	2478	3342	2529	2783	1181	1794			
95	PC-1928	Rustam-Beej-111(CKC)	1673	1635	990	3099	1636	567	2331	1704	1239	704	2703	1502	1537	2638	2406	2681	2575	594	1760			
96	PC-1963	RH-Kashish	1009	985	1563	2948	1616	195	-	1386	1602	1162	2391	1776	1733	2164	1819	2859	2281	1591	1691			
97	PC-1997	PC-1997	1775	2291	1162	2608	1840	837	1386	1700	1253	1032	1306	808	1100	1871	2936	1962	2256	2090	1677			
98	PC-1957	IUB-73	1707	1265	942	2721	1712	647	-	1499	1511	904	2451	1839	1676	1895	1943	1939	1926	1939	1673			
99	PC-1994	Cyto-124 (Non-Bt Standard)	1541	1736	990	1965	1427	188	1914	1394	1237	1549	1792	1497	1519	1877	2139	2010	2009	1890	1583			
Average:			1879	2261	1225	3037	1876	1066	2170	1917	2036	1632	2504	1921	2023	2832	2517	2924	2758	1765	2109			
Notes:			1	* "Pakistan-Average" has been worked out on the basis averages of all fifteen (15) locations for more accuracy.																				20th July 2020.
			2	** NCVT "Field trials results should be associated with Fiber-Testing and Biochemical-Testing results of reference labs.																				
			3	Errors and omissions are accepted. Detailed Final results shall be released in due course.																				
			(Dr.Tassawar Hussain Malik) Director Research																	Page-6/20				

Government of Pakistan
Ministry of National Food Security & Research
Pakistan Central Cotton Committee (PCCC), Multan
Directorate of Agriculture Research
2019-NCVT Field Trial Results

Annexure-VI: Average Seed-Cotton/Phutti Yield (kg/hectare) of all lines (Set-A to D) in Descending Order on Province-wise Basis.

Sr.	Punjab				Sindh				Baluchistan				KPK				*Pakistan			
	Codes	Strains/Lines	Average	Codes	Strains/Lines	Average	Codes	Strains/Lines	Average	Codes	Strains/Lines	Average	Codes	Strains/Lines	Average	Codes	Strains/Lines	Average	Codes	Strains/Lines
1																				
1	1930	Rustam-11	2484	2000	Sahara-Klean-5	2714	1913	Diamond-2	3742	1986	Bt-Cyto-533	2731	1930	Rustam-11	2655					
2	1988	Bt-CIM-775	2423	1955	NIAB-1011	2564	1930	Rustam-11	3553	1966	GH-Hamaliya	2594	1955	NIAB-1011	2604					
3	1919	Saim-102	2364	1980	CEMB-Klean-Cotton-4	2547	1955	NIAB-1011	3453	1985	Bt-Cyto-535	2583	1988	Bt-CIM-775	2588					
4	1950	NIAB-SANAB-M	2337	1967	GH-Sultan	2536	1919	Saim-102	3431	1987	Bt-CIM-785	2573	1968	GH-Uhad	2531					
5	1955	NIAB-1011	2321	1981	CEMB-Klean-Cotton-3	2476	1968	GH-Uhad	3399	1988	Bt-CIM-775	2552	1919	Saim-102	2519					
6	1916	Tahafuz-12(C-II)	2283	1916	Tahafuz-12(C-II)	2475	1988	Bt-CIM-775	3328	1967	GH-Sultan	2548	2000	Sahara-Klean-5	2508					
7	1954	NIAB-135	2209	1966	GH-Hamaliya	2471	1927	Eye-20	3310	1990	Bt-CIM-789	2441	1966	GH-Hamaliya	2434					
8	1949	IR-NIBGE-13	2206	1968	GH-Uhad	2452	1987	Bt-CIM-785	3291	1999	Cyto-226	2425	1967	GH-Sultan	2408					
9	1902	Weal-AG-301(CKC)	2197	1971	FH-155	2442	1990	Bt-CIM-789	3275	1992	Bt-CIM-303	2419	1980	CEMB-Klean-Cotton-4	2400					
10	1968	GH-Uhad	2193	1965	RH-670	2441	1996	NIA-88	3248	1991	Bt-CIM-678	2378	1954	NIAB-135	2365					
11	1945	ASPL-710	2188	1954	NIAB-135	2426	1942	BS-20	3228	1989	Bt-Cyto-511	2335	1981	CEMB-Klean-Cotton-3	2358					
12	2000	Sahara-Klean-5	2165	1930	Rustam-11	2424	1941	BF-1	3197	1984	CRIS-671	2331	1979	CEMB-Klean-Cotton-5	2353					
13	1981	CEMB-Klean-Cotton-3	2161	1972	FH-Super-Cotton-2017	2418	1947	IR-NIBGE-15	3186	1968	GH-Uhad	2270	1916	Tahafuz-12(C-II)	2350					
14	1948	IR-NIBGE-14	2156	1912	Tahafuz-15	2383	2000	Sahara-Klean-5	3170	1980	CEMB-Klean-Cotton-4	2268	1972	FH-Super-Cotton-2017	2327					
15	1931	ICI-2424	2151	1978	CEMB-Klean-Cotton-6	2378	1973	FH-AM-Cotton-2017	3152	1961	VH-402	2259	1978	CEMB-Klean-Cotton-6	2318					
16	1912	Tahafuz-15	2148	2001	Sahara-300	2370	1991	Bt-CIM-678	3148	1959	VH-189	2227	2001	Sahara-300	2306					
17	1923	PC-1923	2124	1944	Bahar-136	2359	1910	Tassco-115	3132	1979	CEMB-Klean-Cotton-5	2188	1996	NIA-88	2301					
18	1908	PC-1908	2119	1979	CEMB-Klean-Cotton-5	2355	1967	GH-Sultan	3081	1982	CRIS-638	2151	1902	Weal-AG-301(CKC)	2296					
19	1927	Eye-20	2116	1988	Bt-CIM-775	2331	1966	GH-Hamaliya	3077	1983	CRIS-673	2148	1913	Diamond-2	2292					
20	1995	NIAB-929	2116	1919	Saim-102	2260	1972	FH-Super-Cotton-2017	3034	1981	CEMB-Klean-Cotton-3	2144	1941	BF-1	2288					
21	1978	CEMB-Klean-Cotton-6	2109	1996	NIA-88	2257	1979	CEMB-Klean-Cotton-5	3011	1921	Rohi-1	2127	1990	Bt-CIM-789	2285					
22	1979	CEMB-Klean-Cotton-5	2094	1941	BF-1	2241	1926	Eye-111	3003	1977	MNH-1035	2115	1912	Tahafuz-15	2284					
23	1946	ASPL-709	2093	1950	NIAB-SANAB-M	2229	1974	BH-224	3003	1965	RH-670	2103	1927	Eye-20	2270					
24	1983	CRIS-673	2091	1951	NIAB-512	2223	1980	CEMB-Klean-Cotton-4	3001	1952	NIAB-973	2102	1950	NIAB-SANAB-M	2267					
25	1942	BS-20	2083	1984	CRIS-671	2211	1956	NIA-89	2965	1978	CEMB-Klean-Cotton-6	2102	1985	Bt-Cyto-535	2230					
26	1926	Eye-111	2081	1998	CRIS-644	2198	1943	BS-15	2960	2000	Sahara-Klean-5	2102	1986	Bt-Cyto-533	2225					
27	1951	NIAB-512	2079	1911	Tassco-112	2188	1985	Bt-Cyto-535	2952	1974	BH-224	2090	1942	BS-20	2222					
28	1980	CEMB-Klean-Cotton-4	2078	1902	Weal-AG-301(CKC)	2186	1911	Tassco-112	2937	1997	PC-1997	2090	1945	ASPL-710	2219					
29	1989	Bt-Cyto-511	2070	1975	BH-223	2178	1932	YBG-2323(CKC)	2932	1930	Rustam-11	2086	1926	Eye-111	2215					
30	2001	Sahara-300	2068	1956	NIA-89	2173	1965	RH-670	2912	1995	NIAB-929	2082	1983	CRIS-673	2203					
31	1924	NS-211	2061	1924	NS-211	2153	1945	ASPL-710	2907	1973	FH-AM-Cotton-2017	2078	1911	Tassco-112	2202					
32	1966	GH-Hamaliya	2061	1945	ASPL-710	2150	1901	Weal-AG-201(C-II)	2896	1972	FH-Super-Cotton-2017	2066	1965	RH-670	2201					
33	1934	Eagle-4	2059	1934	Eagle-4	2147	1902	Weal-AG-301(CKC)	2894	1969	FH-Anmol	2064	1931	ICI-2424	2195					
34	1933	YBG-2222(C-II)	2037	1910	Tassco-115	2140	1933	YBG-2222(C-II)	2888	1953	NIAB-819	2061	1924	NS-211	2189					
35	1947	IR-NIBGE-15	2035	1959	VH-189	2139	1982	CRIS-638	2876	1956	NIA-89	2060	1951	NIAB-512	2184					
36	1977	MNH-1035	2034	1983	CRIS-673	2136	2001	Sahara-300	2874	1970	FH-492	2043	1989	Bt-Cyto-511	2181					
37	1944	Bahar-136	2031	1918	Sayban-209	2128	1940	Badar-4(C-II)	2867	1975	BH-223	2043	1933	YBG-2222(C-II)	2179					
38	1941	BF-1	2030	1964	MNH-1035	2123	1977	MNH-1035	2867	1971	FH-155	2031	1973	FH-AM-Cotton-2017	2175					
39	1913	Diamond-2	2024	1953	NIAB-819	2110	1905	Weal-AG-10	2856	1912	Tahafuz-15	2014	1974	BH-224	2165					
40	1986	Bt-Cyto-533	2015	1969	FH-Anmol	2104	1989	Bt-Cyto-511	2843	2001	Sahara-300	2008	1984	CRIS-671	2163					
41	1906	Weal-AG-9	2013	1925	Eye-22	2103	1986	Bt-Cyto-533	2835	1931	ICI-2424	1989	1908	PC-1908	2150					
42	1918	Sayban-209	2010	1926	Eye-111	2094	1939	Badar-3(C-II)	2827	1922	TJ-King(C-II)	1982	1987	Bt-CIM-785	2150					
43	1911	Tassco-112	1996	1933	YBG-2222(C-II)	2089	1954	NIAB-135	2804	1964	RH-Afhan-2	1972	1947	IR-NIBGE-15	2143					
44	1990	Bt-CIM-789	1986	1985	Bt-Cyto-535	2072	1998	CRIS-644	2802	2002	MZM-7	1971	1925	Eye-22	2142					
45	1996	NIA-88	1977	1927	Eye-20	2071	1921	Rohi-1	2797	1962	SLH-33	1961	1949	IR-NIBGE-13	2138					
46	1967	GH-Sultan	1964	1973	FH-AM-Cotton-2017	2071	1978	CEMB-Klean-Cotton-6	2796	1925	Eye-22	1960	1991	Bt-CIM-678	2132					
47	1985	Bt-Cyto-535	1961	1915	CIM-602 (Bt-Standard)	2062	1958	VH-383	2794	1917	Suncrop(C-II)	1956	1944	Bahar-136	2129					
48	1904	Weal-AG-7	1959	1970	FH-492	2057	1992	Bt-CIM-303	2789	1957	IUB-73	1939	1923	PC-1923	2118					
49	1972	FH-Super-Cotton-2017	1957	1905	Weal-AG-10	2045	1909	PC-1909	2783	1923	PC-1923	1934	1948	IR-NIBGE-14	2116					
50	2002	MZM-7	1952	1908	PC-1908	2044	2002	MZM-7	2767	1958	VH-383	1934	1971	FH-155	2108					

Sr.	Punjab				Sindh				Baluchistan				KPK				*Pakistan						
	Codes	Strains/Lines	Average	Codes	Strains/Lines	Average	Codes	Strains/Lines	Average	Codes	Strains/Lines	Average	Codes	Strains/Lines	Average	Codes	Strains/Lines	Average					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16								
51	1984	CRIS-671	1946	1942	BS-20	2039	1925	Eve-22	2765	1976	MNH-1050	1930	1977	MNH-1035	2106								
52	1925	Eve-22	1924	1976	MNH-1050	2032	1920	Rohi-2	2760	1955	NIAB-1011	1914	1975	BH-223	2098								
53	1982	CRIS-638	1920	1907	PC-1907	2028	1981	CEMB-Klean-Cotton-3	2730	1951	NIAB-512	1908	1934	Eagle-4	2087								
54	1901	Weal-AG-201(C-II)	1914	1990	Bt-CIM-789	2027	1924	NS-211	2695	1996	NIA-88	1908	1905	Weal-AG-10	2086								
55	1917	Suncrop(C-II)	1911	1974	BH-224	2016	1915	CIM-602 (Bt-Standard)	2690	1919	Saim-102	1905	1998	CRIS-644	2085								
56	1905	Weal-AG-10	1876	1931	ICI-2424	2011	1946	ASPL-709	2686	1994	Cyto-124 (Non-Bt Standard)	1890	1964	RH-Afhan-2	2084								
57	1938	Ghauri-2(CKC)	1866	1986	Bt-Cyto-533	2009	1922	TJ-King(C-II)	2683	1998	CRIS-644	1851	1995	NIAB-929	2077								
58	1974	BH-224	1857	1904	Weal-AG-7	2005	1938	Ghauri-2(CKC)	2672	1920	Rohi-2	1808	1969	FH-Anmol	2071								
59	1964	RH-Afhan-2	1856	1958	VH-383	1972	1936	Eagle-3	2636	1916	Tahafuz-12(C-II)	1766	1958	VH-383	2062								
60	1937	Hatf-3(CKC)	1845	1948	IR-NIBGE-14	1954	1976	MNH-1050	2631	1950	NIAB-SANAB-M	1766	1946	ASPL-709	2058								
61	1932	YBG-2323(CKC)	1841	1991	Bt-CIM-678	1945	1908	PC-1908	2613	1954	NIAB-135	1745	2002	MZM-7	2058								
62	1907	PC-1907	1838	1914	Suncrop-3	1936	1931	ICI-2424	2610	1924	NS-211	1708	1918	Sayban-209	2054								
63	1971	FH-155	1834	1947	IR-NIBGE-15	1935	1929	Rustam-Beej-11(C-II)	2600	1914	Suncrop-3	1701	1982	CRIS-638	2053								
64	1970	FH-492	1831	1949	IR-NIBGE-13	1923	1995	NIAB-929	2600	1902	Weal-AG-301(CKC)	1630	1976	MNH-1050	2041								
65	1987	Bt-CIM-785	1830	1921	Rohi-1	1921	1907	PC-1907	2596	1963	RH-Kashish	1591	1959	VH-189	2022								
66	1903	Weal-AG-8	1821	1913	Diamond-2	1912	1975	BH-223	2589	1915	CIM-602 (Bt-Standard)	1590	1901	Weal-AG-201(C-II)	2001								
67	1976	MNH-1050	1808	1962	SLH-33	1899	1969	FH-Anmol	2580	1941	BF-1	1556	1917	Suncrop(C-II)	1997								
68	1975	BH-223	1807	1938	Ghauri-2(CKC)	1891	1949	IR-NIBGE-13	2578	1903	Weal-AG-8	1553	1970	FH-492	1995								
69	1959	VH-189	1800	1923	PC-1923	1866	1928	Rustam-Beej-111(CKC)	2575	1906	Weal-AG-9	1537	1904	Weal-AG-7	1989								
70	1969	FH-Anmol	1796	1952	NIAB-973	1864	1983	CRIS-673	2571	1918	Sayban-209	1530	1906	Weal-AG-9	1988								
71	1992	Bt-CIM-303	1791	1937	Hatf-3(CKC)	1862	1912	Tahafuz-15	2559	1911	Tassco-112	1498	1921	Rohi-1	1986								
72	1999	Cyto-226	1786	1936	Eagle-3	1854	1984	CRIS-671	2548	1933	YBG-2222(C-II)	1417	1915	CIM-602 (Bt-Standard)	1986								
73	1936	Eagle-3	1784	1946	ASPL-709	1844	1948	IR-NIBGE-14	2547	1905	Weal-AG-10	1411	1938	Ghauri-2(CKC)	1984								
74	1958	VH-383	1777	1989	Bt-Cyto-511	1840	1906	Weal-AG-9	2542	1908	PC-1908	1401	1907	PC-1907	1983								
75	1973	FH-AM-Cotton-2017	1771	1917	Suncrop(C-II)	1827	1916	Tahafuz-12(C-II)	2535	1913	Diamond-2	1343	1992	Bt-CIM-303	1958								
76	1991	Bt-CIM-678	1768	1961	VH-402	1825	1914	Suncrop-3	2528	1929	Rustam-Beej-11(C-II)	1343	1943	BS-J5	1944								
77	1939	Badar-3(C-II)	1758	1943	BS-J5	1765	1964	RH-Afhan-2	2526	1934	Eagle-4	1340	1936	Eagle-3	1934								
78	1998	CRIS-644	1746	1987	Bt-CIM-785	1748	1923	PC-1923	2502	1904	Weal-AG-7	1275	1914	Suncrop-3	1927								
79	1920	Rohi-2	1721	2002	MZM-7	1734	1962	SLH-33	2482	1926	Eve-111	1262	1932	YBG-2323(CKC)	1920								
80	1943	BS-J5	1717	1963	RH-Kashish	1733	1952	NIAB-973	2481	1943	BS-J5	1210	1962	SLH-33	1920								
81	1940	Badar-4(C-II)	1715	1903	Weal-AG-8	1726	1917	Suncrop(C-II)	2438	1936	Eagle-3	1201	1937	Hatf-3(CKC)	1910								
82	1928	Rustam-Beej-11(CKC)	1704	1901	Weal-AG-201(C-II)	1688	1951	NIAB-512	2435	1949	IR-NIBGE-13	1201	1953	NIAB-819	1898								
83	1929	Rustam-Beej-11(C-II)	1704	1922	TJ-King(C-II)	1687	1937	Hatf-3(CKC)	2405	1909	PC-1909	1181	1920	Rohi-2	1894								
84	1965	RH-670	1701	1929	Rustam-Beej-11(C-II)	1686	1944	Bahar-136	2398	1948	IR-NIBGE-14	1181	1999	Cyto-226	1883								
85	1997	PC-1997	1700	1999	Cyto-226	1679	1934	Eagle-4	2321	1901	Weal-AG-201(C-II)	1172	1956	NIA-89	1882								
86	1914	Suncrop-3	1696	1909	PC-1909	1677	1950	NIAB-SANAB-M	2320	1938	Ghauri-2(CKC)	1114	1910	Tassco-115	1880								
87	1993	CIM-602 (Bt-Standard)	1682	1957	IUB-73	1676	1953	NIAB-819	2318	1944	Bahar-136	1081	1903	Weal-AG-8	1866								
88	1921	Rohi-1	1655	1977	MNH-1035	1660	1963	RH-Kashish	2281	1937	Hatf-3(CKC)	1068	1952	NIAB-973	1856								
89	1962	SLH-33	1647	1982	CRIS-638	1645	1904	Weal-AG-7	2274	1927	Eve-20	1023	1929	Rustam-Beej-11(C-II)	1854								
90	1961	VH-402	1576	1906	Weal-AG-9	1640	1961	VH-402	2262	1932	YBG-2323(CKC)	1013	1922	TJ-King(C-II)	1843								
91	1922	TJ-King(C-II)	1553	1995	NIAB-929	1616	1903	Weal-AG-8	2260	1907	PC-1907	978	1961	VH-402	1843								
92	1909	PC-1909	1525	1920	Rohi-2	1569	1997	PC-1997	2256	1942	BS-20	904	1939	Badar-3(C-II)	1830								
93	1953	NIAB-819	1519	1928	Rustam-Beej-111(CKC)	1537	1959	VH-189	2239	1910	Tassco-115	833	1940	Badar-4(C-II)	1815								
94	1957	IUB-73	1499	1939	Badar-3(C-II)	1527	1971	FH-155	2235	1946	ASPL-709	781	1909	PC-1909	1794								
95	1952	NIAB-973	1496	1932	YBG-2323(CKC)	1524	1918	Sayban-209	2231	1945	ASPL-710	649	1928	Rustam-Beej-111(CKC)	1760								
96	1994	Cyto-124 (Non-Bt Standard)	1394	1994	Cyto-124 (Non-Bt Standard)	1519	1970	FH-492	2224	1940	Badar-4(C-II)	645	1963	RH-Kashish	1691								
97	1963	RH-Kashish	1386	1992	Bt-CIM-303	1513	1999	Cyto-226	2203	1947	IR-NIBGE-15	600	1997	PC-1997	1677								
98	1910	Tassco-115	1344	1940	Badar-4(C-II)	1493	1994	Cyto-124 (Non-Bt Standard)	2009	1928	Rustam-Beej-111(CKC)	594	1957	IUB-73	1673								
99	1956	NIA-89	1117	1997	PC-1997	1100	1957	IUB-73	1926	1939	Badar-3(C-II)	558	1994	Cyto-124 (Non-Bt Standard)	1583								
		Average	1917		Average	2023		Average	2758		Average	1765		Average	2109								
Notes:		1	* "Pakistan-Average" has been worked out on the basis averages of all fifteen (15) locations for more accuracy.																20th July 2020				
		2	** NCVT "Field trials results should be associated with Fiber-Testing and Biochemical-Testing results of reference labs.																				
		3	Errors and omissions are accepted. Detailed Final results shall be released in due course.																				
		(Dr.Tassawar Hussain Malik) Director Research													Page-8/20								

Spot Examination of cotton held on 21.10.2019 at PSC Farms, Khanewal

FIBRE QUALITY REPORT- SUMMARY

Sr. #	Genotype Name	GOT (%)	Mic. (Microgram/inch)	Staple Length (mm)	Fibre Strength (g/tex)	Fibre Uniformity (%)
1.	Weal AG -7	38	4.6	26.79	31.88	62.07
2.	SLH-33	38	4.2	28.09	27.98	82.43
3.	Evyol-148	40	4.7	26.43	28.38	81.80
4.	NIAB-135	42	4.9	26.92	29.95	81.37
5.	FH-155	41	4.8	26.28	25.08	82.13
6.	RH-AFNAN	42	4.9	27.03	27.90	82.07
7.	FH-Super Cotton-17	42	4.7	30.13	35.20	84.00
8.	MZM-7	38	4.8	27.19	29.53	82.23
9.	CIM-303	39	4.8	26.62	27.38	81.87
10.	TJ-King	40	4.7	27.88	29.35	82.73
11.	Hataf-3	41	4.3	28.10	28.78	82.30
12.	CIM-789	39	5.0	26.31	29.08	74.97
13.	Rustam-11	41	4.0	26.87	30.95	81.83
14.	Eye-111	39	4.5	26.85	27.85	82.23
15.	NIBGE-13	38	4.5	27.36	31.53	82.27
16.	RH-670	39	4.4	25.47	27.58	81.23
17.	C-11 Sun Crop	38	3.7	26.68	28.23	81.43
18.	BF-1	38	4.7	26.15	27.85	80.73
19.	CEMB-Klean Cotton-3	40	4.4	28.19	27.75	82.67
20.	C-11 Tahaffuz-12	38	5.1	25.37	28.30	80.87
21.	Weal Ag-8	40	4.7	25.47	28.78	82.00
22.	Cyto-511	38	3.8	27.09	29.93	82.97
23.	BS-20	38	4.2	28.55	30.73	83.87
24.	FH-AM Cotton-17	38	4.7	27.03	28.85	82.23
25.	ICI-2424	40	4.8	30.03	33.68	84.57
26.	VH-402	41	4.5	24.87	26.65	81.53
27.	CEMB- Klean Cotton-4	38	4.7	25.49	29.88	81.37
28.	NIAB-1011	39	4.3	27.43	28.78	82.57
29.	Eagle-3	38	4.3	26.31	29.13	81.13
30.	KZ-125	42	4.7	27.00	28.35	80.97
31.	BH-223	40	4.5	26.88	28.93	81.60
32.	MNH-1035	39	4.0	28.05	29.30	82.37
33.	CIM-678	38	4.6	26.11	28.03	81.87

Annexure-VII: 2019 NCVT - BCT Results Averages from Reference Labs

Annexure-VII: 2019 NCVT - BCT Testing Averages from Reference Labs																									
Sr.	Codes	Denomination	Bt/Non-Bt	Technology Claim (Gene/ Event)	Year of Testing	BCT As. Results (3 Labs)										BCT Results (CFMB)									
						Cry1Ac (BG-I)					Cry1Ac + Cry2A (BG-I)					Cry1Ac (BG-I)					Cry1Ac + Cry2A (BG-I)				
						Test Confirmation	Test Purity (%)	Quantification ELISA (µg/g)	Test Confirmation	Test Purity (%)	Quantification ELISA (µg/g)	Test Confirmation	Test Purity (%)	Quantification ELISA (µg/g)	Test Confirmation	Test Purity (%)	Quantification ELISA (µg/g)	Test Confirmation	Test Purity (%)	Quantification ELISA (µg/g)					
1	3	3	4	4	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
1	PC-1901	Weal-AG-201(C-II)	Bt	Cry1Ac+Cry2A	1st	+	83	1.38	-	**NT	NT	-	NT	NT	+	100	3.3	+	100	2.73	-	NT	NT		
2	PC-1902	Weal-AG-301(CKC)	Bt	Cry1Ac+Cry2A+GTG	1st	+	92	2.38	-	NT	NT	+	88	***NR	+	100	3.4	+	100	2.62	+	100	2.68		
3	PC-1903	Weal-AG-8	Bt	Cry1AC/Mon-531	2nd	+	100	1.87	-	NT	NT	-	NT	NT	+	100	3.3	-	NT	NT	-	NT	NT		
4	PC-1904	Weal-AG-7	Bt	Cry1AC/Mon-531	2nd	+	100	1.83	-	NT	NT	-	NT	NT	+	100	3.7	-	NT	NT	-	NT	NT		
5	PC-1905	Weal-AG-10	Bt	Cry1AC/Mon-531	1st	+	100	1.62	-	NT	NT	-	NT	NT	+	100	3.2	-	NT	NT	-	NT	NT		
6	PC-1906	Weal-AG-9	Bt	Cry1AC/Mon-531	1st	+	100	3.23	-	NT	NT	-	NT	NT	+	100	2.4	-	NT	NT	-	NT	NT		
7	PC-1907	PC-1907	-	-	-	+	93	1.97	-	NT	NT	-	NT	NT	+	100	2.70	+	100	2.08	-	NT	NT		
8	PC-1908	PC-1908	-	-	-	+	100	1.4	+	50	NR	-	50	NR	+	100	3.6	+	100	2.68	+	100	2.67		
9	PC-1909	PC-1909	-	-	-	+	75	2.09	-	NT	NT	+	88	NR	+	100	3.2	+	100	2.65	+	100	2.65		
10	PC-1910	Tassco-115	Bt	Cry1AC/Mon-531	1st	+	92	2.06	-	NT	NT	-	NT	NT	+	100	3.7	-	NT	NT	-	NT	NT		
11	PC-1911	Tassco-112	Bt	Cry1AC/Mon-531	2nd	+	100	2.19	-	NT	NT	-	NT	NT	+	100	2.6	-	NT	NT	-	NT	NT		
12	PC-1912	Tahafuz-15	Bt	Cry1Ac+Cry2A+GTG	1st	+	83	2.66	-	NT	NT	+	88	NR	+	100	3.8	+	100	2.83	+	100	2.82		
13	PC-1913	Diamond-2	Bt	Cry1Ac+Cry2A	1st	+	100	1.75	-	NT	NT	-	NT	NT	+	100	2.4	+	100	2.10	-	NT	NT		
14	PC-1914	Suncrop-3	Bt	Cry1Ac+Cry2A+GTG	1st	+	100	2.66	-	NT	NT	+	100	NR	+	100	3.1	+	100	2.68	+	100	2.63		
15	PC-1915	CIM-602	Bt	Cry1AC/Mon-531	-	+	81	2.29	-	NT	NT	-	NT	NT	+	100	3.6	+	NT	NT	-	NT	NT		
16	PC-1916	Tahafuz-12(C-II)	Bt	Cry1Ac+Cry2A	2nd	+	35	2.56	-	NT	NT	-	NT	NT	+	100	2.80	+	100	2.23	-	NT	NT		
17	PC-1917	Suncrop(C-II)	Bt	Cry1Ac+Cry2A	2nd	+	83	1.98	-	NT	NT	-	NT	NT	+	100	2.1	+	100	2.18	-	NT	NT		
18	PC-1918	Sayban-209	Bt	Cry1AC/Mon-531	1st	+	100	2.64	-	NT	NT	-	NT	NT	+	100	4	-	NT	NT	-	NT	NT		
19	PC-1919	Saim-102	Bt	Cry1AC/Mon-531	1st	+	84	4.2	-	NT	NT	-	NT	NT	+	100	3.1	-	NT	NT	-	NT	NT		
20	PC-1920	Rohi-2	Bt	Cry1AC/Mon-531	1st	+	80	2.39	-	NT	NT	-	NT	NT	+	100	3.8	-	NT	NT	-	NT	NT		
21	PC-1921	Rohi-1	Bt	Cry1AC/Mon-531	2nd	+	87	1.78	-	NT	NT	-	NT	NT	+	100	3.8	-	NT	NT	-	NT	NT		
Note	1	* Average of Three (03) Labs Consists of NIGAB Islamabad, ABRI Faisalabad and NIBGE Faisalabad																							
	2	** 'NT' means Not Tested																							
	3	*** 'NR' means Not Received																							

*Average of Three (03) Labs Consists of NIGAB Islamabad, ABRI Faisalabad and NIBGE Faisalabad
** "NT" means Not Tested
*** "NR" means Not Received

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Director Research Headquarters

Pakistan Central Cotton Committee (PCCC)
Directorate of Agricultural Research (DAR)
2019 NCVT - BCT Results Averages from Reference Labs

2019 NCVT - BCT Results Averages from Reference 1 Lab																													
Sr.	Codes	Denomination	Bt/Non-Bt	Technology Claim (Gene/Event)	Year of Testing	BCT AX Results (3 Labs)												BCT Results (CMBB)											
						Cry1Ac (Bt-I)			Cry1Ac + Cry2Ab (Bt-II)			Bt-I+RR (Bt-III)			Cry1Ac (Bt-I)			Cry1Ac + Cry2Ab (Bt-II)			Bt-I+RR (Bt-III)								
						Test Confirmation	Test Purity (%)	Quantification (L50 A/kg/g)	Test Confirmation	Test Purity (%)	Quantification (L50 A/kg/g)	Test Confirmation	Test Purity (%)	Quantification (L50 A/kg/g)	Test Confirmation	Test Purity (%)	Quantification (L50 A/kg/g)	Test Confirmation	Test Purity (%)	Quantification (L50 A/kg/g)									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		
22	PC-1922	TJ-King (C-II)	Bt	Cry1Ac+Cry2A	2nd	+	100	2.02	-	NT	NT	-	NT	NT	+	100	3.6	+	100	2.66	-	NT	NT	+	100	3.6	+	100	2.66
23	PC-1923	PC-1923	-	-	-	+	100	1.33	-	NT	NT	-	NT	NT	+	100	3.7	-	NT	NT	-	NT	NT	+	100	3.7	-	NT	NT
24	PC-1924	NS-211	Bt	Cry1AC/Mon-531	1st	+	100	2.63	-	NT	NT	-	NT	NT	+	100	3.1	-	NT	NT	-	NT	NT	+	100	3.1	-	NT	NT
25	PC-1925	Eye-22	Bt	Cry1AC/Mon-531	1st	+	100	1.92	-	NT	NT	-	NT	NT	+	100	3.8	-	NT	NT	-	NT	NT	+	100	3.8	-	NT	NT
26	PC-1926	Eye-111	Bt	Cry1AC/Mon-531	2nd	+	100	1.87	-	NT	NT	-	NT	NT	+	100	3.8	-	NT	NT	-	NT	NT	+	100	3.8	-	NT	NT
27	PC-1927	Eye-20	Bt	Cry1AC/Mon-531	2nd	+	100	1.64	-	NT	NT	-	NT	NT	+	100	3.2	-	NT	NT	-	NT	NT	+	100	3.2	-	NT	NT
28	PC-1928	Rustam-Beej-111(CKC)	Bt	Cry1Ac+Cry2A+GTG	1st	+	92	2.83	-	10	NR	+	100	NR	+	100	3	+	100	2.59	+	100	2.55	+	100	3	+	100	2.55
29	PC-1929	Rustam-Beej-111 (C-II)	Bt	Cry1Ac+Cry2A	1st	+	100	1.48	-	NT	NT	-	NT	NT	+	100	3.61	+	100	2.66	-	NT	NT	+	100	3.61	+	100	2.66
30	PC-1930	Rustam-11	Bt	Cry1AC/Mon-531	2nd	+	100	1.09	-	NT	NT	-	NT	NT	+	100	3.5	-	NT	NT	-	NT	NT	+	100	3.5	-	NT	NT
31	PC-1931	ICI-2424	Bt	Cry1AC/Mon-531	2nd	+	89	2.02	-	NT	NT	-	NT	NT	+	100	3.8	-	NT	NT	-	NT	NT	+	100	3.8	-	NT	NT
32	PC-1932	YBG-2323(CKC)	Bt	Cry1Ac+Cry2A+GTG	1st	+	83	1.61	-	NT	NT	+	75	NR	+	100	3.30	+	100	3.30	+	100	3.37	+	100	3.30	+	100	3.37
33	PC-1933	YBG-2222 (C-II)	Bt	Cry1Ac+Cry2A	1st	+	100	2.43	-	NT	NT	-	NT	NT	+	100	2.9	+	100	2.92	-	NT	NT	+	100	2.9	+	100	2.92
34	PC-1934	Eagle-4	Bt	Cry1AC/Mon-531	1st	+	87	2.78	-	NT	NT	-	NT	NT	+	100	3.3	-	NT	NT	-	NT	NT	+	100	3.3	-	NT	NT
35	PC-1935	CIM-602	Bt	Cry1AC/Mon-531	-	+	100	1.11	-	NT	NT	-	NT	NT	+	100	2.4	-	NT	NT	-	NT	NT	+	100	2.4	-	NT	NT
36	PC-1936	Eagle-3	Bt	Cry1AC/Mon-531	2nd	+	100	1.9	-	NT	NT	-	NT	NT	+	100	3.65	+	100	2.65	-	NT	NT	+	100	3.65	+	100	2.65
37	PC-1937	Hatf-3(CKC)	Bt	Cry1Ac+Cry2A+GTG	2nd	+	88	2.68	-	NT	NT	+	75	NR	+	100	3.2	+	100	2.64	+	100	2.69	+	100	3.2	+	100	2.69
38	PC-1938	Ghauri-2(CKC)	Bt	Cry1Ac+Cry2A+GTG	1st	+	92	2.05	-	NT	NT	+	100	NR	+	100	3.2	+	NT	2.56	+	100	2.66	+	100	3.2	+	NT	2.66
39	PC-1939	Badar-3 (C-II)	Bt	Cry1Ac+Cry2A	1st	+	89	1.74	-	NT	NT	-	NT	NT	+	100	3.80	+	100	2.52	-	NT	NT	+	100	3.80	+	100	2.52
40	PC-1940	Badar-4 (C-II)	Bt	Cry1Ac+Cry2A	1st	+	100	2.78	-	NT	NT	-	NT	NT	+	100	3.5	+	100	2.57	-	NT	NT	+	100	3.5	+	100	2.57
41	PC-1941	BF-1	Bt	Cry1AC/Mon-531	2nd	+	100	1.59	-	NT	NT	-	NT	NT	+	100	3	-	NT	NT	-	NT	NT	+	100	3	-	NT	NT
42	PC-1942	BS-20	Bt	Cry1AC/Mon-531	2nd	+	100	2.27	-	NT	NT	-	NT	NT	+	100	3.1	-	NT	NT	-	NT	NT	+	100	3.1	-	NT	NT
43	PC-1943	BS-J5	Bt	Cry1AC/Mon-531	1st	+	100	1.94	-	NT	NT	-	NT	NT	+	100	3.7	+	100	2.32	-	NT	NT	+	100	3.7	+	100	2.32
Note	*Average of Three (03) Labs Consists of NRI&H Islamabad, ARI Faisalabad and NRI&H Faisalabad																												
	** NT/NT means Not Tested																												
	*** NR/NT means Not Reviewed																												

Note
1 Average of Three (03) Labs: Consists of NIGAB Islamabad, ARI Faisalabad and NIBRI Faisalabad
2 ** NT means Not Tested
3 *** NR means Not Received

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Pakistan Central Cotton Committee (PCCC)
Directorate of Agricultural Research (DAR)
2019 NCVT - BCT Results Averages from Reference Labs

2019 NCVT - BCT Results Averages from Reference Labs																													
Sr.	Codes	Denomination	Bt/Non-Bt	Technology Claim (Gene/ Event)	Year of Testing	BCT AX Results (2 Labs)												BCT Results (CMB)											
						Cry1Ac (Bt-I)				Cry1Ac + Cry2Ab (Bt-2)				Bt-1+RR (Bt-HI)				Cry1Ac (Bt-I)				Cry1Ac + Cry2Ab (Bt-2)				Bt-1+RR (Bt-HI)			
						Test Confirmation (%)	Test Purity (%)	Quantification ELISA (µg/g)	Test Confirmation (%)	Test Purity (%)	Quantification ELISA (µg/g)	Test Confirmation (%)	Test Purity (%)	Quantification ELISA (µg/g)	Test Confirmation (%)	Test Purity (%)	Quantification ELISA (µg/g)	Test Confirmation (%)	Test Purity (%)	Quantification ELISA (µg/g)	Test Confirmation (%)	Test Purity (%)	Quantification ELISA (µg/g)	Test Confirmation (%)	Test Purity (%)	Quantification ELISA (µg/g)			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24						
44	PC-1944	Bahar-136	Bt	Cry1AC/Mon-531	1st	+	100	2.91	-	NT	NT	-	NT	NT	+	100	4	+	100	2.33	-	NT	NT						
45	PC-1945	ASPL-710	Bt	Cry1AC/Mon-531	1st	+	100	1.28	-	NT	NT	-	NT	NT	+	100	3.45	-	NT	NT	-	NT	NT						
46	PC-1946	ASPL-709	Bt	Cry1AC/Mon-531	1st	+	81	1.7	-	NT	NT	-	NT	NT	+	100	3.7	+	100	3.17	-	NT	NT						
47	PC-1947	IR-NIBGE-15	Bt	Cry1AC/Mon-531	1st	+	92	2.43	-	NT	NT	-	NT	NT	+	100	3.8	-	NT	NT	-	NT	NT						
48	PC-1948	IR-NIBGE-14	Bt	Cry1AC/Mon-531	1st	+	92	2.01	-	NT	NT	-	NT	NT	+	100	2.7	-	NT	NT	-	NT	NT						
49	PC-1949	IR-NIBGE-13	Bt	Cry1AC/Mon-531	2nd	+	100	2.25	-	NT	NT	-	NT	NT	+	100	2.50	-	NT	NT	-	NT	NT						
50	PC-1950	NIAB-SANAB-M	Bt	Cry1AC/Mon-531	1st	+	89	1.28	-	NT	NT	-	NT	NT	+	100	3.05	+	40	1.35	-	NT	NT						
51	PC-1951	NIAB-512	Bt	Cry1AC/Mon-531	1st	+	100	1.96	-	NT	NT	-	NT	NT	+	100	2.80	-	NT	NT	-	NT	NT						
52	PC-1952	NIAB-973	Bt	Cry1AC/Mon-531	1st	+	83	1.52	-	NT	NT	-	NT	NT	+	100	3.2	-	NT	NT	-	NT	NT						
53	PC-1953	NIAB-819	Bt	Cry1AC/Mon-531	1st	+	89	1.51	-	NT	NT	-	NT	NT	+	100	3.2	-	NT	NT	-	NT	NT						
54	PC-1954	NIAB-135	Bt	Cry1AC/Mon-531	2nd	+	92	1.74	-	NT	NT	-	NT	NT	+	100	3.1	-	NT	NT	-	NT	NT						
55	PC-1955	NIAB-1011	Bt	Cry1AC/Mon-531	2nd	+	100	2.5	-	NT	NT	-	NT	NT	+	100	3.5	-	NT	NT	-	NT	NT						
56	PC-1956	NIA-89	Bt	Cry1AC/Mon-531	1st	+	100	2.63	-	NT	NT	-	NT	NT	+	100	3.50	-	NT	NT	-	NT	NT						
57	PC-1957	IUB-73	Bt	Cry1AC/Mon-531	1st	+	88	2.56	-	NT	NT	-	NT	NT	+	100	3.9	-	NT	NT	-	NT	NT						
58	PC-1958	VH-383	Bt	Cry1AC/Mon-531	1st	+	92	2.61	-	NT	NT	-	NT	NT	+	100	3.5	+	100	2.52	-	NT	NT						
59	PC-1959	VH-189	Bt	Cry1AC/Mon-531	1st	+	92	2.86	-	NT	NT	-	NT	NT	+	100	3.7	-	NT	NT	-	NT	NT						
60	PC-1960	CIM-602	Bt	Cry1AC/Mon-531	-	+	81	2.22	-	NT	NT	-	NT	NT	+	100	4	-	NT	NT	-	NT	NT						
61	PC-1961	VH-402	Bt	Cry1AC/Mon-531	2nd	+	89	0.74	-	NT	NT	-	NT	NT	+	100	3.8	-	NT	NT	-	NT	NT						
62	PC-1962	SLH-33	Bt	Cry1AC/Mon-531	2nd	+	80	0.88	-	NT	NT	-	NT	NT	+	100	2.72	-	NT	NT	-	NT	NT						
63	PC-1963	RH-Kashish	Bt	Cry1AC/Mon-531	1st	+	100	3.22	-	NT	NT	-	NT	NT	+	100	3.7	-	NT	NT	-	NT	NT						
64	PC-1964	RH-Afnan-2	Bt	Cry1AC/Mon-531	1st	+	100	4.32	-	NT	NT	-	NT	NT	+	100	3.8	-	NT	NT	-	NT	NT						
Note		1	*Average of Three (03) Labs Consists of NIAB Islamabad, ARRI Faisalabad and NIAB Faisalabad																										
		2	** "NT" means Not Tested																										
		3	*** "NR" means Not Received																										

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7/20/2020

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2019 NCVT - BCT Results Averages from Reference Labs

2019 NCV - BCT Results Averages from Reference Labs																													
Sr.	Codes	Denomination	Bt/Non-Bt	Technology Claim (Gene/ Event)	Year of Testing	BCT AC Results (3 Labs)												BCT Results (CISB)											
						Cry1Ac (Bt-I)				Cry1Ac + Cry2Ab (Bt-II)				Bt-II+RR (Bt-III)				Cry1Ac (Bt-I)				Cry1Ac + Cry2Ab (Bt-II)				Bt-II+RR (Bt-III)			
						Test Confirmation	Test Purity (%)	Quantification EUSA (µg/g)	Test Confirmation	Test Purity (%)	Quantification EUSA (µg/g)	Test Confirmation	Test Purity (%)	Quantification EUSA (µg/g)	Test Confirmation	Test Purity (%)	Quantification EUSA (µg/g)	Test Confirmation	Test Purity (%)	Quantification EUSA (µg/g)	Test Confirmation	Test Purity (%)	Quantification EUSA (µg/g)	Test Confirmation	Test Purity (%)	Quantification EUSA (µg/g)			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24						
65	PC-1965	RH-670	Bt	Cry1AC/Mon-531	2nd	+	100	2.52	-	NT	NT	-	NT	NT	+	100	2.6	-	NT	NT	-	NT	NT						
66	PC-1966	GH-Hamaliya	Bt	Cry1AC/Mon-531	1st	+	83	2.21	-	NT	NT	-	NT	NT	+	100	3.47	-	NT	NT	-	NT	NT						
67	PC-1967	GH-Sultan	Bt	Cry1AC/Mon-531	1st	+	92	2.56	-	NT	NT	-	NT	NT	+	100	3.3	-	NT	NT	-	NT	NT						
68	PC-1968	GH-Uhad	Bt	Cry1AC/Mon-531	2nd	+	92	1.61	-	NT	NT	-	NT	NT	+	100	3.60	-	NT	NT	-	NT	NT						
69	PC-1969	FH-Anmol	Bt	Cry1AC/Mon-531	1st	+	72	2.26	-	NT	NT	-	NT	NT	+	100	3.5	-	NT	NT	-	NT	NT						
70	PC-1970	FH-492	Bt	Cry1AC/Mon-531	1st	+	92	2.34	-	NT	NT	-	NT	NT	+	100	3.2	-	NT	NT	-	NT	NT						
71	PC-1971	FH-155	Bt	Cry1AC/Mon-531	2nd	+	100	2.77	-	NT	NT	-	NT	NT	+	100	3.31	-	NT	NT	-	NT	NT						
72	PC-1972	FH-Super-Cotton-2017	Bt	Cry1AC/Mon-531	2nd	+	83	2.15	-	NT	NT	-	NT	NT	+	100	2.4	-	NT	NT	-	NT	NT						
73	PC-1973	FH-AM-Cotton-2017	Bt	Cry1AC/Mon-531	2nd	+	92	3.03	-	NT	NT	-	NT	NT	+	100	3.6	-	NT	NT	-	NT	NT						
74	PC-1974	BH-224	Bt	Cry1AC/Mon-531	1st	+	100	2.75	-	NT	NT	-	NT	NT	+	100	3.80	-	NT	NT	-	NT	NT						
75	PC-1975	BH-223	Bt	Cry1AC/Mon-531	2nd	+	87	1.6	-	NT	NT	-	NT	NT	+	100	3.7	-	NT	NT	-	NT	NT						
76	PC-1976	MNH-1050	Bt	Cry1AC/Mon-531	1st	+	100	1.65	-	NT	NT	-	NT	NT	+	100	3.7	-	NT	NT	-	NT	NT						
77	PC-1977	MNH-1035	Bt	Cry1AC/Mon-531	2nd	+	100	0.94	-	NT	NT	-	NT	NT	+	100	3.5	-	NT	NT	-	NT	NT						
78	PC-1978	CEMB-Klean-Cotton-6	Bt	Cry1AC+Cry2A+GTG	1st	+	100	2.79	-	NT	NT	+	100	NR	+	100	3.50	+	100	3.50	+	100	3.60						
79	PC-1979	CEMB-Klean-Cotton-5	Bt	Cry1AC+Cry2A+GTG	1st	+	83	3.33	-	NT	NT	+	100	NR	+	100	3.7	+	100	2.48	+	100	2.68						
80	PC-1980	CEMB-Klean-Cotton-4	Bt	Cry1AC+Cry2A+GTG	2nd	+	92	1.20	-	NT	NT	+	88	NR	+	100	3.7	+	100	2.72	+	100	2.72						
81	PC-1981	CEMB-Klean-Cotton-3	Bt	Cry1AC+Cry2A+GTG	2nd	+	92	0.83	-	NT	NT	+	78	NR	+	100	2.4	+	100	3.49	+	100	3.76						
82	PC-1982	CRIS-638	Bt	Cry1AC/Mon-531	1st	+	92	1.34	-	NT	NT	-	NT	NT	+	100	3.3	-	NT	NT	-	NT	NT						
83	PC-1983	CRIS-673	Bt	Cry1AC/Mon-531	2nd	+	83	2.16	-	NT	NT	-	NT	NT	+	100	2.90	-	NT	NT	-	NT	NT						
84	PC-1984	CRIS-671	Bt	Cry1AC/Mon-531	2nd	+	72	2.04	-	NT	NT	-	NT	NT	+	100	3.9	-	NT	NT	-	NT	NT						
85	PC-1985	Bt-Cyto-535	Bt	Cry1AC/Mon-531	1st	+	100	2.25	-	NT	NT	-	NT	NT	+	100	3.3	-	NT	NT	-	NT	NT						
86	PC-1986	Bt-Cyto-533	Bt	Cry1AC/Mon-531	1st	+	92	1.90	-	NT	NT	-	NT	NT	+	100	3.3	-	NT	NT	-	NT	NT						
Note																													
	1		*Average of Three (03) Labs Consists of NIGAD Islamabad, ABRI Faisalabad and NIDRI Faisalabad																										
	2		** NT means Not Tested																										
		*** NT means Not Reported																											

*Average of Three (03) Labs Counts of NIGAB Islamabad, AMRI Faisalabad and NIKR Faisalabad

** "NT" means Not Tested

*** "NR" means Not Received

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2019 NCVT - BCT Results Averages from Reference Labs

2019 NCVT - BCT Results Averages from Reference Labs																																
Sr.	Codes	Denomination	Bt/Non-Bt	Technology Claim (Gene/Event)	Year of Testing	BCT Ass. Results (3 Labs)												BCT Results (CMBB)														
						Cry1Ac (Bt-I)				Cry1Ac + Cry2Ab (Bt-II)				Bt-II-RR (Bt-III)				Cry1Ac (Bt-I)				Cry1Ac + Cry2Ab (Bt-II)				Bt-II-RR (Bt-III)						
						Test Confirmation	Test Purity (%)	Quantification EUSA Ag/g (g)	Test Confirmation	Test Purity (%)	Quantification EUSA Ag/g (g)	Test Confirmation	Test Purity (%)	Quantification EUSA Ag/g (g)	Test Confirmation	Test Purity (%)	Quantification EUSA Ag/g (g)	Test Confirmation	Test Purity (%)	Quantification EUSA Ag/g (g)	Test Confirmation	Test Purity (%)	Quantification EUSA Ag/g (g)	Test Confirmation	Test Purity (%)	Quantification EUSA Ag/g (g)	Test Confirmation	Test Purity (%)	Quantification EUSA Ag/g (g)			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
87	PC-1987	Bt-CIM-785	Bt	Cry1AC/Mon-531	1st	+	92	2.73	-	NT	NT	-	NT	NT	+	100	3.7	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
88	PC-1988	Bt-CIM-775	Bt	Cry1AC/Mon-531	1st	+	78	1.76	-	NT	NT	-	NT	NT	+	100	3.6	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
89	PC-1989	Bt-Cyto-511	Bt	Cry1AC/Mon-531	2nd	+	80	1.50	-	NT	NT	-	NT	NT	+	100	3.21	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
90	PC-1990	Bt-CIM-789	Bt	Cry1AC/Mon-531	2nd	+	100	0.93	-	NT	NT	-	NT	NT	+	100	2.6	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
91	PC-1991	Bt-CIM-678	Bt	Cry1AC/Mon-531	2nd	+	100	3.62	-	NT	NT	-	NT	NT	+	100	3.6	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
92	PC-1992	Bt-CIM-303	Bt	Cry1AC/Mon-531	2nd	+	100	2.52	-	NT	NT	-	NT	NT	+	100	3.46	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
93	PC-1993	CIM-602	Bt	Cry1AC/Mon-531	-	+	100	2.18	-	NT	NT	-	NT	NT	+	100	2.7	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
94	PC-1994	Cyto-124	Non Bt	Nil	-	+	38	2.78	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
95	PC-1995	NIAB-929	Non Bt	Nil	1st	+	78	2.54	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
96	PC-1996	NIAB-88	Non Bt	Nil	1st	+	54	1.34	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
97	PC-1997	PC-1997	-	-	-	+	78	2.20	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
98	PC-1998	CRIS-644	Non Bt	Nil	1st	+	38	1.84	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
99	PC-1999	Cyto-226	Non Bt	Nil	1st	-	25	1.14	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
100	PC-2000	Sahara-Klean-5	Bt	Cry1AC+Cry2A+GTG	1st	+	92	2.27	-	NT	NT	+	100	NR	+	100	3.3	+	100	2.52	+	100	2.63	+	100	2.63	+	100	2.63	+	100	2.63
101	PC-2001	Sahara-300	Bt	Cry1AC/Mon-531	1st	+	100	4.11	-	NT	NT	-	NT	NT	+	100	2.8	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
102	PC-2002	MZM-7	Bt	Cry1AC/Mon-531	1st	+	100	1.48	-	NT	NT	-	10	NR	+	100	3.5	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
103	PC-2003	Cyto-124	Non Bt	Nil	1st	-	0	NR	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
104	PC-2004	NIAB-929	Non Bt	Nil	1st	+	67	3.27	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
105	PC-2005	NIAB-88	Non Bt	Nil	1st	-	38	0.57	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
106	PC-2006	PC-2006	-	-	-	+	65	3.95	-	NT	NT	-	20	NR	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
107	PC-2007	CRIS-644	Non Bt	Nil	1st	-	50	1.05	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
108	PC-2008	Cyto-226	Non Bt	Nil	1st	-	38	1.34	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
109	PC-2009	CRIS-638	Bt	Cry1AC/Mon-531	1st	+	93	1.83	-	NT	NT	-	NT	NT	+	100	3.4	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
110	PC-2010	YBG-2222(C-II)	Bt	Cry1Ac+Cry2A	1st	+	83	0.88	-	NT	NT	-	NT	NT	+	100	3.3	+	100	2.32	-	NT	NT	-	NT	NT	-	NT	NT	-	NT	NT
111	PC-2011	Weal-AG-CKC-301	Bt	Cry1AC+Cry2A+GTG	1st	+	92	1.02	-	NT	NT	+	100	NR	+	100	1.50	+	100	2.32	+	100	2.42	+	100	2.42	+	100	2.42	+	100	2.42
Average							87	2.10					80			100	3.30		98	2.59		100	2.84									

Note	1	*Average of Three (03) Labs consists of NIGAB Islamabad, ARRI Faisalabad and NROF Faisalabad
	2	**NT means Not Tested
	3	***NR means Not Received

Note: Errors and omissions are accepted, Please.


Director Research Headquarters

7/20/2020

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