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A BRIEF REPORT OF THE  
TENTH INTERNATIONAL CHICKPEA TRIALS AND NURSERIES  
CONDUCTED IN INDIA

RP  
C3202

1984-85

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ICRISAT

International Crops Research Institute for the Semi-Arid Tropics  
ICRISAT Patancheru P.O.  
Andhra Pradesh 502 324, India

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## INTRODUCTION

ICRISAT has coordinated International Chickpea Trials and Nurseries since 1975-76 with the aim of: supplying segregating populations and advanced breeding lines to cooperators for selection or direct release; identifying differences in adaptation; promoting cooperation through visits and information exchange.

In 1984-85, we distributed the following trials and nurseries:

- i. F2 Multilocal Trial - desi, short duration (F2-MLT-DS)
- ii. F2 Multilocal Trial - desi, medium duration (F2-MLT-DM)
- iii. F2 Multilocal Trial - desi, long duration (F2-MLT-DL)
- iv. F3 Multilocal Trial - desi, short duration (F3-MLT-DS)
- v. F3 Multilocal Trial - desi, medium duration (F3-MLT-DM)
- vi. F3 Multilocal Trial - desi, long duration (F3-MLT-DL)
- vii. International Chickpea Screening Nursery - desi, short duration (ICSN-DS)
- viii. International Chickpea Screening Nursery - desi, medium duration (ICSN-DM)
- ix. International Chickpea Screening Nursery - desi, long duration (ICSN-DL)
- x. International Chickpea Cooperative Trial - desi, short duration (ICCT-DS)
- xi. International Chickpea Cooperative Trial - desi, long duration (ICCT-DL)
- xii. Plant Type Multilocation Trial (PT-MLT)

A total of 99 sets were prepared and made available to 28 cooperators in 15 states (Appendix 1).

In addition we supplied 2889 samples of seeds of parental materials and segregating populations to cooperators in India.

Results have been received from most locations and are presented in this report. The highlights are described in the text and detailed tables are given in the appendices.

As in the past there were considerable interactions between entries and locations, emphasising the specific adaptation of chickpeas and the need for testing in more than a single environment.

Details of trials proposed for 1985-86 have been circulated and requests are being received. An outline of these is included for information.

## RESULTS 1984-85

### EARLY GENERATION SEGREGATING POPULATION TRIALS

As in the previous year, we grouped F2 and F3 populations into three categories; short, medium and long duration and distributed these sets to their respective maturity regions.

#### F2 Multilocation Trials

The trials comprised 23 F2 populations of crosses combining good agronomic attributes, disease resistance, and other desirable characters. One common and one local check was included in the trials. The entries and their pedigrees are shown in Appendix 2 (short duration), Appendix 7 (medium duration) and Appendix 12 (long duration). All the three trials were randomised blocks with three replications and a plot size of 4 rows, 30 cm apart and 4 m long with a spacing of 10 cm within the rows.

Desi, short duration (F2 MLT-DS): The short duration trials were sent to 8 locations in peninsular India and the data were received from 4 locations at the preparation of this report. The results are presented in Appendices 3 to 6.

At individual locations several entries exceeded the checks in yield indicating their promise for further selection. The characteristics of the best entries are summarised in Table 1.

Desi, medium duration (F2 MLT-DM): The medium duration trials were sent to 5 locations in peninsular and 1 in central India. Data were received from 5 (Appendices 8 to 11). Again there were entries exceeding in yield K-850 or the local check. Table 2 lists the 4 best crosses.

Desi, long duration (F2 MLT-DL): The long duration trials were sent to 6 locations and results were received from 3 (Appendices 13 to 16). The performance of the best three populations has

Table 1. Characteristics of populations yielding highest on average in  $F_2$  MLT-DS in 1984-85.

IC No/ name	Seed yield (kg/ha)					DFF <sup>§</sup>	100- seed weight (g)
	Patan- cheru	Juna- gadh	Gul- barga	Rahuri	Mean*		
820059	1444	1924	277	3015	2128	55	20
820144	1429	2371	229	2420	2023	59	15
820108	1349	1949	222	2856	2050	51	21
Annigeri	1587	1251	118	2666	1835		
Local check	1476	1471	250	1666	-		

\*Gulbarga not considered for mean, because of high CV and low mean.

§ DFF = Days to 50% flowering.

Table 2. Characteristics of populations yielding highest on average in  $F_2$  MLT-DM in 1984-85.

IC No./ name	Seed yield (kg/ha)						DFF <sup>§</sup>	100- seed weight
	Patan- cheru	Berol	Sehore	Gwalior	Parbhani	Mean*		
820144	1937	5149	728	1967	1557	2651	56	18
820140	2286	3545	1277	2618	1613	2516	57	19
820073	2524	3283	892	1991	1754	2466	56	16
K 850	2111	3229	881	2198	1083	2103	65	24
Local check	2206	3000	964	2190	1746	-		

\*Sehore not considered for mean, because

§ DFF = Days to 50% flowering.



been given in Table 3. Also here crosses were identified with yields exceeding those of the checks.

### F3 Multilocation Trials

The trials comprised of 12 F3 populations, one common and one local check. The F3 populations were selected from the F2 multilocation trials of 1983-84 on the basis of performance at individual or across locations. The list of entries included are given in Appendix 15 (short duration), Appendix 20 (medium duration) and Appendix 25 (long duration). The design for the trials was a randomized complete block with three replications. Plot size was 4 rows of 4 meters with 30 cm between rows and 10 cm with in rows.

Deasi, short duration (F3 MLT-D6): This trial was sent to 7 locations in India, and data have been received from 6 locations. The data are presented in Appendices 16 to 19. Coefficient of variation was high only at Navagaon. At Rahuri, one F3 bulk gave significantly higher yield than the common check Annigeri. At other locations, none of the bulks could produce significantly higher yields than the checks. The overall comparison of top three yielders are given in Table 4. Three bulks have given higher yields than Annigeri.

Deasi, medium duration (F3 MLT-DM): Ten sets of this trial were sent to Indian locations, and we received data from all locations. These are presented in Appendices 21 to 24. Coefficients of variation were high at Navagaon and Sehere, but were with in acceptable limits at other locations. Eight bulks were significantly better yielding at Patancheru. At other locations none of the bulks were significantly better than the checks. The overall performance of three highest yielding bulks are given in Table 5, along with other characters. All the three show overall high mean than the common check K-850.

Deasi, long duration (F3 MLT-DL): The trial was sent to 10 locations in India. Data were returned from 9 locations, and are presented in Appendices 26 to 29. Navagaon and Pantnagar had very high coefficients of variation, while at other locations the CVs were at acceptable levels. No bulk could yield significantly higher than the check at any of the locations. However, five bulks gave overall higher mean yields than G-130; and the top three bulks are presented in Table 6.

### INTERNATIONAL CHICKPEA SCREENING NURSERIES (ICSNs)

As in F2 and F3 trials, short, medium, and long duration sets were prepared and sent to cooperators. Entries included F5 to F7 near-homozygous lines from the ICRISAT breeding program, two common and one local check. The ICSN-DS and ICSN-DM comprised of 60 entries and ICSN-DL, 80. The trials were all

Table 3. Characteristics of populations yielding highest on average in  $F_2$  MLT-DL in 1984-85.

IC No./ Name	Seed yield (kg/ha)				Days to 50% flowering
	Berthin	New Delhi	Sriganga- nagar	Mean*	
820193	1531	2380	4076	3228	112
820307	1543	2309	4069	3189	111
820304	1414	2420	3944	3182	111
H 208	1796	2428	3986	3207	112
Local check	1512	1777	4125	-	-

\*Berthin not considered for mean, because of high CV.

Table 4. Characteristics of populations yielding highest on average in  $F_3$  MLT-DS in 1984-85.

IC No./ Name	Seed yield (kg/ha)							DFF <sup>a</sup>	100- seed weight (g)
	Patan- cheru	Arnej	Juna- gadhd	Akola	Rahuri	Nav- gaon	Mean*		
810001	2683	3231	1712	1397	2031	389	2211	47	26
810011	2286	2763	1697	1349	1920	537	2003	51	22
810092	2524	2602	1851	1111	1825	505	1763	51	17
Annigeri	2349	2822	1654	1254	1714	405	1959	58	21
Local check	2667	3553	1888	1016	1539	600	-	-	-

<sup>a</sup>DFF = Days to 50% flowering

Table 5. Characteristics of populations yielding highest on average in F<sub>3</sub> MLT-DM in 1984-85.

IC No./ Name	seed yield (kg/ha)										Mean*	DFF <sup>†</sup>	100- seed wt (g)
	Patan- cheru	Derol	Juna- gadh	Gul- barga	Sehore	Gwa- lior	New Delhi	Farid- kot	Nav- gaon	Kanpur			
810009	1905	3245	1712	988	992	2372	2475	1561	858	4132	2299	18	63
810076	1603	2885	1705	675	638	2650	2769	1317	1011	3685	2186	18	67
810045	1445	3016	1558	754	841	2364	2626	1310	871	3700	2097	15	67
5003	825	2605	1449	750	643	1222	1896	1076	927	3083	1613	25	68
Local check	889	2820	1551	1214	1150	2436	2372	1801	432	3700	-	-	

<sup>†</sup>DFF = Days to 50% flowering.

\*Sabour and Navgaon not considered for mean because of high CV%.

Table 6. Characteristics of populations yielding highest on average in F<sub>3</sub> MULT-DL in 1984-85.

IC No./ Name	Seed yield (kg/ha)										100- seed weight (g)
	Hisar	Beithin	New Delhi	Farid- kot	Srigan- ganagar	Nav- gaon	Pant- nagar	Kangur	Means	DFF <sup>§</sup>	
810275	2967	2741	1833	1636	1576	309	428	2713	3114	92	13
810280	2356	2846	2205	1706	3444	129	254	3207	3053	95	12
810278	2967	2247	1777	1435	3437	210	159	2590	2945	94	15
4948	2412	2982	2198	1692	2792	92	524	3083	2962	95	13
Local check	2102	1697	1825	2129	3528	231	317	2837	-	-	-

§ DFF = Days to 50% flowering.

\* Navgaon and Pantnagar not considered for mean because of high CV% and low mean.

augmented designs with the checks repeated for every ten test entries. The plot size was 2 rows, 4 m long and 30 cm apart with 10 cm between plants along the rows.

#### Desi, short duration, (ICSN-DS)

The entries in ICSN-DS and their parentages are shown in Appendix 30. We distributed 8 sets and the results were received from 6 locations, (Appendices 31 to 35).

To the yield data the ranks have been added showing at a glance overall performance and local adaptation. The best overall performance are listed in Table 7.

#### Desi, medium duration, (ICSN-DW)

Seven sets were supplied to cooperators and results have been received from 8 locations. The entries and their parentages are in Appendix 36. The results are summarized in Appendices 37 to 41.

Several entries had an impressive overall performance. The characteristics of the highest yielding materials are presented in Table 8.

#### Desi, long duration, (ICSN-DL)

The entries in ICSN-DL and their parentages are shown in Appendix 42. Sets were supplied for 11 locations and the data received from 7 of them are presented in Appendices 43 to 46.

At individual locations several to many entries gave significantly higher seed yields than the common and local check. Many entries produced overall better yields than the checks. The characteristics of the best yielding entries are shown in Table 9.

### INTERNATIONAL CHICKPEA COOPERATION TRIALS (ICCTs)

As in the previous years, we invited scientists in Indian institutions to contribute entries into ICCTs. We could get few entries for the long duration type, but none for the short duration group. We had two sets of trials—desi, short duration and desi, long duration. The list of entries and their pedigree is given in Appendices 47 and 53, respectively.

Each of the trials comprised of 14 test entries, one common and one local check. The design was randomized complete block with three replications. Plot size was 6 rows of 4 meters, with rows spaced at 30 cm and plants within a row at 10 cm.

Table 7. Characteristics of entries yielding highest on average in ICSN-DS in 1984-85.

ICCL No name	seed yield (kg/ha)							Weight of 100-seed (g)	
	Patan- cheru	Juna- gadhi	Akola	Rahuri	Keon- jhar	Ludh- iana	Mean		DTW
84230	-	2252	1429	2332	1460	1428	1868	51	20
84219	-	2648	1381	1666	1772	4046	1867	50	16
84204	2429	2356	810	1618	1751	2190	1793	45	22
Annigeri	1929	2321	964	1646	1366	2229	1645	48	20
JG 62	-	1727	730	1658	862	1999	1244	50	10
Local check	20-4	2210	663	1658	1202	2889			

DTW = Days to 50% flowering.

Table 8. Characteristics of entries yielding highest on average in ICSN-DM in 1984-85.

ICCL No. Name	seed yield (kg/ha)									DFP	100- seed weight (g)
	Patan- cheru	Sabour	Derol	Juna- gadh	Gwa- lior	New Delhi	Nav- gaon	Durga- pura	Mean		
84127	2000	1429	3142	2439	2261	2006	740	1332	1989	70	21
84334	2000	1667	2213	2544	1666	1699	1309	1493	1846	69	19
83288	2524	1000	2380	2168	2713	2502	167	250	1815	70	17
K 850	1364	736	1813	1512	2015	2182	438	1051	1366	76	27
ICCC 4	794	1437	2396	1845	2301	1999	384	692	1402	72	14
Local check	1206	1413	2281	2009	2432	1741	434	939			

@DFP = Days to 50% flowering.

\*Sabour not considered for mean because of high CV%.

Table 9. Characteristics of entries yielding highest on average in ICSN-DL in 1984-85.

ICCL No./ Name	Seed yield (kg/ha)								DFF <sup>a</sup>	100- seed weight (g)
	Hisar	Ber- thin	New Delhi	Farid- kot	Ludh- iana	Pant- nagar	Kanpur	Mean <sup>b</sup>		
83448	2524	3656	-	1668	2237	238	2618	2541	90	16
84460	3476	3533	1476	1710	2618	238	2380	2532	95	13
84412	2476	2722	1904	1605	2332	238	3808	2475	94	18
G 130	2185	2658	1652	1251	1416	338	1993	1859	92	13
H 208	1738	2105	1804	1147	1476	292	1815	1681	91	13
Local check	1595	2382	1845	1574	1309	497	1993			

<sup>a</sup>DFF = Days to 50% flowering

<sup>b</sup>Pantnagar not considered for mean because of high CV%.



Desi, short duration (ICCT-DS): We sent 8 sets of this trial to locations in India, and received data from all the locations. The data from these locations are presented in Appendices 48 to 52. Coefficients of variation were high at Bahore, Ludhiana and Berhampore, and hence have been left out of further analysis. At other locations CVs were within acceptable limits. One entry yielded significantly higher than the local check at Keonjhar. At other locations no test entry was significantly higher yielding than the check varieties. The overall performance of top three lines is given in Table 10. Among them, ICRISAT line ICCL-83132 has given the highest yield.

Desi, long duration (ICCT-DL): The trial was sent to 13 locations. We received data from 9 locations and these are presented in Appendices 54 to 58. Ranchi, Pantnagar and Kanpur locations had very high coefficients of variation; while at other locations the CVs were acceptable. No test entry was significantly higher yielding than the check at any of the locations. Common check G-130 has come out as overall high yielder (Table 11). Lines ICC-11508 and ICCL-84469 are second and third, overall.

#### PLANT TYPE MULTILLOCATION TRIAL

The mid-tall compact genotypes are reported to be tolerant to *Botrytis* gray mold. Hence, a trial of such lines was proposed for areas where gray mold is prevalent. The trial was sent to 8 locations and we received data from 7 locations. There are presented in Appendices 59 to 64.

Three highest yielding lines are presented in Table 12. Entry ICCL-845005 is good across locations, after K 850.

#### Other materials

We supplied 2889 samples of chickpea in response to specific requests (Appendix 65).

#### Proposals for 1985-86

A list of the trials proposed for 1985-86 season had already been circulated, and is shown on pages 16 and 17. This remains same as in the previous year except that we have discontinued F3MLT and added ICCT-DM.

#### Acknowledgements

The cooperation of all who participated in conducting the trials is gratefully acknowledged. The results are essential to the success of our international breeding activities. It is hoped that the materials and information generated will prove to have equal value within India.

Table 10. Characteristics of entries yielding highest on average in ICCT-DS in 1984-85.

ICCI/ ICU No.	seed yield (kg/ha)									DFP <sup>a</sup>	100- seed wt (g)
	Patan- cheru	Dohad	Juna- gadh	Sehore	Nav- gaon	Keon- jhar	Ludh- iana	Berham- pore	Mean <sup>b</sup>		
83132	1774	3511	4406	536	1276	1631	1761	1202	2520	56	18
83214	1750	2261	4774	646	918	1900	1184	769	2321	56	16
13818	1816	2529	4088	536	1864	1237	1172	1007	2307	55	20
Annigeri	1905	2410	4911	521	1724	459	720	641	2282	55	20
Local check	1726	3868	4154	824	1224	1436	1642	619	-	-	-

<sup>a</sup>DFP = Days to 50% flowering.

<sup>b</sup>Sehore, Berhampore and Ludhiana not considered for mean because of high CV%.

Table 11. Characteristics of entries yielding highest on average in ICCT-DL in 1984-85.

ICC/ ICCL No.	Seed yield (kg/ha)										100- seed weight (g)
	Ranchi	Hisar	Ber- thin	Lhau- lsan	New Delhi	Farid- kot	Srikan- ganagar	Pant- nagar	Kargur	Mean <sup>a</sup>	
11508	95	1909	2443	2027	2110	1157	3198	84	766	2141	90
84469	678	1409	2583	2371	2060	1286	2990	122	828	2117	91
11507	666	1845	2211	2208	1690	1300	3202	119	938	2076	91
H 208	428	1968	2408	2074	2207	1168	3108	134	1156	2156	92
Local check	350	2004	2147	2021	2369	1946	3271	164	1109	-	-

DIFF = Days to 50% flowering

<sup>a</sup>Ranchi, Panthnagar and Kargur not considered for mean because of high CVA.

Table 12. Characteristics of entries yielding highest on average in PT-MLT in 1984-85.

ICCL No./ ICC No.	Seed yield (kg/ha)										100- seed weight (g)
	Patan- cheru	Ranchi	Hisar	Ber- thin	Gwa- luor	Srigan- ganagar	Pant- nagar	Mearf	DFPY		
845005	1317	928	1349	436	1595	2188	119	1217	80	28	
845001	1295	1349	1222	584	1690	1563	32	1195	79	20	
K 850	1683	1182	1611	806	1761	2188	63	1465	82	-	
Local check	1619	2063	1889	634	1634	2308	476	-	-	-	

DFPY = Days to 50% flowering.

\* Hisar, Gwalior and Pantnagar not considered for seed because of high CVs.

## REQUEST FOR INTERNATIONAL CHICKPEA COOPERATIVE TRIALS AND NURSERIES

Name : .....

Address : .....

: .....

: .....

: .....

: .....

Please supply the following sets of chickpea trials and nurseries for 1985-86

Trial	Design	No. of Entries	Number of sets	Locations
<b>Breeding</b>				
F2 MLT-DS	RB	25		
F2 MLT-DM	RB	25		
F2 MLT-DL	RB	25		
ICSN-DS	DAug	40-50		
ICSN-DM	DAug	40-50		
ICSN-DL	DAug	40-50		
ICCT-DS	RB	16		
ICCT-DM	RB	16		
ICCT-DL	RB	16		
ICAT	RB	16		
<b>Pathology</b>				
ICRRN	RB	51		
IIUCRRN	RB	51		
ICSDN	RB	10		
<b>Entomology</b>				
ICRN	RB	12		

MLT : Multilocal Trial  
DS : Desi Short Duration  
DM : Desi Medium Duration  
DL : Desi Long Duration  
ICSN : International Chickpea Screening Nursery  
ICCT : International Chickpea Cooperative Trial  
ICAT : International Chickpea Adaptation Trial  
ICRRWN : International Chickpea Root-Rot/Wilt Nursery  
IIUCWRRN : ICRISAT-ICAR Uniform Chickpea Wilt/Root-Rot Nursery  
ICSDN : International Chickpea Stunt Disease Nursery  
ICHRN : International Chickpea Heliothis Resistant Nursery

Appendix 1. International Trials &amp; Nurseries set within India in 1964-65.

State	Location	Cooperator	F25	F2M	F2L	F3S	F3M	F3L	M2	M3	ML	T5	TL	PT
Andhra	Patancheru	ICRISAT	1	1	1	1	1	1	1	1	1	1	1	1
Andhra Pradesh	Kamha	M.P. Raque												
Bihar	Sabour	M.B. Singh	1	1	1	1	1	1	1	1	1	1	1	1
Gujarat	S.K. Nagar	S.M. Shah	1	1	1	1	1	1	1	1	1	1	1	1
	Jungnagadh	J.P. Yadavendra	1	1	1	1	1	1	1	1	1	1	1	1
Maryana	Misar	ICRISAT	2											
	Misar	V.P. Singh	1								4			3
West Bengal	Berhampur	S.C. Sood	1											
	Calcutta	T. Somy Rao	1											
Madhya Pradesh	Sehore	M.B. Lal	1											
	Gwalior	ICRISAT	1											
	Raipur	G.P. Mishra	1											
	Jabalpur	S.L. Pandey	1											
	Alkole	G.R. Palsankar	1											
Maharashtra	Bamburda	S.B. Deshmukh	1											
	Parbhani	Y.S. Sertai	1											
	Parbhani	F.M. Sakhi	1											
New Delhi	Mayergarh	K.C. Prasad	1											
Orissa	Keonjhar	K.M. Samal	1											
	Fardkot	T.S. Sarda	1											
Punjab	Ludhiana	M.M. Verma	1											
	SC Nagar	S.V. Naraswami	1											
Rajasthan	Mavgaon	Ms. Uma Menon-Bir	1							2				
	Mavgaon	Zonal Assoc. Bir	1											
Tamil Nadu	Pudupalayam	G.Satyam Kumar	1											
U.P.	Pantnagar	S.P. Pandya	1											
	Kanpur	J.S. Sinha	1											
	Faizabad	S.P. Katiyar	1											
	Berhampore	S.M. Sen	1											
Total			4	6	6	7	10	10	8	8	11	8	13	6

Appendix 2. Entries in P2 Multilocational Trial - Desi  
Short Duration (P2 MLT-D8) - 1984-85

Entry No.	IC No./ Name	Parents
1	IC-820110	ICCC-30 x 18-7-2-1
2	IC-820023	18-7-2-1 x Phule G-7
3	IC-820024	18-7-2-1 x 2375
4	IC-820027	18-7-2-1 x JG-315
5	IC-820033	A1-97 x 2375
6	IC-820128	A1-97 x 2E
7	IC-820044	N-52 x ICCL-80074
8	IC-820054	2E x JG-315
9	IC-820058	RSG-44 x ICC-22
10	IC-820059	RSG-44 x Phule G-7
11	IC-820060	RSG-44 x 2375
12	IC-820069	JG-1258 x 2375
13	IC-820070	JG-1258 x BDN-G-20
14	IC-820072	JG-1258 x JG-315
15	IC-820086	ICCC-6 x Phule G-7
16	IC-820091	64-3 x Annigeri
17	IC-820094	64-3 x ICC-22
18	IC-820095	64-3 x Phule G-7
19	IC-820096	64-3 x 2375
20	IC-820108	Phule G-12 x ICC-6
21	IC-820114	ICCC-30 x RSG-44
22	IC-820129	A1-97 x RSG-44
23	IC-820137	N-52 x JG-1265
24	Annigeri	
25	Local check	



Appendix 3. Mean seed yield (kg/ha) and ranks of entries in F2M17-D8 at 4 locations in 1984-85

Entry No.	ICCL./ ICC.No	Patan-cheru	Junag-adh	Gulb-arga	Rab-uri	Mean*
1	820110	1413 13	1771 16	257 13	2221 10	1802 16
2	820023	1699 1	1851 12	299 7	2142 14	1897 6
3	820024	1460 10	1822 13	180 19	2031 17	1771 17
4	820027	1540 5	1639 18	347 3	2253 9	1811 15
5	820033	1492 7	1537 19	278 9	1952 20	1660 19
6	820102	1603 2	2063 4	271 11	1983 18	1883 8
7	820044	1333 16	2158 2	326 4	2301 8	1931 5
8	820054	1349 15	1946 9	222 17	2856 2	2050 3
9	820058	1444 11	1895 11	264 12	2205 11	1848 10
10	820059	1444 11	1924 10	277 10	3015 1	2128 1
11	820060	1079 20	2041 6	271 11	2158 13	1759 18
12	820069	1461 9	2005 7	229 16	2380 6	1949 4
13	820070	1286 17	1719 17	368 2	1904 21	1636 20
14	820072	1270 18	1800 14	306 5	2523 4	1864 9
15	820086	1524 6	1785 15	285 8	2190 12	1833 12
16	820091	1429 12	1800 14	476 1	2047 16	1759 18
17	820094	1460 10	1397 21	326 4	1610 23	1489 22
18	820095	1429 12	2056 5	236 15	1967 19	1817 14
19	820096	1429 12	1968 8	299 7	2094 15	1830 13
20	820108	1571 4	2005 7	305 6	2094 15	1890 7
21	820114	1429 12	2371 1	229 16	2420 5	2073 2
22	820129	1222 19	2100 3	153 20	2348 7	1890 7
23	820137	1397 14	1924 10	209 18	1412 24	1578 21
24	4918	1587 3	1251 22	118 21	2666 3	1835 11
25	Lo.Ch	1476 8	1471 20	250 14	1666 22	- -
SE		127.8	237.0	62.7	105.2	
MEAN		1433.0	1852.0	271.1	2177.5	
CV		15.4	22.2	40.1	8.4	

\* Gulbarga not considered for mean

Appendix 4 Mean days to 50% flowering of entries in F2MILT-D8 at 4 locations in 1984-85

Entry No.	ICCL./ ICC.No	Patan-cheru	Jung-adh	Gulb-arga	Rab-uri	Mean
1	820110	50	54	75	56	59
2	820023	38	51	58	62	52
3	820024	48	52	49	55	51
4	820027	45	48	87	50	58
5	820033	41	55	59	50	51
6	820102	41	52	69	49	53
7	820044	41	49	68	48	52
8	820054	43	50	58	52	51
9	820058	51	53	50	58	53
10	820059	39	51	78	50	55
11	820060	46	52	61	49	52
12	820069	49	53	68	48	55
13	820070	51	54	75	60	60
14	820072	49	54	83	52	60
15	820086	37	52	70	48	52
16	820091	43	52	72	49	54
17	820094	44	49	76	56	56
18	820095	39	52	80	46	54
19	820096	41	53	71	47	53
20	820108	45	52	83	49	57
21	820114	53	54	70	58	59
22	820129	46	52	70	49	54
23	820137	47	53	73	48	55
24	4918	46	49	55	50	50
25	Lo.Ch	39	51	50	45	
	SE	1.0	0.7	8.0	0.6	
	MEAN	44.5	51.8	68.3	51.3	
	CV	4.0	2.3	20.2	1.9	

Appendix 5. Mean days to maturity of entries in  
F2MLT-D8 at 4 locations in 1984-85

Entry No.	ICCL./ ICC.No	Patan-cheru	Junagadh	Colbarga	Rahuri	Mean
1	820110	99	99	110	112	105
2	820023	87	93	105	115	100
3	820024	90	94	107	114	101
4	820027	92	98	106	114	103
5	820033	89	95	104	112	100
6	820102	90	92	104	113	100
7	820044	89	96	108	111	101
8	820054	90	96	107	114	102
9	820058	94	99	107	112	103
10	820059	90	96	105	114	101
11	820060	96	98	107	112	103
12	820069	95	99	110	114	105
13	820070	97	97	112	116	106
14	820072	93	99	110	115	104
15	820086	88	92	108	114	101
16	820091	90	96	110	113	102
17	820094	89	95	107	115	102
18	820095	87	98	105	112	101
19	820096	87	95	107	114	101
20	820108	92	97	107	114	103
21	820114	93	96	110	115	104
22	820129	95	98	111	109	103
23	820137	97	94	108	110	102
24	4918	90	96	104	114	101
25	Lo.Ch	91	96	107	107	
SE		1.0	0.7	0.6	0.0	
MEAN		91.5	96.1	107.4	113.0	
CV		1.9	1.2	1.0	0.0	

Appendix 6. Mean weight of 100 seeds (g) of entries in FZMLT-DB at 4 locations in 1984-85

Entry No.	ICCL./ ICC.No	Patan-cheru	Junag-adh	Gulb-arga	Rab-uri	Mean
1	820110	17	18	20	16	18
2	820023	21	28	16	22	22
3	820024	22	25	17	23	22
4	820027	17	17	16	19	17
5	820033	22	25	23	23	23
6	820102	22	25	17	23	22
7	820044	17	18	18	18	18
8	820054	21	25	15	21	21
9	820058	19	18	24	17	20
10	820059	20	23	17	21	20
11	820060	20	20	12	19	18
12	820069	21	22	20	21	21
13	820070	18	20	19	19	19
14	820072	17	15	17	14	16
15	820086	25	20	26	21	23
16	820091	16	20	22	16	19
17	820094	18	18	25	20	20
18	820095	19	22	21	23	21
19	820096	18	21	18	19	19
20	820108	17	19	22	17	19
21	820114	15	14	16	13	15
22	820129	17	18	17	18	18
23	820137	22	24	17	17	20
24	4918	19	22	18	21	20
25	Lo.ch	18	13	25	17	
	SE	0.6	0.8	0.2	0.3	
	MEAN	19.1	20.4	18.9	18.9	
	CV	5.6	6.5	1.5	3.1	

## Appendix 7. Entries in P2 Multilocational Trial - Desi

Medium Duration (P2 MLT-DM) - 1984-85

Entry No.	IC No./ Name	Parents
1	IC-820007	Phule G-12 x BDNG-20
2	IC-820016	ICCC-30 x BDNG-20
3	IC-820019	18-7-2-1 x Annigeri
4	IC-820021	18-7-2-1 x K-850
5	IC-820022	18-7-2-1 x ICCG-22
6	IC-820025	18-7-2-1 x BDNG-20
7	IC-820028	A1-97 x Annigeri
8	IC-820030	A1-97 x K-850
9	IC-820034	A1-97 x BDNG-20
10	IC-820036	A1-97 x JG-315
11	IC-820039	N-52 x K-850
12	IC-820049	2E x ICCG-22
13	IC-820057	RSG-44 x K-850
14	IC-820066	JG-1258 x K-850
15	IC-820073	JG-1265 x Annigeri
16	IC-820084	ICCC-6 x K-850
17	IC-820097	64-3 x BDNG-20
18	IC-820101	Phule G-12 x 18-7-2-1
19	IC-820104	Phule G-12 x 2E
20	IC-820105	Phule G-12 x RSG-44
21	IC-820140	2E x RSG-44
22	IC-820142	2E x JG-1265
23	IC-820144	2E x 64-3
24	K-850	
25	Local check	

Appendix 8. Mean seed yield (kg/ha) and ranks of entries in  
PZMLT-DW at 5 locations in 1984-85

Entry No.	ICCL./ ICC.No	Patan-cheru	Derol	Sehore	Gwalior	Parbhani	Mean*
1	820007	2111 13	3327 6	693 18	2729 1	1384 16	2388 3
2	820016	2190 9	3100 16	936 8	1960 16	1329 21	2145 18
3	820019	2143 12	3357 5	651 21	1722 20	1647 4	2217 11
4	820021	2016 14	3235 10	689 19	2071 12	1326 22	2162 16
5	820022	2540 1	3429 4	1295 1	1991 14	1560 6	2380 4
6	820025	2175 10	3253 9	960 6	2237 8	1178 24	2211 12
7	820028	2301 5	3319 7	968 5	1785 18	1522 9	2232 10
8	820030	1984 15	3000 20	709 17	2562 3	1549 8	2274 8
9	820034	2349 4	2601 23	717 15	1539 22	1429 13	1980 22
10	820036	2381 3	1928 24	551 24	2063 13	1446 11	1955 23
11	820039	2238 7	3138 13	654 20	2523 4	1445 12	2336 5
12	820049	2524 2	3126 15	711 16	1785 18	1304 23	2185 14
13	820057	2190 9	2750 22	885 12	1952 17	1368 19	2065 19
14	820066	1921 17	3581 2	511 25	2380 6	1367 20	2312 6
15	820073	2524 2	3283 8	892 11	1991 14	1754 1	2388 3
16	820084	2206 8	2870 21	605 23	1753 19	1379 17	2052 20
17	820097	2159 11	3034 17	1047 3	2063 13	1398 14	2164 15
18	820101	1921 17	3129 14	641 22	2396 5	1375 18	2205 13
19	820004	2175 10	3031 18	938 7	1547 21	1390 15	2036 21
20	820105	2286 6	3013 19	901 10	2309 7	1455 10	2266 9
21	820140	2286 6	3545 3	1277 2	2618 2	1613 5	2516 2
22	820142	2111 13	3192 12	920 9	2150 11	1675 3	2282 7
23	820144	1937 16	5149 1	728 14	1967 15	1557 7	2653 1
24	5003	2111 13	3229 11	881 13	2198 9	1083 25	2155 17
25	Lo.ch	2206 8	3000 20	984 4	2190 10	1740 2	- -
SE		194.0	448.8	193.0	230.0	147.8	
MEAN		2199.3	3184.8	829.7	2099.2	1451.0	
CV		15.3	24.4	40.3	19.0	17.6	

\* Sehore not considered for mean

Appendix 9. Mean days to 50% flowering of entries in  
F2MLT-DW at 5 locations in 1984-85

Entry No.	ICCL./ ICC.No	Fatan-cheru	Derol	Seh-ore	Gwa-lior	Pard-hani	Mean
1	820007	47	63	69	65	42	57
2	820016	53	62	70	82	52	64
3	820019	49	63	69	72	40	59
4	820021	49	64	69	65	43	58
5	820022	48	67	69	69	44	59
6	820025	48	65	70	68	42	59
7	820028	46	66	68	64	42	57
8	820030	49	67	68	65	44	59
9	820034	49	67	69	66	43	59
10	820036	47	63	68	64	43	57
11	820039	48	67	69	77	47	62
12	820049	46	67	68	77	45	61
13	820057	53	66	71	77	52	64
14	820066	53	69	71	75	50	64
15	820073	48	62	69	67	42	58
16	820084	52	65	69	69	44	60
17	820097	47	65	69	71	42	59
18	820101	50	67	69	75	45	61
19	820004	42	69	68	75	42	59
20	820105	46	64	68	65	41	57
21	820140	45	65	67	65	42	57
22	820142	47	68	69	69	40	59
23	820144	44	62	68	65	51	58
24	5003	56	67	73	77	51	65
25	Lo.ch	52	66	68	65	40	
	SE	1.1	1.8	0.6	4.9	0.4	
	MEAN	48.5	65.4	69.0	69.9	44.4	
	CV	4.0	4.8	1.6	12.1	1.5	

Appendix 10. Mean days to maturity of entries in  
F2MLT-DW at 5 locations in 1984-85

Entry No.	ICCL./ ICC.No	Patam-cheru	Derol	Seb-ore	Gwa-lior	Parb-hani	Mean
1	820007	101	115	124	128	94	112
2	820016	101	113	126	128	98	113
3	820019	102	117	118	130	94	112
4	820021	102	121	125	129	94	114
5	820022	102	119	123	129	95	114
6	820025	102	120	126	130	96	115
7	820028	99	114	117	128	94	110
8	820030	103	118	125	128	95	114
9	820034	100	116	124	128	94	112
10	820036	100	121	121	127	97	113
11	820039	101	115	125	131	100	114
12	820049	97	117	123	130	101	114
13	820057	102	116	126	128	98	114
14	820066	104	119	132	128	99	116
15	820073	101	118	123	127	95	113
16	820084	101	119	124	131	94	114
17	820097	99	114	119	128	95	111
18	820101	104	117	131	130	100	116
19	820004	100	119	114	129	96	112
20	820105	103	118	124	128	96	114
21	820140	101	118	119	129	98	113
22	820142	101	116	124	129	97	113
23	820144	101	117	114	128	96	111
24	5003	102	116	128	131	100	115
25	Lo.ch	102	117	116	127	93	
	SE	1.0	1.7	1.2	0.8	0.6	
	MEAN	101.2	117.2	122.9	128.7	96.3	
	CV	1.7	2.5	1.7	1.1	1.1	



Appendix 11. Mean weight of 100 seeds (g) of entries in  
F2MLT-DM at 5 locations in 1984-85

Entry No.	ICCL/ ICC.No	Patan- cheru	Derol	Seh- ore	Gwa- lior	Par- bhani	Mean
1	820007	20	30	17	16	18	20
2	820016	19	21	16	15	18	18
3	820019	20	21	18	16	19	19
4	820021	22	22	19	18	21	20
5	820022	22	27	18	16	21	21
6	820025	21	25	18	17	19	20
7	820028	20	18	18	16	18	18
8	820030	22	31	20	19	22	23
9	820034	20	28	19	17	20	21
10	820036	18	24	16	15	17	18
11	820039	24	29	20	21	22	23
12	820049	26	25	21	22	25	24
13	820057	20	20	17	16	15	18
14	820066	19	18	17	16	19	18
15	820073	19	22	18	16	19	19
16	820084	28	22	20	20	21	22
17	820097	18	21	15	14	18	17
18	820101	16	27	13	13	16	17
19	820004	23	23	21	19	16	20
20	820105	15	21	13	14	18	16
21	820140	20	24	14	18	19	19
22	820142	22	20	17	17	19	19
23	820144	19	22	15	15	19	18
24	5003	26	23	20	23	26	24
25	Lo.ch	15	20	15	13	14	
	SE	1.0	1.1	1.1	0.7	0.1	
	MEAN	20.5	23.3	17.4	16.9	19.1	
	CV	8.4	7.8	10.9	7.5	0.9	

## Appendix 12:

## Entries in F2 Multilocational Trial - Desi

## Long Duration (F2 MLT-DL) - 1984-85

Entry No.	IC No./ Name	Parents
1	IC-820155	GL-1002 x Pant G-114
2	IC-820163	GL-1002 x ICCG-23
3	IC-820164	GL-1002 x T-3
4	IC-820165	GG-685 x Pant G-114
5	IC-820169	GG-685 x H-76-49
6	IC-820175	H-77-51 x Pant G-114
7	IC-820193	ICCG-29 x ICCG-23
8	IC-820194	ICCG-29 x T-3
9	IC-820220	ICCG-30 x T-3
10	IC-820227	18-7-2-1 x H-75-35
11	IC-820282	JG-1265 x GL-769
12	IC-820303	64-3 x C-235
13	IC-820304	64-3 x G-543
14	IC-820307	64-3 x H-75-35
15	IC-820315	GL-1002 x Phule G-7
16	IC-820317	GL-1002 x BDNG-20
17	IC-820319	GL-1002 x JG-315
18	IC-820320	GG-685 x Annigeri
19	IC-820330	H-77-51 x BDN 9-3
20	IC-820335	H-77-51 x BDNG-20
21	IC-820337	H-77-51 x JG-315
22	IC-820338	ICCG-29 x Annigeri
23	IC-820339	ICCG-29 x BDN 9-3
24	G-130	
25	Local Check	

Appendix 13. Seed yield (kg/ha) and ranks of entries in  
PZML7-DL at 3 locations in 1984-85

Entry No	ICCL./ ICC.No	Berthin	New Delhi	Brigangana	Mean*
1	820155	1438 13	2007 13	3687 14	2847 13
2	820163	1488 12	1833 15	3319 21	2576 21
3	820164	1808 4	2285 6	3868 12	3077 6
4	820165	2025 1	1476 23	3368 20	2422 24
5	820169	1673 7	2459 1	3646 15	3053 8
6	820175	1111 18	2142 10	3542 18	2842 14
7	820193	1531 9	2380 4	4076 5	3228 1
8	820194	969 20	1825 16	4292 1	3059 7
9	820220	1204 16	1444 24	4153 2	2799 16
10	820227	1543 8	1023 25	4035 7	2529 22
11	820282	1889 2	2126 11	3909 10	3018 9
12	820303	1068 19	1761 21	3437 19	2599 20
13	820304	1414 14	2420 3	3944 9	3182 4
14	820307	1543 8	2309 5	4069 6	3189 3
15	820315	1438 13	1769 20	3882 11	2826 15
16	820317	1679 6	2055 12	4118 4	3087 5
17	820319	1871 3	2174 8	3069 23	2622 18
18	820320	1253 15	1801 18	3556 17	2679 17
19	820330	895 21	2166 9	3618 16	2892 11
20	820335	1494 11	1595 22	3646 15	2621 19
21	820337	1253 15	2253 7	3542 18	2898 10
22	820338	1488 12	1912 14	3785 13	2849 12
23	820339	1124 17	1817 17	3167 22	2492 23
24	4948	1796 5	2428 2	3986 8	3207 2
25	Lo.Ch	1512 10	1777 19	4125 3	- -
	SE	317.5	272.9	272.8	
	MEAN	1460.3	1969.4	3753.5	
	CV	37.7	24.0	12.6	

\* Berthin not considered for

**Appendix 14. Mean days to 50% flowering  
of entries in PZMLT-DL at 2 locations  
in 1984-85**

Entry No.	ICCL./ ICC.No	Bert- his	New Delhi	Mean
1	820155	122	100	111
2	820163	122	93	108
3	820164	122	100	111
4	820165	124	100	112
5	820169	123	100	112
6	820175	123	97	110
7	820193	123	100	112
8	820194	122	95	109
9	820220	123	95	109
10	820227	121	100	111
11	820282	123	100	112
12	820303	122	100	111
13	820304	122	100	111
14	820307	122	100	111
15	820315	123	100	112
16	820317	122	100	111
17	820319	122	100	111
18	820320	123	95	109
19	820330	121	100	111
20	820335	123	100	112
21	820337	122	100	111
22	820338	123	100	112
23	820339	122	100	111
24	4948	124	100	112
25	Lo.ch	122	93	
	SE	0.7	2.7	
	MEAN	122.4	98.7	
	CV	1.0	4.7	

Appendix 15. Entries in F3 Multilocational Trial - Desi  
Short Duration (F3- MLT-D8) - 1984-85

Entry No.	IC No./ Name	Parents
1	IC-810001	Annigeri x Phule G-5
2	IC-810002	Annigeri x Phule G-7
3	IC-810011	BDW-9-3 x 2375
4	IC-810016	BDW-9-3 x ICC-31
5	IC-810030	P-326 x ICCL-80074
6	IC-810034	ICCC-4 x Phule G-7
7	IC-810051	BG-212 x 2375
8	IC-810052	BG-212 x BDNG-20
9	IC-810070	K-850 x ICCL-80074
10	IC-810092	BDNG-20 x ICCL-80074
11	IC-810095	JG-315 x ICCL-80074
12	IC-810098	ICCL-80074 x ICC-30
13	Annigeri	
14	Local check	

Appendix 16. Mean seed yield and ranks of entries in  
F3MLT-DB at 6 locations in 1984-85

Entry No	IC./ ICC.No	Patan-cheru	Arnej	Juna-gadh	Akola	Rah-uri	Navg-son	Mean							
1	810001	2349	5	2478	14	1354	14	1016	7	1825	3	645	4	1804	10
2	810002	2683	1	3231	2	1712	7	1397	1	2031	1	389	14	2211	1
3	810011	2286	6	2763	7	1697	8	1349	2	1920	2	537	9	2003	2
4	810016	2016	12	2933	4	1939	2	1175	5	1634	8	523	10	1943	6
5	810030	2079	11	2617	9	1419	13	984	8	1825	3	631	6	1785	12
6	810034	2080	10	2588	11	2100	1	1262	3	1714	6	646	3	1949	5
7	810051	2079	11	2719	8	1580	11	802	11	1777	5	489	12	1791	11
8	810052	2175	8	2544	13	1727	6	1016	7	1682	7	794	1	1829	9
9	810070	2191	7	2573	12	1500	12	778	12	1682	7	560	8	1745	13
10	810092	2524	3	2602	10	1851	5	1111	6	1825	3	505	11	1983	3
11	810095	2508	4	2836	5	1610	10	904	10	1809	4	632	5	1933	7
12	810098	2127	9	2968	3	1873	4	952	9	1491	10	786	2	1882	8
13	4918	2349	5	2822	6	1654	9	1254	4	1714	6	405	13	1959	4
14	Lo.Ch	2667	2	3533	1	1888	3	1016	7	1539	9	600	7		
SE		207.6		127.9		165.6		133.8		83.4		116.0			
MEAN		2293.7		2803.4		1707.4		1072.5		1747.6		581.5			
CV		15.7		7.9		16.8		21.6		8.3		34.5			

Appendix 17. Mean days to 50% flowering of entries in  
F3MLT-DB at 6 locations in 1984-85

Entry No	IC./ ICC.No	Patan-cheru	Arnej	Juna-gadh	Akola	Rah-uri	Navg-son	Mean
1	810001	47	67	54	42	49	58	52
2	810002	40	61	50	40	41	50	47
3	810011	46	66	52	42	49	52	51
4	810016	49	60	48	40	44	49	48
5	810030	46	75	53	42	44	53	52
6	810034	42	69	49	42	49	51	50
7	810051	45	68	51	41	44	53	50
8	810052	51	73	57	51	55	63	58
9	810070	47	73	55	42	46	53	53
10	810092	45	73	53	42	47	57	53
11	810095	47	68	54	43	44	56	52
12	810098	50	68	52	42	43	53	51
13	4918	48	68	51	42	45	58	52
14	Lo.Ch	46	70	49	53	42	84	
SE		0.9	0.4	1.4	0.9	0.2	2.0	
MEAN		46.4	68.6	52.0	43.1	45.9	56.4	
CV		3.2	0.9	4.6	3.8	0.7	6.0	

Appendix 18. Mean days to maturity of entries in F3MLT-DB at 6 locations in 1984-85

Entry No	IC./ ICC.No	Patan-cheru	Arnej	Juna-gadh	Akola	Rah-uri	Havg-aon	Mean
1	810001	102	122	97	97	110	137	111
2	810002	99	118	93	89	109	138	108
3	810011	99	126	92	94	107	139	110
4	810016	102	125	92	95	107	137	110
5	810030	107	129	98	100	112	136	114
6	810034	98	119	93	97	112	139	110
7	810051	102	125	96	99	110	138	112
8	810052	100	126	96	102	113	138	113
9	810070	103	130	97	100	110	138	113
10	810092	101	127	97	98	110	136	112
11	810095	101	121	92	98	108	137	110
12	810098	103	128	95	101	109	137	112
13	4918	99	126	93	92	109	137	109
14	Lo.Ch	99	129	92	102	106	140	
	SE	0.9	0.4	0.7	1.6	0.1	1.3	
	MEAN	101.0	125.2	94.5	97.4	109.4	137.5	
	CV	1.5	0.5	1.3	2.8	0.2	1.7	

Appendix 19. Mean weight of 100 seeds of entries in F3MLT-DB at 6 locations in 1984-85

Entry No	IC./ ICC.No	Patan-cheru	Arnej	Juna-gadh	Akola	Rah-uri	Mean
1	810001	22	23	25	22	18	22
2	810002	24	25	31	29	23	26
3	810011	21	21	26	20	22	22
4	810016	18	15	16	16	16	16
5	810030	16	14	16	16	17	16
6	810034	26	28	34	31	24	29
7	810051	19	18	21	26	23	21
8	810052	17	17	19	22	18	19
9	810070	21	23	21	25	19	22
10	810092	22	21	21	27	20	22
11	810095	17	16	18	17	17	17
12	810098	16	16	20	19	17	18
13	4918	20	20	26	20	17	21
14	Lo.Ch	19	15	13	12	19	
	SE	1.4	0.3	0.4	1.7	1.8	
	MEAN	19.9	19.4	21.9	21.7	19.1	
	CV	11.8	3.1	3.1	13.5	16.7	

Appendix 20. Entries in F3 Multilocational Trial - Desi  
Medium Duration (F3 MLT-DM) - 1984-85

Entry No.	IC No./ Name	Parents
1	IC-810009	BDNG-3 x Phule G-5
2	IC-810021	JG-62 x JG-315
3	IC-810025	P-326 x Phule G-5
4	IC-810027	P-326 x 2375
5	IC-810028	P-326 x BDNG-20
6	IC-810037	ICCC-22 x JG-315
7	IC-810045	ICCC-4 x JG-315
8	IC-810047	ICCC-4 x ICCC-30
9	IC-810049	BG-212 x Phule G-5
10	IC-810053	BG-212 x JG-315
11	IC-810076	Phule G-5 x 2375
12	IC-810091	BDNG-20 x JG-315
13	K-850	
14	Local Check	



Appendix 21. Mean seed yield (kg/ha) and ranks of entries in F3MLT-DM at 10 locations in 1984-85

Entry No.	IC No.	Patancheru	Derol	Junagadh	Gulbarga	Sehore	Gwalior	New Delhi	Faridkot	Navgaon	Kanpur	Mean*
1	810009	1905	1 3245	1 1712	3 988	2 992	5 2372	8 2475	5 1561	4 858	8 4132	1 2299
2	810021	1111	10 3175	2 2019	1 841	6 992	5 2396	7 1936	11 1442	6 896	6 3731	3 2081
3	810025	1159	9 2080	13 1610	5 790	9 1063	4 2586	2 2166	7 1428	7 811	9 3515	6 1917
4	810027	1254	8 2689	7 1866	2 937	3 947	6 2515	3 1999	10 1637	3 738	12 3268	7 2021
5	810028	1000	11 2651	8 1522	10 857	5 1122	3 2253	10 2872	1 1777	2 792	11 3515	6 2056
6	810037	1619	4 2036	14 1566	6 794	8 916	7 2190	12 2102	8 1477	5 527	13 3638	5 1928
7	810045	1445	6 3016	3 1558	7 754	10 841	10 2364	9 2626	3 1310	11 871	7 3700	4 2097
8	810047	1365	7 2426	11 1383	12 897	4 750	11 2086	13 2618	4 1372	8 1411	1 3145	8 1912
9	810049	1619	4 2818	6 1544	9 694	13 876	9 2459	5 1999	10 1352	9 808	10 3268	7 1969
10	810053	1698	3 2586	10 1610	5 714	12 1203	1 2507	4 1626	13 1223	12 904	5 3145	8 1889
11	810076	1603	5 2885	4 1705	4 675	14 638	13 2650	1 2769	2 1317	10 1011	3 3885	2 2186
12	810091	1857	2 2261	12 1566	6 825	7 881	8 2245	11 2047	9 1310	11 1317	2 3268	7 1922
13	5003	825	13 2605	9 1449	11 750	11 643	12 1222	14 1896	12 1076	13 927	4 3083	9 1613
14	Lo.Ch	889	12 2820	5 1551	8 1214	1 1150	2 2436	6 2372	6 1801	1 432	14 3700	4
SE	133.1	273.7	179.9	109.6	209.7	252.7	291.5	140.0	194.7	421.0		
MEAN	1382.0	2663.8	1618.6	837.9	929.4	2305.8	2250.2	1434.4	878.7	3499.6		
CV	16.7	17.8	19.3	22.7	39.1	19.0	22.4	16.9	38.4	20.8		

\* Sehore and Navgaon not considered for mean

Appendix 22. Mean days to 50% flowering of entries in F3MLT-DK at 8 locations in 1984-85

Entry No.	IC./ ICC.No	Patan-cheru	Derol	Junagadh	Gulbarga	Sehore	Gwalior	Navgaon	Kanpur	Mean
1	810009	48	65	51	69	68	60	56	87	63
2	810021	50	63	50	67	68	60	70	73	63
3	810025	60	70	54	73	70	72	83	77	70
4	810027	47	64	52	65	67	59	55	73	60
5	810028	53	68	54	69	70	68	76	76	67
6	810037	52	67	53	65	69	61	60	74	63
7	810045	54	67	55	75	69	64	78	73	67
8	810047	60	71	56	72	72	71	77	87	71
9	810049	54	68	57	74	71	70	69	82	68
10	810053	53	66	53	75	69	65	75	78	67
11	810076	53	67	53	73	69	61	77	86	67
12	810091	50	65	53	60	68	60	67	83	63
13	5003	58	68	53	72	73	52	85	79	68
14	Lo.ch	55	65	53	69	67	64	90	76	
SE		0.8	1.1	0.5	0.5	0.5	7.0	3.7	1.6	
MEAN		53.3	66.8	53.4	69.8	69.3	63.3	72.8	79.0	
CV		2.5	2.9	1.5	1.2	1.3	19.0	8.7	3.6	

Appendix 23. Mean days to maturity of entries in F3MLT-DK at 7 locations in 1984-85

Entry No.	IC./ ICC.No	Patan-cheru	Derol	Junagadh	Sehore	Gwalior	Navgaon	Kanpur	Mean
1	810009	99	117	98	126	143	138	145	124
2	810021	95	111	93	123	140	132	142	119
3	810025	102	116	99	131	141	139	150	125
4	810027	101	115	98	130	141	137	148	124
5	810028	100	116	99	127	140	140	149	124
6	810037	97	115	98	128	143	135	148	123
7	810045	97	115	98	124	141	136	147	123
8	810047	100	118	99	130	141	139	147	125
9	810049	99	114	98	127	140	136	149	123
10	810053	97	111	96	124	142	136	148	122
11	810076	96	114	97	127	142	136	147	123
12	810091	96	113	98	123	141	140	142	122
13	5003	102	120	98	131	96	139	148	119
14	Lo.ch	99	114	97	120	141	138	148	
SE		0.8	1.0	0.5	1.3	12.9	1.5	1.2	
MEAN		98.6	115.0	97.6	126.5	138.1	137.2	146.9	
CV		1.4	1.6	0.8	1.8	16.2	1.9	1.4	

Appendix 24. Mean weight of 100 seeds of entries in F3M17-DM at 8 locations in 1984-85

Entry No.	IC./ ICC.No	Patan-cheru	Derol	Junag-adh	Gulb-arga	Seh-ore	Oval-ior	New Delhi	Kan-per	Mean
1	810009	18	20	18	18	16	17	18	15	18
2	810021	14	15	15	14	12	14	15	13	14
3	810025	15	19	21	17	18	17	19	14	18
4	810027	19	22	20	18	16	16	18	13	18
5	810028	16	21	18	16	17	14	14	14	16
6	810037	21	20	21	18	18	17	20	13	19
7	810045	14	16	16	14	16	14	16	13	15
8	810047	13	16	15	12	12	13	15	13	14
9	810049	16	20	19	15	17	16	17	14	17
10	810053	13	14	16	12	12	13	9	13	13
11	810076	18	21	19	17	18	16	18	14	18
12	810091	18	18	19	17	15	15	19	13	17
13	5003	23	30	30	25	26	16	27	25	25
14	Lo.ch	12	19	16	20	15	12	14	13	
	SE	1.0	0.3	0.3	0.2	0.6	2.1	1.6	0.1	
	MEAN	16.5	19.4	18.9	16.5	16.3	14.9	17.1	14.3	
	CV	10.3	2.4	3.0	1.9	6.1	25	16.6	1.2	

Appendix 25. Entries in F3 Multilocational Trial - Desi  
 Long Duration (F3 MLT-DL) - 1984-85

Entry No.	IC No./ Name	Parents
1	IC-810128	P-326 x GG-588
2	IC-810258	Pant G-114 x ICC-23
3	IC-810260	✓ Pant G-114 x ICC-28
4	IC-810263	BG-209 x GG-588
5	IC-810264	BG-209 x H-75-35
6	IC-810267	BG-209 x ICC-23
7	IC-810275	GL-769 x BG(M)-408
8	IC-810278	GL-769 x ICC-28
9	IC-810280	GL-769 x DG-77-29
10	IC-810302	C-235 x BG(M)-408
11	IC-810316	G-543 x DG-77-29
12	IC-810325	BG-203 x DG-77-29
13	G-130	
14	Local check	

Appendix 26. Mean seed yield (kg/ha) and ranks of entries in F3HLT-DL at 8 locations in 1984-85

Entry No.	ICC.No	Hisar	Bert-hin	New Delhi	Farid-kot	Srigang-anagar	Navgaon	Pant-nagar	Kan-pur	Mean *
1	810128	1872 13	1951 11	1872 7	1310 14	3396 7	149 10	182 7	2713 8	2524 14
2	810258	2301 9	2370 7	1658 13	1560 9	3243 8	202 7	341 3	2467 10	2682 13
3	810260	2174 10	2265 8	2221 1	1518 11	2750 13	304 3	127 10	3515 1	2800 8
4	810263	2547 4	2488 6	1856 8	1643 6	3159 9	178 8	175 8	2898 6	2892 6
5	810264	2166 11	2766 4	2015 5	1511 12	3611 1	259 4	238 6	2343 11	2793 9
6	810267	2539 5	2012 10	1579 14	1615 8	2833 11	174 9	238 6	2837 7	2695 12
7	810275	2967 1	2741 5	1833 9	1636 7	3576 2	309 2	428 2	2713 8	3114 1
8	810278	2967 1	2247 9	1777 11	1435 13	3437 5	210 6	159 9	2590 9	2945 4
9	810280	2356 7	2846 3	2205 2	1706 4	3444 4	129 12	254 5	3207 2	3053 2
10	810302	2562 3	1764 12	1761 12	1976 2	3424 6	99 13	182 7	3022 4	2881 7
11	810316	2674 2	1759 13	1904 6	1553 10	2923 10	140 11	238 6	2960 5	2779 10
12	810325	2309 8	2939 2	2079 4	1914 3	2618 14	389 1	238 6	3022 4	2897 5
13	4948	2412 6	2982 1	2198 3	1692 5	2792 12	92 14	524 1	3083 3	2967 3
14	Lo.ch	2102 12	1697 14	1825 10	2129 1	3528 3	231 5	317 4	2837 7	
	SE	507.5	370.4	172.4	152.5	276.9	61.3	95.5	281.5	
	MEAN	5053.3	2344.7	1913.1	1657.1	3195.4	204.7	260.1	2871.9	
	CV	17.4	27.4	15.6	15.9	15.0	51.9	63.6	17.0	

\* Navgaon and Pantnagar not considered for mean

Appendix 27. Mean days to 50% flowering of entries in F3MLT-DL at 5 locations in 1984-85

Entry No	IC./ICC. No	Hisar	Bert-hin	Navg-son	Pant-nagar	Kan-pur	Mean
1	810128	89	121	94	83	89	95
2	810258	88	121	87	81	87	93
3	810260	91	122	88	83	83	93
4	810263	90	122	92	83	85	94
5	810264	86	122	92	81	82	93
6	810267	87	121	88	82	83	92
7	810275	89	121	89	81	79	92
8	810278	91	121	93	81	85	94
9	810280	88	122	95	82	86	95
10	810302	89	120	95	80	82	93
11	810316	90	120	94	82	79	93
12	810325	89	121	86	82	93	94
13	4948	93	122	97	83	79	95
14	Lo.ch	91	121	87	84	78	
	SE	0.8	0.8	1.7	0.8	1.6	
	MEAN	89.3	121.2	91.2	82.0	83.5	
	CV	1.6	1.1	3.3	1.7	3.4	

Appendix 28. Mean days to maturity of entries in F3MLT-DL at 5 locations in 1984-85

Entry No	IC./ICC. No	Hisar	Bert-hin	Navg-son	Pant-nagar	Kan-pur	Mean
1	810128	165	168	144	135	148	152
2	810258	166	167	141	134	150	152
3	810260	166	168	142	132	147	151
4	810263	166	171	142	132	150	152
5	810264	167	168	145	133	150	153
6	810267	166	164	145	134	149	152
7	810275	165	164	139	131	150	150
8	810278	167	162	141	131	149	150
9	810280	166	164	144	131	150	151
10	810302	167	158	142	130	149	149
11	810316	166	159	143	132	149	150
12	810325	166	168	144	132	148	152
13	4948	166	170	144	134	150	153
14	Lo.ch	166	158	136	134	149	
	SE	0.4	2.3	1.8	1.0	1.2	
	MEAN	166.1	165.0	142.3	132.5	149.0	
	CV	0.4	2.4	2.1	1.3	1.3	

Appendix 29. Mean weight of 100 seeds (g) of entries  
in F3MLT-DL at 4 locations in 1984-85

Entry No	IC./ICC No	Hisar	Bert- hin	Pant- nagar	Kan- pur	Mean
1	810128	11	14	12	13	13
2	810258	16	17	18	13	16
3	810260	15	17	14	13	15
4	810263	11	13	12	13	12
5	810264	14	15	15	13	14
6	810267	15	16	16	13	15
7	810275	11	13	13	13	13
8	810278	14	17	17	13	15
9	810280	10	13	12	13	12
10	810302	10	13	13	13	12
11	810316	11	13	13	13	13
12	810325	11	13	12	12	12
13	4948	11	13	14	13	13
14	Lo.ch	11	14	13	13	
	SE	0.4	0.4	0.3	0.1	
	MEAN	12.2	14.4	13.8	12.8	
	CV	5.6	5.3	3.3	1.0	

## Appendix 30. Entries in International Chickpea screening Nursery

Desi short Duration (ICSN-DS) 1984-85

Entry No.	ICCL/ ICC No.	Selection No.	Parentage
1	82108	ICCX-761470-BP-1P-BP	F2 (JG-62 x WR-315)-2 x F2 (P-1363 x PRR-1)-2
2	82211	ICCX-75926-BP-BP-24P-1P-BP	P-200 x P-1222
3	82230	ICCX-761340-BP-BP-5P-BP	P-2359 x P5 (BN-10 x WP-
4	83134	ICCX-761431-31P-1P-1P-1P-BP	F2 (P-2974 x JG-62)-2 x F2 (N-208 x WR-315)-2
5	83209	ICCX-770026-BP-BP-19P-BP	Annigeri x E-100
6	83222	ICCX-761203-BP-BP-5P-1P-BP	T-103 x ICCX-750840-F1
7	83224	ICCX-760654-BP-BP-35P-1P-BP	JG-62 x WEC-802
8	83232	ICCX-750899-BP-BP-15P-2P-1P-BP	P-1661 x P-1222
9	84201	ICCX-770019-BP-BP-35P-BP	Annigeri x K-850
10	84202	ICCX-770018-BP-BP-60P-BP	Annigeri x ICCX-1
11	84204	ICCX-761340-BP-BP-23P-1P-BP	Annigeri x WEC-802
12	84204	ICCX-761340-BP-BP-23P-1P-BP	P-2359 x F5 (BN-10 x WP-34)
13	84205	ICCX-790047-BP-BP-BP	Annigeri x ICCX-9
14	84206	ICCX-790098-BP-BP-5P-BP	ICCX-730167-5-3-B-BP x P-127
15	84207	ICCX-790057-BP-BP-40P-BP	Phule G-4 x ICCX-9
16	84208	ICCX-790061-BP-BP-BP-BP	Phule G-4 x ICCX-73012-16 1-B-BP
17	84209	ICCX-79063-BP-BP-9P-BP	Phule G-4 x ICCX-730094-14-2-B-BP
18	84210	ICCX-79047-BP-BP-53P-BP	Annigeri x ICCX-9
19	84211	ICCX-790057-BP-BP-34P-BP	Phule G-4 x ICCX-9
20	84212	ICCX-790057-BP-BP-30P-BP	PHULE G-4 X ICCX-9
21	84213	ICCX-790099-BP-BP-20P-BP	ICCX-730167-5-3-B-BP x ICCX-1
22	84214	ICCX-780631-BP-BP-10P-BP	Annigeri x Giza
23	84215	ICCX-790057-BP-BP-49P-BP	Phule G-4 x ICCX-9
24	84216	ICCX-780070-BP-BP-53P-BP	ICCX-730089-20-3-B-BP x GW-5/7
25	84217	ICCX-780398-9P-BH-1P-1P-BP	Pant G-114 x (JG-62 x P-345-1)
26	84218	ICCX-790161-BH-BP-53P-BP	P-272 x HMS-13
27	84219	ICCX-790169-BH-BP-34P-BP	P-502 x HMS-13
28	84220	ICCX-790163-BH-BP-30P-BP	P-272 x HMS-22
29	84221	ICCX-790168-101P-BP-1P-BP	P-502 x HMS-8
30	84222	ICCX-780323-24P-BP-2P-BP	JG-62 x HMS-2
31	84223	ICCX-790025-11P-BP-BP	P-4203 x P-1198-1
32	84224	ICCX-790001-10P-BP-BP	ICCX-4 x K-850
33	84225	ICCX-790242-BP-BT-39P-BP	Annigeri x ICCX-1

cont....



Entry No.	ICCL/ ICC No.	Selection No.	Parentage
34	84226	ICCX-790259-BP-BT-38P-BP	K-850 x (ICCC-1 x ICC-2)
35	84227	ICCX-790248-BP-BT-39P-BP	Annigeri x (ICCC-1 x ICC-2)
36	84228	ICCX-790254-BP-BT-18P-BP	ICCC-2 (Annigeri x ICCC-1)
37	84229	ICCX-770788-BP-BP-32P-1P-BP	K-468 x (JG-71 x ICC x 730089-18-5-8)
38	84230	ICCX-770147-BP-BP-54P-1P-BP	JGC-1 x Pant G-114
39	84231	ICCX-770795-BP-BP-116P-1P-BP	P-436 x (NP-34 x P-810)
40	84232	ICCX-770150-BP-BP-24P-1P-BP	JGC-1 x ICC-3
41	84233	ICCX-770150-BP-BP-30P-1P-BP	JGC-1 x ICC-3
42	84234	ICCX-770150-BP-BP-43P-1P-BP	JGC-1 x ICC-3
43	84235	ICCX-770019-BP-BP-21P-1P-BP	Annigeri x K-850
44	84236	ICCX-770019-BP-BP-29P-1P-BP	Annigeri x K-850
45	84237	ICCX-770024-BP-BP-21P-1P	Annigeri x NEC-802
46	84238	ICCX-770024-BP-BP-36P-1P	Annigeri x NEC-802
47	84239	ICCX-770001-BP-BP-7P-1P-BP	PRR-1 x Annigeri
48	84240	ICCX-770147-BP-BP-46P-1P-BP	JGC-1 x Pant G-114
49	84241	ICCX-770147-BP-BP-64P-1P-BP	JGC-1 x Pant G-114
50	84242	ICCX-770150-BP-BP-18P-1P-BP	JGC-1 x ICC-3
51	84243	ICCX-761204-BP-BP-55P-3P-1P-BP	WP-2654-A x ICCX-750847-F1
52	84244	ICCX-760162-BP-BP-7P-3P-1P-BP	JM-466 x B-110
53	84245	ICCX-760640-BP-BP-10P-2P-1P-BP	F-378 x Annigeri-1
54	84246	ICCX-760640-BP-BP-13P-2P-1P-BP	F-378 x Annigeri-1
55	84247	ICCX-760640-BP-BP-14P-1P-1P-BP	F-378 x Annigeri-1
56	84248	ICCX-760878-BP-BP-16-4P-1P-BP	P-1363-1 x ICCX-730047-6-4-B
57	84249	ICCX-760878-BP-BP-11P-1P-1P-BP	P-1363-1 x ICCX-730047-6-4-B
58	84250	ICCX-761945-BP-BP-60P-3P-1P-BP	F2[P-9669 x (10-2-3 x P-472)]1 x F2(P-2591 x NEC-249)-1
59	84251	ICCX-761340-BP-BP-38P-2P-1P-BP	P-2559 x F5(BN-10 x NP-34)
60	12237	ICC-554WR	
61	4918	Annigeri	
62	4951	JG-62	
63	Local check	--	

Appendix 31. Seed yield (kg/ha) and ranks of entries in ICSM-DB at 6 locations in 1984-85

Entry No.	ICCL No.	Paten- churu	Janag- adh	Abola	Rahuri	Keon- jhar	Ludh- iana	Mean							
1	82108	1762	9	2252	14	476	33	2618	2	1376	11	2618	13	1697	7
2	82211	1286	17	2377	8	857	20	1095	30	1251	16	1809	26	1373	47
3	82230	1619	12	1960	24	1095	11	2380	5	1543	8	3142	4	1719	5
4	83134	1524	14	2669	2	714	24	2094	11	1147	19	2142	21	1630	15
5	83209	1429	15	2711	1	1952	1	94	33	1334	14	3094	5	1504	31
6	83222	1190	19	2398	7	667	26	1142	28	1666	6	2237	18	1413	41
7	83224	1714	10	2335	10	1190	9	1666	18	1585	7	2142	21	1698	6
8	83232	1238	18	2394	13	1000	13	1666	18	1460	10	1380	32	1532	24
9	84201	1714	10	2252	14	429	34	1999	12	1668	6	2904	8	1612	17
10	84202	1238	18	2002	22	1286	7	1000	31	1751	5	2047	22	1455	34
11	84203	1238	18	2002	22	1452	4	2142	10	1460	10	1952	24	1659	11
12	84204	2429	1	2356	9	810	22	1618	21	1751	5	2190	20	1793	3
13	84205	1524	14	1918	26	857	20	237	32	1293	15	1428	31	1166	57
14	84206	1667	11	1605	35	1071	12	1190	27	1585	7	3284	2	1424	39
15	84207	1524	14	1877	27	1095	11	1428	25	959	24	1761	27	1377	48
16	84208	238	30	2314	12	1571	3	2618	2	1543	8	476	34	1657	12
17	84209	1524	14	1939	25	643	28	1761	16	834	28	2047	22	1340	48
18	84210	1000	21	2439	6	1024	14	1666	18	1043	22	1428	31	1434	37
19	84211	1571	13	1835	28	905	19	2142	10	1147	19	2523	14	1520	27
20	84212	1714	10	2344	4	381	36	1119	29	1877	3	2999	6	1527	26
21	84213	1333	16	2439	6	952	18	1904	14	1751	5	2618	13	1676	10
22	84214	667	25	1981	23	1000	15	2428	4	1460	10	1761	27	1507	30
23	84215	1714	10	2189	16	1238	8	1809	15	1084	21	2380	16	1607	19
24	84216	429	28	1710	33	405	35	1618	21	1188	18	1666	28	1066	60
25	84217	-	-	1960	24	524	31	1571	22	1585	7	2856	10	1410	42
26	84218	952	22	1605	35	1143	10	3142	1	1585	7	2142	21	1685	9
27	84219	-	-	2648	3	1381	6	1666	18	1722	4	4046	1	1867	2
28	84220	190	31	1939	25	143	42	1142	28	1751	5	1761	27	1033	62
29	84221	810	24	2043	21	262	39	1666	18	1668	6	2142	21	1290	51
30	84222	-	-	1585	36	976	16	1428	25	1334	14	2332	17	1331	49
31	84223	1429	15	2085	19	1833	2	1238	26	1355	13	2713	12	1588	23
32	84224	1333	16	2377	8	357	37	1714	17	1355	13	2618	13	1427	31
33	84225	1190	19	2314	12	595	30	1952	13	1918	2	3094	5	1594	22
34	84226	1619	12	2127	18	952	18	1523	23	1334	14	2475	15	1511	29
35	84227	2000	5	2252	14	952	18	1714	17	1293	15	1856	25	1642	14
36	84228	1810	8	1710	33	714	24	1190	27	1501	9	2332	17	1385	44
37	84229	1095	20	2168	17	500	32	2285	8	1126	20	3094	5	1435	36
38	84230	-	-	2252	14	1429	5	2332	7	1460	10	1428	31	1868	1
39	84231	95	33	1751	31	833	21	2332	7	1877	3	2618	13	1378	45
40	84232	810	24	2127	18	857	20	2380	5	1334	14	2856	10	1502	32

cont...

## Appendix 31. cont.

Entry No.	ICCL./ ICC.No.	Patan-cheru	Junag-adh	Akols	Rahuri	Keon-jhar	Ludh-iana	Mean
41	84233	143 32	1939 25	690 25	1618 21	1334 14	1571 29	1145 59
42	84234	857 23	1501 38	1048 13	1809 15	980 23	1952 24	1239 54
43	84235	1095 20	1668 34	1024 14	1618 21	584 29	2808 11	1198 55
44	84236	1619 12	1522 37	1095 11	2237 9	1126 20	3094 5	1520 28
45	84237	2143 2	1126 39	214 40	2523 3	1043 22	1761 27	1410 43
46	84238	1286 17	2064 20	190 41	1142 28	1543 8	1666 28	1245 52
47	84239	1714 10	2335 10	1238 8	2428 4	1043 22	1999 23	1752 4
48	84240	1238 18	1772 30	1429 5	1523 23	1251 16	904 33	1443 35
49	84241	2048 3	1814 29	1095 11	1571 22	1460 10	2808 11	1598 21
50	84242	571 27	1585 36	714 24	1999 12	1772 4	2713 12	1328 50
51	84243	571 27	1710 33	1381 6	1142 28	1043 22	2142 21	1169 56
52	84244	1571 13	2002 22	810 22	2142 10	938 25	1476 30	1493 33
53	84245	1619 12	2252 14	1190 9	1476 24	1460 10	2237 18	1599 20
54	84246	333 29	2002 22	1286 7	1095 30	1084 21	3189 3	1160 58
55	84247	1429 15	2460 5	952 18	1666 18	1147 19	2142 21	1531 25
56	84248	1667 11	1751 31	619 29	2523 3	521 30	1666 28	1416 40
57	84249	1905 7	1918 26	667 26	2618 2	1334 14	1476 30	1688 8
58	84250	619 26	1501 38	667 26	1523 23	917 26	2618 13	1045 61
59	84251	1238 18	2669 2	857 20	2356 6	917 26	2142 21	1607 18
60	12237	1667 11	1918 26	286 38	2094 11	2168 1	2951 7	1627 16
61	4918	1929 6	2321 11	964 17	1646 20	1366 12	2229 19	1645 13
62	4951	- -	1727 32	730 23	1658 19	862 27	1999 23	1244 53
63	Lo.ch	2024 4	2210 15	663 27	1658 19	1202 17	2896 9	
SE		27.5	129.0	64.6	2.8	105.0	190.1	
MEAN		1308.7	2049.3	894.1	1821.8	1350.5	2267.2	
CV		3.4	15.1	20.1	0.4	22.5	19.6	

Appendix 32. Days to 50% flowering of entries in ICSW-DB at 6 locations in 1984-85

Entry No.	ICCL./ ICC.No	Patan-cheru	Junag-edh	Ahola	Raburi	Keon-jhar	Ludh-lana	Mean
1	82108	44	50	54	47	45	90	48
2	82211	53	59	53	48	64	94	55
3	82230	42	51	44	43	50	75	46
4	83134	51	57	54	48	50	91	52
5	83209	42	54	42	50	53	94	48
6	83222	52	56	48	45	49	93	50
7	83224	41	51	47	44	51	89	47
8	83232	52	58	52	47	53	92	52
9	84201	39	50	43	57	50	86	48
10	84202	38	50	35	45	49	93	43
11	84203	38	49	38	46	44	88	43
12	84204	40	50	40	42	52	92	45
13	84205	41	53	43	52	50	92	48
14	84206	57	58	52	56	53	87	55
15	84207	42	51	40	44	49	72	45
16	84208	48	50	42	43	48	91	46
17	84209	50	53	46	46	51	93	49
18	84210	44	53	43	50	52	91	48
19	84211	45	53	44	52	52	92	49
20	84212	51	54	49	47	47	94	50
21	84213	51	58	52	48	51	89	52
22	84214	49	52	43	45	52	90	48
23	84215	51	55	55	46	46	88	51
24	84216	52	59	58	55	53	93	55
25	84217	51	57	54	50	50	92	52
26	84218	51	59	50	55	52	89	53
27	84219	50	55	46	44	53	76	50
28	84220	52	67	56	45	65	94	57
29	84221	51	59	54	52	53	93	54
30	84222	53	53	43	49	56	90	51
31	84223	49	56	47	50	50	93	50
32	84224	55	59	58	53	52	94	55
33	84225	44	53	49	50	52	87	50
34	84226	53	59	54	52	53	92	54
35	84227	45	54	44	43	53	93	48
36	84228	44	51	41	42	50	86	46
37	84229	50	58	54	55	53	92	54
38	84230	-	54	51	47	51	91	51
39	84231	51	58	55	52	51	91	53
40	84232	40	51	44	45	50	88	46

Cont...

## Appendix 32. Cont..

Entry No.	ICCL./ ICC.No	Patan-cheru	Junag-adh	Akola	Rahuri	Keon-jhar	Ludh-iana	Mean
41	84233	37	53	44	42	52	88	46
42	84234	39	51	38	47	51	90	45
43	84235	43	51	47	54	58	93	51
44	84236	42	53	42	50	53	85	48
45	84237	44	53	41	43	51	92	46
46	84238	42	51	41	45	50	93	46
47	84239	42	53	42	47	52	93	47
48	84240	46	52	40	42	51	88	46
49	84241	46	51	44	54	52	95	49.
50	84242	38	50	41	44	50	88	45
51	84243	51	53	47	46	50	87	49
52	84244	48	55	46	45	52	92	49
53	84245	38	50	41	41	49	86	44
54	84246	41	55	41	45	52	92	47
55	84247	43	53	50	55	52	91	51
56	84248	45	53	44	49	53	94	49
57	84249	42	52	43	57	52	92	49
58	84250	42	50	44	56	51	90	49
59	84251	49	56	50	48	50	88	51
60	12237	48	53	60	47	48	94	51
61	4918	47	53	43	45	52	89	48
62	4951	52	54	50	44	50	84	50
63	Lo.ch	44	49	56	43	58	94	
	SE	1.6	1.2	2.7	0.4	1.7	2.0	
	MEAN	46.1	53.8	46.8	47.9	51.5	90.0	
	CV	8.4	5.6	13.4	2.3	7.7	5.6	

Appendix 33. Days to maturity of entries in IC5M-DB at 6 locations in 1984-85

Entry No.	ICCL./ ICC.No	Patent-cheru	Junag-adh	Ahola	Raburi	Keon-jhar	Ladh-iana	Mean
1	82108	96	110	102	111	88	157	101
2	82211	97	107	102	108	91	157	101
3	82230	94	109	90	108	88	159	98
4	83134	94	107	106	108	89	161	101
5	83209	90	107	89	113	89	157	98
6	83222	96	110	93	103	88	158	98
7	83224	93	102	95	105	89	156	97
8	83232	96	106	106	110	89	159	101
9	84201	93	99	88	116	87	157	97
10	84202	93	102	87	112	86	158	96
11	84203	90	99	85	110	87	159	94
12	84204	96	103	88	108	91	160	97
13	84205	92	106	92	113	88	160	98
14	84206	97	109	104	115	89	159	103
15	84207	93	105	95	110	89	158	98
16	84208	89	108	89	104	88	150	96
17	84209	96	107	99	110	88	156	100
18	84210	97	108	95	107	90	158	99
19	84211	92	109	95	110	88	156	99
20	84212	98	107	102	110	88	155	101
21	84213	96	108	102	114	87	161	101
22	84214	98	101	90	109	89	157	97
23	84215	97	109	102	108	89	159	101
24	84216	98	107	104	112	89	155	102
25	84217	91	108	100	107	86	160	98
26	84218	93	109	96	114	87	161	100
27	84219	-	111	90	107	89	158	99
28	84220	99	108	108	105	88	154	102
29	84221	92	108	102	108	88	162	100
30	84222	-	108	89	110	88	156	99
31	84223	94	107	90	108	88	158	97
32	84224	97	109	113	111	90	157	104
33	84225	99	109	102	112	90	158	102
34	84226	97	108	104	110	91	159	102
35	84227	94	101	97	109	89	158	98
36	84228	93	102	89	105	88	157	95
37	84229	89	108	103	111	88	155	100
38	84230	-	104	100	112	88	152	101
39	84231	90	104	100	107	87	156	98
40	84232	89	105	92	108	87	158	96

cont..

## Appendix 33. cont..

Entry No.	ICCL./ ICC.No	Patan-cheru	Junag-edh	Akola	Rahuri	Keon-jhar	Ladh-iana	Mean
41	84233	87	103	89	101	88	153	94
42	84234	90	105	88	107	88	159	96
43	84235	98	104	92	114	91	157	100
44	84236	91	101	92	110	88	155	96
45	84237	96	107	90	110	91	162	99
46	84238	92	102	94	108	88	162	97
47	84239	96	109	90	108	91	162	99
48	84240	90	101	89	100	88	150	94
49	84241	94	101	95	112	88	158	98
50	84242	91	98	89	108	87	160	95
51	84243	94	106	96	107	86	159	98
52	84244	98	106	97	100	89	159	98
53	84245	89	106	87	107	88	157	95
54	84246	92	102	92	107	88	161	96
55	84247	94	101	96	116	88	157	99
56	84248	93	107	93	114	91	159	100
57	84249	93	107	93	111	89	157	99
58	84250	91	101	94	112	89	158	97
59	84251	97	108	100	112	89	160	101
60	12237	94	109	107	114	88	155	102
61	4918	97	107	96	111	90	157	100
62	4951	-	105	98	112	89	154	101
63	Lo.ch	94	100	104	107	91	156	
	SE	0.9	1.5	1.7	1.0	0.4	0.6	
	MEAN	93.9	105.0	95.0	109.0	88.0	157.0	
	CV	2.2	3.5	4.3	2.1	1.1	0.9	

Appendix 34. Plant height (cm) of entries in ICSN-D6 at 6 locations in 1984-85

Entry No.	ICCL./ ICC.No	Patam-cheru	Junag-adh	Akols	Raburi	Koon-jhar	Ludh-iana	Mean
1	82108	30	33	34	28	29	47	31
2	82211	26	30	36	40	30	47	32
3	82230	27	31	32	35	31	59	31
4	83134	32	27	33	34	27	50	31
5	83209	19	30	32	40	29	55	30
6	83222	32	30	32	24	28	48	29
7	83224	25	30	33	32	29	66	30
8	83232	33	35	37	43	33	42	36
9	84201	27	26	27	40	33	51	31
10	84202	30	33	29	40	32	47	33
11	84203	30	22	34	36	29	39	30
12	84204	27	30	30	41	31	52	32
13	84205	23	30	34	35	27	44	30
14	84206	27	28	30	28	31	44	29
15	84207	25	30	30	37	29	46	30
16	84208	27	28	32	36	28	32	30
17	84209	31	36	40	47	37	55	38
18	84210	25	36	28	39	31	32	32
19	84211	31	31	31	39	34	48	33
20	84212	31	35	40	39	37	53	36
21	84213	31	31	32	37	37	47	34
22	84214	29	34	35	34	37	52	34
23	84215	29	29	31	30	31	48	30
24	84216	27	36	42	43	40	70	38
25	84217	31	34	33	35	31	41	33
26	84218	26	28	34	37	34	55	32
27	84219	-	30	33	26	31	55	30
28	84220	31	35	42	37	33	56	36
29	84221	36	28	34	42	35	52	35
30	84222	-	27	34	42	28	68	33
31	84223	27	31	27	37	31	48	31
32	84224	36	34	28	32	29	51	32
33	84225	30	37	27	61	33	49	38
34	84226	30	31	33	45	31	47	34
35	84227	25	34	28	33	28	46	30
36	84228	31	28	28	34	32	46	31
37	84229	24	28	31	43	27	53	31
38	84230	-	26	28	44	26	31	31
39	84231	27	35	32	33	30	49	31
40	84232	22	31	24	46	31	51	31

cont...



## Appendix 34. cont...

Entry No.	ICCL./ ICC.No	Patan-cheru	Junag-edh	Akola	Raburi	Keon-jhar	Ludh-iana	Mean
41	84233	18	35	28	36	33	27	30
42	84234	25	31	28	34	29	46	29
43	84235	20	28	27	34	23	50	26
44	84236	27	28	26	39	29	43	30
45	84237	32	26	26	35	28	59	29
46	84238	26	25	26	32	28	52	27
47	84239	30	27	29	34	28	49	30
48	84240	24	26	28	26	30	25	27
49	84241	27	28	26	33	31	44	29
50	84242	25	34	31	39	37	52	33
51	84243	26	30	30	32	27	50	29
52	84244	26	26	24	32	25	34	27
53	84245	22	30	32	37	31	47	30
54	84246	22	26	33	31	31	38	29
55	84247	22	30	26	34	30	47	28
56	84248	32	28	27	39	27	52	31
57	84249	24	30	35	36	33	33	32
58	84250	15	26	23	23	27	48	23
59	84251	35	36	33	40	31	47	35
60	12237	36	34	27	44	36	66	35
61	4918	25	30	30	31	29	50	29
62	4951	29	27	30	30	27	43	29
63	Lo.ch	27	31	27	34	29	56	
	SE	0.8	0.7	0.7	0.9	0.6	2.7	
	MEAN	27.4	30.4	30.8	36.2	30.6	48.1	
	CV	7.4	5.9	5.9	6.7	4.9	13.1	

Appendix 35. Weight of 100 seeds in ICSN-DS at 6 locations  
in 1984-85

Entry No.	ICCL./ ICC.No	Patan-cheru	Junag-adh	Akola	Rahuri	Koonj-har	Ludh-iana	Mean
1	82108	15	19	16	17	14	18	16
2	82211	15	15	18	17	13	17	16
3	82230	18	20	20	16	17	22	19
4	83134	16	20	18	16	16	19	18
5	83209	21	23	23	20	20	19	21
6	83222	13	17	17	16	14	19	17
7	83224	15	20	16	17	16	16	17
8	83232	16	19	11	18	16	21	17
9	84201	17	20	15	17	17	15	17
10	84202	18	20	18	23	18	20	20
11	84203	21	22	19	22	21	25	21
12	84204	24	23	21	18	20	23	22
13	84205	17	20	18	17	18	20	18
14	84206	15	16	15	15	14	18	16
15	84207	22	23	22	16	21	28	22
16	84208	12	17	15	18	13	18	16
17	84209	21	24	24	19	20	23	22
18	84210	18	19	15	19	18	22	18
19	84211	21	24	21	18	17	23	21
20	84212	22	23	24	19	24	24	22
21	84213	15	17	16	18	14	19	17
22	84214	16	22	16	17	15	19	18
23	84215	22	22	23	20	20	23	22
24	84216	27	30	33	28	27	32	30
25	84217	-	17	14	18	13	16	16
26	84218	14	17	16	17	14	16	16
27	84219	-	16	17	16	15	18	17
28	84220	14	15	16	16	14	20	16
29	84221	16	16	16	14	13	18	16
30	84222	-	19	17	15	15	19	17
31	84223	17	19	18	19	17	17	18
32	84224	19	18	18	19	18	21	19
33	84225	22	24	22	22	21	23	22
34	84226	20	23	20	20	19	26	22
35	84227	20	22	20	20	17	22	20
36	84228	16	18	18	20	15	18	18
37	84229	15	18	16	20	13	7	15
38	84230	-	24	16	19	18	21	20
39	84231	13	21	16	14	16	18	16
40	84232	20	23	20	19	18	21	20

cont.

## Appendix 35. cont.

Entry No.	ICCL./ ICC.No	Patan- chera	Junag- adh	Akola	Raburi	Keon- jhar	Ladh- ana	Mean
41	84233	22	29	25	24	23	15	23
42	84234	23	25	25	22	21	25	24
43	84235	15	19	15	16	16	17	16
44	84236	17	19	17	17	14	19	17
45	84237	24	28	20	24	21	25	24
46	84238	17	21	17	18	16	18	18
47	84239	20	22	21	17	19	22	20
48	84240	16	17	17	15	16	18	17
49	84241	17	18	15	20	16	18	17
50	84242	20	23	23	23	23	25	23
51	84243	17	20	18	16	16	18	18
52	84244	14	16	14	18	13	18	16
53	84245	17	22	17	18	17	18	18
54	84246	15	22	20	18	16	20	19
55	84247	19	24	21	19	19	23	21
56	84248	21	22	19	13	20	20	19
57	84249	18	23	20	19	17	23	20
58	84250	17	19	17	16	17	22	18
59	84251	21	24	22	17	19	22	21
60	12237	19	21	19	19	17	14	18
61	4918	19	23	16	20	19	22	20
62	4951	-	17	17	15	14	18	16
63	Lo.ch	18	15	12	18	13	16	
	SE	0.3	1.8	1.0	0.9	1.2	1.2	
	MEAN	18.0	20.4	18.5	18.0	17.1	20.0	
	CV	4.5	23.6	16.4	13.1	18.5	16.0	

## Appendix 36. Entries in International Chickpea Screening Nursery

Desi Medium Duration (ICSN-DM) 1984-85

Entry No.	ICCL/ ICC No.	Selection No.	Parentage
1	82302	ICCX-750841-30P-BP-1P-1P-BP	P-1231 x P-1265
2	82313	ICCX-750948-BP-BP-9P-1P-BP	P-1222 x P-1092
3	83146	ICCX-780110-3P-1P-2P-BP	H-208 x P-212-1
4	83316	ICCX-770793-BP-BP-28P-BP	P-1209-1 x (P-36 x P-4087)
5	83320	ICCX-760445-BP-BP-19P-1P-BP	JG-62 x ICCX-730076-15-2-B
6	83324	ICCX-761340-BP-BP-33P-1P-BP	P-2559 x P5 (BH-10 x WP-34)
7	83329	ICCX-760203-BP-BP-23P-3P-BP	T-103 x P-119-1
8	83332	ICCX-760716-BP-BP-4P-1P-BP	G-130 x Annigeri
9	83334	ICCX-750760-BP-BP-36P-2P-2P-BP	P-1363-1 x WR-315
10	83339	ICCX-750948-BP-BP-50P-1P-2P-BP	P-1222 x P-1092
11	83340	ICCX-750948-BP-BH-1H-1P-2P-BP	P-1613 x P-183
12	82335	ICCX-750053-2P-1P-BP-1P-1P-BP	JG-62 x WR-315
13	83303	ICCX-751682-BP-BP-39P-1P-BP	NEC-900 x (P-61 x Ayelet)
14	83317	ICCX-760203-BP-BP-8P-1P-BP	T-103 x P-619-1
15	83228	ICCX-750841-32P-BP-1P-1P-1P-BP	P-1231 x P-1265
16	81300	ICCX-740911-1H-1H-1P-BH-2H-BH	P-99 x H-208
17	81290	ICCX-750297-2P-1P-BH-1H-BH	(NEC-240 x NEC-249) x (P-61 x P-9623)
18	84301	ICCX-770029-BP-BP-36P-BP	Annigeri x G-130
19	84302	ICCX-760840-BP-BP-25P-1P-BP	NEC-249 x NEC-197
20	84303	ICCX-760695-BP-BP-19P-2P-BP	C-214 x BDN-9-3
21	84304	ICCX-750760-BP-BP-36P-1P-1P-BP	P-1363-1 x WR-315
22	84305	ICCX-752766-BP-BP-41P-1P-2P-BP	F3[(JG-62 x Chafa) x P-1022]-1 x F3[(CW-5/7 x Pant-104) x C-235]
23	84306	ICCX-761983-BH-BH-5H-BH	ICCX-730087-3-1-2H x H-208
24	84307	ICCX-761991-BH-BH-7H-BH	F2(P-1265 x P-1092)-2 x F2(K-4 x NEC-249)-2
25	84308	ICCX-751245-BH-BH-BH-7H-BH	P-2974 x P-36
26	84309	ICCX-751245-BH-BH-BH-10H-BH	P-2974 x P-36
27	84310	ICCX-770026-BP-BP-41P-BP	Annigeri x E-100
28	84311	ICCX-770019-BP-BP-28P-BP	Annigeri x K-850
29	84312	ICCX-790084-BP-BP-24P-BP	ICCC-4 x ICCX-730089- 18-3-B-BP
30	84313	ICCX-790084-BP-BP-38P-BP	ICCC-4 x ICCX-730089- 18-3-B-BP
31	84314	ICCX-790161-BH-BP-36P-BP	P-272 x RMS-13
32	84315	ICCX-790165-BH-BP-22P-BP	P-272 x RMS-28
33	84316	ICCX-790165-BH-BP-27P-BP	P-272 x RMS-28

cont...

Entry No.	ICCL/ ICC No.	Selection No.	Parentage
34	84317	ICCX-790169-BN-BP-38P-BP	P-502 x HMB-13
35	84318	ICCX-790171-BN-BP-36P-BP	P-502 x HMB-22
36	84319	ICCX-790165-BN-BP-15P-BP	P-272 x HMB-28
37	84320	ICCX-780357-208P-BP-2P-BP	K-850 x HMB-8
38	84321	ICCX-790171-BN-BP-20P-BP	P-502 x HMB-22
39	84322	ICCX-790168-49P-BP-3P-BP	P-502 x HMB-8
40	84323	ICCX-790168-188P-BP-1P-BP	P-502 x HMB-8
41	84324	ICCX-780083-8G-BG-BG-BG	(JG-62 x F-496) x K-850
42	84325	ICCX-780578-26-BG-BG-BG	P-324 x WEC-177
43	84326	ICCX-780077-20G-BG-BG-BG	(K-850 x F-378) x P-436
44	84327	ICCX-780073-7G-BG-BG-BG	(K-850 x F-378) x P-180-1
45	84328	ICCX-780095-8G-BG-BG-BG	(JG-62 x F-496) x P-1081-1
46	84329	ICCX-790259-BP-BT-32P-BP	K-850 (ICCC-1 x ICC-2)
47	84330	ICCX-790249-BP-BT-8P-BP	Annigeri x (ICCC-1 x K-850)
48	84331	ICCX-760068-29P-1P-1P-BT-BH	C-214 x (WR-315 x GL-651)
49	84332	ICCX-790248-BP-BT-4P-BP-BP	Annigeri x (ICCC-1 x ICC-2)
50	84333	ICCX-790245-BP-BT-13P-BP-BP	ICCC-1 x ICC-2
51	84334	ICCX-771121-BP-BP-9P-1P-BP	F2(P-2974 x P-36)-2 x F2 (P-1661 x P-2852)
52	84335	ICCX-770788-BP-BP-9P-1P-BP	K-468 x (JG-71 x ICCX-730089-18-5-B)
53	84336	ICCX-770788-BP-BP-13P-1P-BP	K-468 x (JG-71 x ICCX-730089-18-5-B)
54	84337	ICCX-770782-BP-BP-15P-1P-BP	ICCC-2 x (P-1236 x BG-203)
55	84338	ICCX-770782-BP-BP-28P-1P-BP	ICCC-2 x (P-1236 x BG-203)
56	84339	ICCX-770795-BP-BP-97P-1P-BP	P-436 x (NP-34 x P-810)
57	84340	ICCX-770150-BP-BP-21P-1P-BP	JGC-1 x ICC-3
58	84341	ICCX-761340-BP-BP-23P-1P-1P-BP	P-2559 x F5 (BN-10 x NP-34)
59	84342	ICCX-750364-BP-BP-31P-2P-1P-BP	JG-62 x NEC-802
60	84343	ICCX-750674-BP-BP-85P-2P-1P-1P-BP	JG-71 x P-388
61	5003	K-850	
62	11525	ICCC-4	
63		Local check	

Appendix 37. Seed yield (kg/ha) and ranks of entries in ICBR-DH at 8 locations in 1984-85

Entry No	ICCL/ICC.No	Patna-ehara	Sabour	Derol	Juna-gadh	Qualior	Nav Delhi	Navg son	Durga-pura	Mean
1	82302	1476 14	1220 20	1285 38	1939 17	2808 4	2407 7	538 22	501 37	1365 22
2	82313	1619 11	2148 6	1238 39	2148 12	2761 5	1817 25	179 49	638 29	1485 26
3	82146	2090 4	1000 23	1428 33	1334 34	1894 31	2195 13	838 10	258 52	1426 33
4	82314	- -	1571 13	758 42	709 44	2142 22	2171 15	1038 6	319 47	1186 50
5	82320	714 27	1333 18	262 45	897 43	1854 31	1345 34	245 42	852 27	853 57
6	82324	1476 14	857 27	1309 37	1126 41	1664 37	1227 36	185 47	247 54	1035 53
7	82329	1048 23	1095 23	3046 3	1374 35	2237 20	944 42	286 36	235 55	1310 43
8	82322	1476 14	1143 22	1666 30	2323 3	1476 39	2289 11	262 39	618 31	1473 27
9	82334	1524 13	1095 23	1404 34	1168 40	1854 31	2313 10	595 20	575 35	1368 42
10	82339	1762 9	2762 7	2094 23	1814 21	1333 40	944 42	167 51	390 44	1215 49
11	82340	1286 18	1048 24	2570 12	2335 7	2237 20	1935 22	264 38	424 43	1519 20
12	82325	1905 8	1762 10	2475 15	2085 13	1809 33	1038 40	210 45	438 41	1423 31
13	82303	2143 4	1191 21	2899 4	1689 24	2285 18	1558 31	167 51	861 25	1642 14
14	82317	1000 24	824 28	3046 3	2335 7	2190 21	2384 8	271 37	185 57	1630 15
15	82308	2524 1	1000 25	2380 16	2168 11	2713 7	2502 4	167 51	250 53	1815 3
16	81306	1286 18	1667 11	2666 11	1001 42	1952 28	1062 39	200 46	467 39	1233 48
17	81290	1667 10	1143 22	2931 5	1314 37	2618 9	1657 29	679 17	260 51	1592 18
18	84301	1952 7	1343 22	2237 19	1710 23	2190 21	1038 40	343 33	460 40	1419 32
19	84302	2048 5	1429 16	3189 3	1939 17	2523 11	- -	298 35	387 45	1731 8
20	84303	1333 17	2476 3	2094 23	2544 2	2570 10	2124 17	738 12	688 23	1727 9
21	84304	1905 8	2286 5	2785 8	1585 28	2380 15	944 42	450 26	903 18	1565 22
22	84305	- -	429 33	1666 30	2419 6	1761 35	2478 5	229 43	663 24	1536 24
23	84306	1095 22	2333 4	1190 40	1918 18	2380 15	1204 37	857 9	301 49	1278 45
24	84307	1048 23	1619 12	2666 11	1522 31	1904 30	1204 37	514 23	926 13	1398 36
25	84308	619 29	476 32	1714 29	1939 17	1856 31	1345 34	860 8	1146 8	1354 41
26	84309	1619 11	1762 10	1999 24	1689 24	2856 3	2242 12	348 54	1029 11	1655 13
27	84310	1952 7	1191 21	1952 25	1689 24	1833 32	1912 23	190 48	1568 7	1585 19
28	84311	2143 4	2143 7	2808 7	1564 29	2404 14	2575 3	248 41	518 36	1744 6
29	84312	1524 13	1095 23	3046 3	1501 33	2570 10	1086 38	229 41	100 50	1465 28
30	84313	1571 12	1143 22	571 44	21 48	1688 37	1204 37	1152 5	492 38	954 55
31	84314	190 35	- -	1714 29	2231 9	1595 38	2789 11	150 53	1514 3	1383 38
32	84315	- -	1429 16	1761 28	792 44	2142 22	684 41	255 46	1066 10	1137 51
33	84316	238 34	2000 8	1142 41	1793 38	2047 24	944 42	171 56	588 34	918 56
34	84317	48 36	1667 11	2285 17	1731 22	2737 6	2454 6	705 15	1399 5	1623 16
35	84318	571 30	952 26	2737 9	1126 41	1999 27	2596 2	126 56	1107 9	1465 28
36	84319	333 33	952 26	1380 35	1543 30	2261 14	1369 33	1226 4	592 33	1243 47
37	84320	1190 21	1191 21	2190 21	1230 39	1928 29	2006 14	631 34	592 33	1395 39
38	84321	476 31	1476 14	1618 31	1460 34	2261 14	2006 14	464 25	888 14	1310 43
39	84322	1095 22	1952 9	1380 35	2022 15	2475 11	2148 18	974 7	903 18	1572 21
40	84323	429 32	1000 25	1547 32	1732 22	2190 21	1478 30	343 13	943 15	1259 44

cont....

## Appendix #7 cont...

Entry No	ICCL./ ICC.No	Patancheru	Rebour	Derol	Jana-gadh	Gwalior	How Delhi	Harv-son	Durga-pura	Mean									
41	84324	1206	18	1429	16	1999	24	1605	27	3046	2	1369	33	1429	1	598	32	1619	17
42	84325	1667	10	1095	23	2428	14	1501	33	2332	16	3233	1	733	13	805	21	1814	4
43	84326	190	35	2914	1	1466	30	626	47	2332	16	1935	22	150	53	179	58	1011	54
44	84327	2000	6	1429	16	3143	1	2439	5	2261	19	2006	19	740	11	1332	6	1989	1
45	84328	1762	9	1429	16	2904	6	1689	24	3213	1	1251	35	543	21	832	20	1742	7
46	84329	2190	3	1206	19	714	43	2690	1	2047	24	1794	26	410	30	314	48	1451	29
47	84330	1238	19	952	26	1285	38	1605	27	1999	27	2407	7	105	57	430	42	796	44
48	84331	1474	14	1762	10	1333	36	1710	23	1785	34	2030	18	129	55	1301	7	1395	39
49	84332	1667	10	1095	23	2237	19	2460	4	2094	23	1416	32	476	24	217	56	1510	25
50	84333	1667	10	1429	16	2808	7	1385	28	2237	20	2006	19	714	14	644	28	1666	11
51	84334	2000	6	1667	11	2213	20	2344	2	1666	37	1699	28	1309	3	1493	4	1846	2
52	84335	810	25	1191	21	1428	33	1835	20	2094	23	2360	9	693	16	680	26	1411	34
53	84336	1048	23	810	29	2666	11	1626	26	2094	23	2360	9	214	44	1593	1	1657	12
54	84337	1667	10	1206	19	3046	3	2232	8	2689	8	1015	41	319	34	978	14	1709	10
55	84338	1905	8	1191	21	2142	22	1522	31	1714	36	684	43	1374	2	652	27	1428	30
56	84339	667	28	714	31	1238	39	751	45	1509	41	944	42	357	32	323	46	798	58
57	84340	1429	15	952	26	1618	31	2043	14	2761	5	1982	21	433	24	575	35	1549	23
58	84341	2476	2	1000	25	2713	10	2189	10	2142	22	1251	35	643	18	1027	13	1777	5
59	84342	1474	14	1095	23	1856	26	1689	24	1999	27	1841	24	62	58	624	30	1164	40
60	84343	1190	21	476	32	2142	22	1668	25	2023	25	354	44	155	52	185	59	1098	52
61	5003	1365	16	736	30	1813	27	1512	32	2015	26	2182	14	438	27	1051	11	1366	39
62	11525	794	26	1437	15	2396	15	1845	19	2301	17	1999	20	384	31	692	22	1402	35
63	Lo.ch	1206	20	1413	17	2281	18	2009	16	2432	13	1741	27	434	28	939	16		
SE		85.1		114.9		126.1		103.4		87.0		89.9		12.3		53.1			
MEAN		1357.7		1330.3		2275.2		1691.3		2173.2		1714.4		473.9		690.6			
CV		26.3		33.3		14.3		14.2		9.5		11.2		7.2		20.6			

Appendix 38. Days to 50% flowering of entries in ICSM-DM at 8 locations in 1984-85

Entry No.	ICCL/ ICC.No	Pata- schera	Sab- our	Derol	Juna- gadh	Gwal- ior	New Delhi	Havg- son	Durg- apura	Mean
1	82302	53	84	62	59	59	90	79	69	69
2	82313	55	83	66	59	77	92	82	69	73
3	83146	53	83	66	62	72	90	83	72	73
4	83316	60	83	73	61	82	93	83	75	76
5	83320	48	72	62	55	57	87	78	61	65
6	83324	43	77	65	50	54	90	52	52	60
7	83329	52	80	62	58	60	90	79	62	68
8	83332	51	82	71	52	58	94	74	61	68
9	83334	54	80	65	59	60	93	82	68	70
10	83339	52	77	65	59	73	91	83	63	70
11	83340	52	74	71	60	59	89	81	77	70
12	82335	52	76	66	58	72	86	79	63	69
13	83303	52	74	62	56	72	89	81	62	69
14	83317	48	77	58	51	56	93	72	57	64
15	83228	53	80	67	61	59	90	81	71	70
16	81300	58	82	66	69	71	89	85	74	74
17	81290	61	87	68	61	72	94	86	72	75
18	84301	49	87	62	52	55	87	79	58	66
19	84302	47	77	62	53	57	92	74	62	66
20	84303	46	80	58	50	54	90	54	56	61
21	84304	48	74	62	50	71	90	75	58	66
22	84305	43	84	62	49	54	88	46	47	59
23	84306	59	83	66	68	76	90	86	69	75
24	84307	61	76	65	67	79	93	86	72	75
25	84308	59	83	71	61	70	86	86	72	74
26	84309	61	83	68	68	78	93	87	62	75
27	84310	49	76	65	53	56	90	79	55	65
28	84311	48	76	62	49	54	90	73	55	63
29	84312	52	76	61	59	60	88	78	68	68
30	84313	50	83	68	59	58	92	83	61	69
31	84314	54	-	64	59	77	93	85	69	72
32	84315	57	85	71	64	80	90	87	71	76
33	84316	61	87	73	72	80	100	90	82	81
34	84317	56	80	66	54	78	91	86	66	72
35	84318	59	83	71	61	83	89	88	79	77
36	84319	53	80	64	58	57	88	80	63	68
37	84320	58	82	65	59	78	95	85	76	75
38	84321	55	83	64	58	59	91	83	61	69
39	84322	56	74	66	59	77	93	85	69	72
40	84323	56	85	72	61	79	93	87	67	75

cont...



## Appendix 38. cont.

Entry No.	ICCL./ ICC.No	Patan-cheru	Sab-our	Derol	Juna-gadh	Oval-ior	New-Delhi	Navg-aon	Durg-apura	Me
41	84324	50	79	62	51	58	87	72	60	61
42	84325	53	80	60	54	60	87	85	67	61
43	84326	54	80	62	59	60	90	83	70	71
44	84327	50	82	72	54	60	94	79	57	61
45	84328	52	80	65	53	58	92	77	61	67
46	84329	55	83	64	59	76	93	80	71	73
47	84330	52	85	65	60	59	93	82	61	71
48	84331	55	85	65	59	84	91	86	68	74
49	84332	53	85	58	59	84	93	75	63	71
50	84333	56	85	72	61	79	95	83	78	76
51	84334	54	82	66	58	60	94	86	62	71
52	84335	53	88	66	59	79	94	86	67	74
53	84336	52	84	68	54	60	95	83	60	70
54	84337	56	83	68	66	77	90	82	62	71
55	84338	47	80	58	53	54	91	86	53	65
56	84339	55	87	64	70	81	103	88	68	77
57	84340	48	83	62	54	59	93	54	58	64
58	84341	48	84	62	53	56	93	83	56	67
59	84342	53	83	65	60	82	95	83	62	73
60	84343	53	90	65	60	77	92	83	68	74
61	5003	58	85	70	66	80	92	86	71	76
62	11525	58	82	65	60	70	91	82	71	72
63	Lo.ch	53	84	62	53	66	93	89	73	
BE		0.8	0.5	1.6	2.7	2.8	0.3	1.3	0.4	
MEAN		53.2	80.1	65.2	58.2	67.7	91.5	80.2	65.3	
CV		5.0	1.9	5.9	11.1	9.5	0.8	3.6	1.9	

Appendix 39. Days to maturity of entries in ICRM-III at 8 locations in 1984-85

Meryston./Pacem-Sub-Berol-Jamb-Guel-New Harg-Burga-Mean  
No ICC.No chern out gath for Delit non pars

1	82302	97	139	115	118	131	126	132	134	123
2	82313	97	137	120	108	135	134	130	130	123
3	82346	94	143	120	109	129	131	127	126	124
4	82316	-	138	122	109	132	130	135	126	127
5	82320	90	138	115	102	123	122	122	140	120
6	82324	92	143	121	99	129	134	123	129	121
7	82329	97	143	120	106	131	123	126	125	123
8	82332	97	139	120	105	130	134	122	127	123
9	82334	97	139	116	109	131	128	129	129	123
10	82339	96	139	113	109	130	126	126	125	122
11	82340	95	138	120	109	132	127	123	128	122
12	82335	96	143	121	105	130	123	123	125	121
13	82303	96	138	111	102	129	124	123	137	120
14	82317	96	138	121	104	129	128	123	123	122
15	82228	96	136	120	109	129	123	123	125	122
16	81300	98	139	117	110	127	124	124	125	121
17	81290	100	147	118	109	129	127	123	123	124
18	84301	95	145	121	100	130	123	128	120	120
19	84302	92	136	112	107	128	131	123	126	119
20	84303	90	138	116	102	131	126	124	130	121
21	84304	93	138	113	101	131	124	124	132	120
22	84305	-	139	117	98	131	123	124	134	124
23	84306	98	139	118	111	130	124	124	138	124
24	84307	100	139	113	111	128	125	125	128	125
25	84308	99	140	120	111	129	127	128	126	125
26	84309	100	137	122	110	131	126	126	130	123
27	84310	96	141	120	101	129	126	126	124	121
28	84311	94	141	113	97	132	123	123	130	121
29	84312	97	137	113	106	130	123	123	140	121
30	84313	96	143	118	106	130	126	124	124	122
31	84314	96	-	117	106	130	125	124	123	120
32	84315	-	139	120	102	130	123	127	125	125
33	84316	100	137	121	109	128	124	124	127	123
34	84317	96	139	117	106	131	126	126	138	124
35	84318	100	138	113	108	130	125	126	130	123
36	84319	94	137	113	105	130	124	124	124	121
37	84320	96	139	113	111	132	126	127	124	124
38	84321	99	138	121	106	129	126	126	125	124
39	84322	96	136	121	107	132	124	124	129	124
40	84323	95	139	123	109	131	125	125	127	124

cont.

## Appendix 39.

Entry No	ICCL/ ICC.No	Patam cheru	Sub- our	Duroi	Juna- gadh	Qual- ior	How Delhi	Navg- aon	Darga- para	Mean
41	84324	98	137	118	109	130	125	136	127	123
42	84325	95	139	113	107	129	125	135	136	122
43	84326	98	136	113	107	130	133	124	135	122
44	84327	96	143	120	106	129	129	135	135	124
45	84328	96	140	121	108	131	123	128	136	123
46	84329	97	137	112	109	131	138	130	126	123
47	84330	98	147	121	108	130	130	130	133	125
48	84331	99	143	118	107	131	124	127	135	123
49	84332	102	145	113	112	132	135	130	131	125
50	84333	98	141	122	109	131	133	134	130	125
51	84334	97	138	123	109	131	136	139	129	125
52	84335	95	139	122	107	129	129	134	130	126
53	84336	92	138	113	109	129	137	124	142	123
54	84337	96	141	120	109	129	123	124	129	121
55	84338	94	136	115	99	127	123	139	128	120
56	84339	99	139	121	108	132	130	138	133	125
57	84340	98	143	117	109	132	136	130	129	124
58	84341	95	139	120	101	130	129	135	134	123
59	84342	98	141	122	109	130	126	126	126	122
60	84343	98	145	123	109	130	135	123	132	124
61	5003	99	141	121	109	131	131	131	121	136
62	11525	101	140	119	110	131	130	132	130	124
63	Lo.ch	98	141	115	101	130	129	134	131	
	SE	0.4	0.2	1.2	2.0	0.3	0.4	0.6	0.6	
	MEAN	96.5	137.8	117.9	106.6	130.1	129.0	129.5	131.4	
	CV	1.3	0.5	2.5	4.7	0.6	0.7	1.1	1.5	

Appendix 40. Plant height (cm) of entries in IC59-204  
at 6 locations in 1984-85

Entry No.	ICCL. ICC.No	Patan- chera	Sub- our	Bawal	Qual- lor	Now Delhi	Durga- pura	Mean
1	82302	29	61	44	62	55	35	48
2	82313	34	65	49	67	56	46	53
3	83146	27	58	45	46	39	43	43
4	83316	-	65	46	55	50	39	51
5	83320	22	48	36	49	45	40	40
6	83324	29	54	46	49	48	33	43
7	83329	26	56	40	55	46	31	42
8	83332	24	51	46	47	42	32	40
9	83334	31	55	43	64	45	47	48
10	83339	33	72	52	55	50	45	51
11	83340	30	70	57	63	53	30	51
12	82335	23	66	49	47	44	40	45
13	83303	30	51	43	43	42	49	43
14	83317	25	60	57	50	48	24	44
15	83228	27	56	43	54	57	35	45
16	81300	31	60	49	56	38	32	44
17	81290	34	60	59	48	51	34	48
18	84301	22	48	52	47	39	32	40
19	84302	27	60	51	50	-	35	43
20	84303	23	64	43	44	38	40	42
21	84304	25	60	43	55	38	47	45
22	84305	-	47	46	43	45	38	44
23	84306	28	58	46	60	41	25	43
24	84307	38	58	50	52	48	47	49
25	84308	29	52	50	46	40	55	45
26	84309	34	51	43	57	48	42	46
27	84310	29	53	45	41	43	45	43
28	84311	30	60	50	46	46	38	45
29	84312	32	71	56	57	43	38	50
30	84313	34	63	46	53	46	41	47
31	84314	27	-	51	48	-	53	45
32	84315	-	67	54	49	41	52	53
33	84316	29	68	51	49	48	48	49
34	84317	31	55	59	61	48	58	52
35	84318	35	57	55	61	59	57	54
36	84319	30	58	43	53	47	45	46
37	84320	29	58	48	49	50	33	45
38	84321	33	68	47	52	50	36	48
39	84322	28	67	48	61	46	44	49
40	84323	26	61	44	50	38	45	44

cont...

## Appendix 40. cont.

Entry No.	ICCL. No	Patan-Sub-cheru	Sub-our	Derol	Goal-ior	How Delhi	Burga-pura	Mean
41	84324	34	65	51	54	50	40	49
42	84325	31	54	51	45	50	47	46
43	84326	29	-	51	55	39	39	43
44	84327	31	63	56	51	47	57	51
45	84328	30	61	52	64	45	40	49
46	84329	34	61	52	56	48	35	48
47	84330	30	59	41	50	46	40	44
48	84331	29	57	43	62	52	49	49
49	84332	27	48	43	48	40	29	39
50	84333	35	56	51	51	50	38	47
51	84334	29	63	51	55	50	42	48
52	84335	27	55	43	43	44	49	44
53	84336	27	61	55	54	50	53	50
54	84337	26	57	46	49	39	41	43
55	84338	24	68	41	35	33	31	39
56	84339	30	68	44	48	-	22	42
57	84340	32	52	47	55	47	45	46
58	84341	24	56	48	45	-	45	44
59	84342	30	63	51	51	40	54	48
60	84343	34	51	48	42	47	29	42
61	5003	33	62	51	53	49	40	48
62	11525	32	59	52	49	49	43	47
63	Lo.ch	29	60	49	51	47	41	46
SE		0.6	0.4	0.6	0.7	0.6	0.4	
MEAN		29.3	57.3	48.3	51.7	45.7	40.9	
CV		6.3	2.4	2.7	3.5	3.0	3.6	

Appendix 41. Weight of 100 seeds of entries in ICSE-DM  
at 7 locations in 1984-85

Entry No	ICCL. No	Patm- chera	Sub- our	Derol	Jama- gadh	Gwal- ior	Now Delhi	Durga- pura	Mean
1	82302	16	13	20	17	14	15	21	17
2	82313	22	21	23	23	19	19	23	21
3	83146	15	15	17	15	12	14	15	15
4	83316	-	19	21	16	12	18	20	18
5	83320	16	20	17	19	20	16	18	18
6	83324	17	17	26	19	15	16	18	18
7	83329	17	22	24	23	15	22	23	21
8	83332	16	14	19	17	12	14	16	15
9	83334	16	16	16	17	15	14	18	16
10	83339	18	19	21	21	15	11	22	18
11	83340	18	19	21	18	17	18	21	19
12	82335	16	14	17	18	13	16	21	16
13	83303	18	18	18	21	16	17	19	18
14	83317	21	17	24	25	19	21	26	22
15	83228	16	16	18	21	14	14	18	17
16	81300	11	11	12	13	10	9	12	11
17	81290	15	14	20	16	14	15	16	16
18	84301	15	16	18	18	12	15	19	16
19	84302	15	14	14	19	14	-	18	16
20	84303	13	14	14	16	13	13	16	14
21	84304	17	14	17	19	15	-	20	17
22	84305	-	16	14	19	17	14	16	16
23	84306	14	13	14	20	11	13	15	14
24	84307	12	11	14	13	11	11	12	12
25	84308	13	13	14	15	11	12	15	13
26	84309	12	14	12	14	12	12	16	13
27	84310	18	18	20	24	17	16	20	19
28	84311	22	20	20	25	20	19	24	21
29	84312	24	22	26	19	22	21	12	21
30	84313	25	15	28	29	21	26	28	25
31	84314	13	-	14	15	10	15	16	14
32	84315	-	15	14	13	13	13	16	14
33	84316	14	13	13	15	13	13	15	14
34	84317	12	13	17	18	14	15	17	15
35	84318	13	15	16	14	13	14	17	15
36	84319	16	16	18	20	15	16	22	18
37	84320	14	17	17	17	15	18	17	16
38	84321	14	14	16	16	13	14	24	16
39	84322	12	12	16	14	11	11	15	13
40	84323	14	15	17	14	12	14	16	15

cont.

## Appendix 41. cont..

Entry No	ICCL/ ICC.No	Patna- chara	Sab- our	Derol	Jama- gadh	Gwal- ior	Now Delhi	Burga- para	Mean
41	84324	19	19	19	22	17	17	23	19
42	84325	15	16	17	18	14	15	19	16
43	84326	13	14	17	13	12	14	16	14
44	84327	18	18	21	20	17	18	20	19
45	84328	14	14	14	15	13	13	17	14
46	84329	17	15	18	20	16	18	20	18
47	84330	24	21	26	24	19	22	23	23
48	84331	15	14	14	15	13	14	17	15
49	84332	19	21	20	21	16	21	22	20
50	84333	17	16	18	20	14	16	17	17
51	84334	20	22	24	23	18	20	20	21
52	84335	15	13	18	16	11	12	16	14
53	84336	20	19	22	23	16	19	25	21
54	84337	14	15	20	18	13	14	18	16
55	84338	17	16	14	19	15	13	19	16
56	84339	16	17	18	19	14	22	17	18
57	84340	19	19	18	14	17	19	21	18
58	84341	22	24	24	25	21	23	23	23
59	84342	21	21	30	22	17	20	21	22
60	84343	13	19	16	16	11	14	17	15
61	5003	25	26	29	29	22	28	28	27
62	11525	13	14	16	15	14	14	15	14
63	Lo.Ch	23	12	19	18	12	12	14	
	SE	1.9	2.3	2.8	3.0	2.3	3.7	2.2	
	MEAN	16.6	16.2	18.6	18.5	14.8	16.1	18.7	
	CV	31.9	45.3	31.8	35.6	34.9	50.6	40.0	

## Appendix 42. Entries in International Chickpea Screening Nursery

## Desi Long Duration (ICSN-DL) 1984-85

Entry No.	ICCL/ ICC No.	Selection No.	Percentage
1	81290	ICCX-741297-4H-1P-BH-1H-BH	JG-39 x L-550
2	81299	ICCX-74911-1H-1H-1P-BH-1H-BH	P-99 x H-208
3	82436	ICCX-752288-7H-1H-BH-1P-1H-BH	F3(CW-517 x BECA82) x F3(PB-7 x B8-11)-3
4	82439	ICCX-75653-BH-BH-1H-1H-BP	JG-71 x WR-315
5	82441	ICCX-752235-5H-1H-BH-1H-1H-BH	[P3 (P-502 x BEG-482)] x F2 [(L-550 x CW-5/7) x F-404 x Ceylon-2]
6	83410	ICCX-779-B-BH-1H-BH	PRR-1 x P-5462
7	83425	ICCX-73359-BH-BT-5H-BH	H-208 x P-4353-1
8	83430	ICCX-761889-BH-BH-6H-1H-BH	F2 (L-550 x WP-34)-2 x F2 (JG-39 x C-375)-3
9	83447	ICCX-761710-BH-BH-10H-1H-BH	F2 (NEC-249 x P-994)-1 x F2 (C-214 x WP-34)-1
10	83448	ICCX-761229-BH-BH-11H-1H-BH	(P-30 x P-458) x (C-214 x P-183)
11	84401	ICCX-780378-BH-BH-1H-BH	ICCC-2 x (Annigeri x Pant-G-114)
12	84402	ICCX-770426-5A-2P-1P-BT-BP-BH	B-106 x NEC-989
13	84403	ICCX-760379-BH-BH-21H-BH	C-214 x P-2718-1
14	84404	ICCX-770114-B-BH-3H-BH	NEC-989 x G-130
15	84405	ICCX-751245-BH-BH-BH-104-BH	P-2974 x P-36
16	84406	ICCX-790375-BH-BH-28H-BH	L-550 x Pant-G-114
17	84407	ICCX-790393-BH-BH-2H-BH	P-324 x Pant-G-114
18	84408	ICCX-790393-BH-BH-4H-BH	P-324 x Pant-G-114
19	84409	ICCX-790393-BH-BH-5H-BH	P-324 x Pant-G-114
20	84410	ICCX-790393-BH-BH-12H-BH	P-324 x Pant-G-114
21	84411	ICCX-790394-BH-BH-14H-BH	P-2161 x P-4353-1
22	84412	ICCX-77430-B-BH-1H-1H-BH	H-355 x P-496
23	84413	ICCX-770431-B-BH-6H-1H-BH	F-378 x SL-972-A
24	84414	ICCX-770431-B-BH-13H-1H-BH	F-378 x SL-972-A
25	84415	ICCX-770431-B-BH-16H-2H-BH	F-378 x SL-972-A
26	84416	ICCX-770431-BH-BH-21H-2H-BH	F-378 x SL-972-A
27	84417	ICCX-770431-BH-BH-25H-1H-BH	F-378 x SL-972-A
28	84418	ICCX-770436-B-BH-6H-1H-BH	F-404 x JG-39

cont...



Entry No.	ICCL/ ICC No.	Selection No.	Percentage
29	84419	ICCX-770436-B-BH-10H-1H-BH	F-404 x JG-39
30	84420	ICCX-770436-B-BH-10H-2H-BH	F-404 x JG-39
31	84421	ICCX-770436-B-BH-14H-2H-BH	F-404 x JG-39
32	84422	ICCX-770436-B-BH-15H-1H-BH	F-404 x JG-39
33	84423	ICCX-770436-B-BH-18H-2H-BH	F-404 x JG-39
34	84424	ICCX-771146-B-BH-3H-1H-BH	F2 (G-130 X NP-34)-3 x F2 (P-1639 x NEC-1640)-1
35	84425	ICCX-77134-B-BH-3H-1H-BH	USA-613 x ICC-2
36	84426	ICCX-770142-B-BH-1H-2H-BH	JG-39 x Pant G-114
37	84427	ICCX-770142-B-BH-8H-1H-BH	JG-39 x Pant G-114
38	84428	ICCX-770142-B-BH-29H-2H-BH	JG-39 x Pant G-114
39	84429	ICCX-770142-B-BH-45H-2H-BH	JG-39 x Pant G-114
40	84430	ICCX-770142-B-BH-47H-1H-BH	JG-39 x Pant G-114
41	84431	ICCX-770467-B-BH-1H-2H-BH	G-130 x IC-10495
42	84432	ICCX-771154-B-BH-1H-2H-BH	F2 (GL-651 x P-1092)-2 x F2 (Bengalgram x NEC-30)
43	84433	ICCX-770089-B-BH-2H-3H-BH	F-496 x E-100
44	84434	ICCX-770097-B-BH-2H-3H-BH	P-992 x ICC-2
45	84435	ICCX-770097-B-BH-4H-2H-BH	P-992 x ICC-2
46	84436	ICCX-780537-B-BH-1H-1H-BH	BG-203 x G-543
47	84437	ICCX-780537-B-BH-7H-1H-BH	BG-203 x G-543
48	84438	ICCX-780083-B-BH-13H-2H-BH	ICCX-73167-5-3-B-BP x K-850
49	84439	ICCX-780454-BH-BT-5H-2H-BH	(F-404 x JG-39) x P-326
50	84440	ICCX-76343-B-BP-BH-144-1H-BH	IC-73126-6-2-B x GL-651
51	84441	ICCX-790359-BH-BT-9H-1H-BH	H-208 x P-4353-1
52	84442	ICCX-790359-BH-BT-10H-1H-BH	H-208 x P-4353-1
53	84443	ICCX-771130-B-BH-2H-1H-BH	F2 (P-1013 x P-992)-1 x F2 (12-071-05093 x P-1488)-1
54	84444	ICCX-780075-B-BH-16H-1H-BH	ICCX-7389-70-3-B-BP x P-1081-1
55	84445	ICCX-780517-BH-BT-22H-1H-BH	Pant-114 x G-543
56	84446	ICCX-780517-BH-BT-24H-1H-BH	Pant-114 x G-543
57	84447	ICCX-780454-BH-BT-11H-1H-BH	(F-404 x JG-39) x P-326
58	84448	ICCX-770210-BH-4H-1H-1H-BH	ICCX-730085-17-2-B-BH x ICCC-2
59	84449	ICCX-760343-B-BP-BH-2H-1H-BH	ICCX-73126-6-2-B x GL-630
60	84450	ICCX-760368-B-BP-BH-17H-1H-BH	H-208 x P-2571

cont....

Entry No.	ICCL/ ICC No.	Selection No.	Parentage
61	84451	ICCX-760857-BH-BH-10H-2H-1H-BH	NP-34 x 7332-7-2-B
62	84452	ICCX-760857-BH-BH-10H-3H-2H-BH	NP-34 x 7332-7-2-B
63	84453	ICCX-760928-BH-BH-15H-1H-1H-BH	P-1363-1 x K-468
64	84454	ICCX-761728-BH-BH-4H-1H-2H-BH	F2 (P-436 x P-3090)-1 x F2 (L-550 x P-3642-1)-2
65	84455	ICCX-761981-BH-BH-2H-1H-1H-BH	(L-550 x G-130) x F-378
66	84456	ICCX-761981-BH-BH-16H-1H-2H-BH	(L-550 x G-130) x F-378
67	84457	ICCX-760877-BH-BH-19H-1H-2H-BH	P-1363-1 x ICCX-73327-7-2-
68	84458	ICCX-760293-BH-BH-5H-1H-1H-BH	G-543 x ICCX-7341-8-1-B
69	84459	ICCX-760379-BH-BH-22H-2H-1H-BH	C-214 x P-2718-1
70	84460	ICCX-752243-4H-2H-BH-2H-BH	F3 (RS-11 x Ceylon-2) x NEC-759 x F2 (H-223 x GW-577) x P-1243
71	84461	ICCX-761889-BH-BH-5H-BH	F2 (L-550 x NP-34)-2 x F2 (JG-39 x C-375)-3
72	84462	ICCX-760068-29P-1P-1P-BT-BH	C-214 x (WR-315 x GL-651)
73	84463	ICCX-752306-2P-1P-BP-1H-BH	[F3 (K-850 x Chafa) x G-130]-5 x [F3 (E-100 x NP-34) x (Radhey x L-550)]-5
74	84464	ICCX-760953-BH-BH-4H-BH	NEC-989 x P-5462
75	84465	ICCX-740632-1P-LB-BH-2P-BP-BH	(H-355 x BEG-482) x (JG-62 x P-1307)
76	84466	ICCX-770532-7P-BT-BH	K-468 x P-1863
77	84467	ICCX-770463-5H-1H-BH	(JG-39 x P-240) x WR-315
78	84468	ICCX-770532-22P-BT-BH	K-468 x P-1863
79	1762	P-1443-3	
80	6819	NEC-989	
81	4948	G-130	
82	4954	H-208	
83		Local check	

Seed yield (kg/ha) and ranks of entries in ICR-9L at 7 locations  
in 1984-85

Berry locn./ No. ICR No.	Biser	Bert-	Bow	Ferid-	Ladh-	Post-	Kemper	Mean									
	his	Dolbi	lut	ana	ager												
1	81290	3000	2478	43	644	40	1301	29	1428	17	476	5	1904	10	1820	43	
2	81789	1476	34	3230	16	2261	9	1418	31	1333	20	48	14	1904	10	1940	28
3	82326	2048	21	3050	23	1690	26	1731	17	524	34	143	11	1904	10	1828	44
4	82329	1762	27	2644	38	-	-	1293	37	857	30	24	15	1904	10	1692	54
5	82441	1048	40	2472	46	1023	33	1022	44	619	33	26	15	1428	13	1369	78
6	83410	1333	37	3036	22	1737	23	1731	18	1428	17	48	14	238	18	1367	65-
7	83425	1619	31	872	73	-	-	1293	37	1666	15	476	5	1666	12	1423	73
8	83430	1762	27	2536	42	1380	30	980	45	1000	27	238	9	1428	13	1318	68
9	83447	1000	41	2489	44	904	34	1564	26	2047	9	238	9	3094	4	1830	39
10	83448	2524	13	3636	4	-	-	1668	21	2237	7	238	9	2618	6	2341	1
11	84401	1476	34	1339	63	1490	24	939	46	2618	2	1190	1	2142	8	1737	54
12	84402	1476	34	2111	53	2469	4	1418	31	1904	11	238	9	1666	12	1846	41
13	84403	2619	11	1094	71	2190	11	1316	36	716	32	476	5	2380	7	1719	55
14	84404	1762	27	1861	60	1904	13	2043	5	1142	24	48	14	2380	7	1849	40
15	84405	1476	34	2238	50	1809	19	792	50	2142	8	95	12	1666	12	1686	57
16	84406	1524	33	2972	25	-	-	1647	22	767	31	238	9	2836	5	1932	25
17	84407	2371	12	2272	33	-	-	646	54	476	35	714	3	952	15	1483	69
18	84408	1190	38	1222	69	785	36	1772	16	1716	14	337	6	2142	8	1471	70
19	84409	2837	8	3389	9	1737	23	667	33	1904	11	48	14	2836	5	2235	15
20	84410	2266	17	3330	12	-	-	2022	6	932	28	337	6	2380	7	2198	13
21	84411	2905	7	3333	14	-	-	1188	40	1761	13	190	10	1428	13	2123	15
22	84412	2426	14	2722	34	1904	13	1605	24	2332	5	238	9	3808	1	2475	3
23	84413	2524	13	2164	52	-	-	1668	21	1904	11	337	6	476	7	1743	53
24	84414	1333	37	2289	49	-	-	1897	21	476	35	238	9	1190	14	1437	72
25	84415	1476	34	1778	62	738	38	1334	35	932	28	14	16	238	18	1086	80
26	84416	3048	4	1278	68	-	-	1981	8	524	34	238	9	1904	10	1747	51
27	84417	1000	41	2700	35	-	-	1856	13	1023	26	932	2	1428	13	1601	64
28	84418	1429	35	2111	53	-	-	1293	37	428	36	71	13	1666	12	1385	75
29	84419	2932	6	3167	20	-	-	1355	34	1904	11	238	9	1904	10	2236	10
30	84420	2619	11	1111	70	666	40	1731	18	1380	19	48	14	1190	14	1450	71
31	84421	2932	6	2944	27	-	-	1689	20	932	28	48	14	3094	4	2336	8
32	84422	1932	23	1278	68	1190	31	813	49	428	36	238	9	1904	10	1261	79
33	84423	932	42	2930	26	785	36	1751	17	524	34	74	15	714	16	1279	77
34	84424	2667	10	3244	17	643	41	1397	32	932	28	190	10	1190	14	1682	58
35	84425	1334	33	1972	56	2094	13	1343	27	1904	11	71	13	1428	13	1744	52
36	84426	1362	27	636	75	1932	14	1710	19	2285	6	238	9	3094	4	1910	31
37	84427	1762	27	1933	58	1095	32	897	47	2380	4	95	12	1904	10	1662	61
38	84428	2190	18	1461	66	2166	12	2043	5	1428	17	238	9	1666	12	1826	45
39	84429	1905	24	3406	8	-	-	1418	31	714	32	24	15	1904	10	1669	34
40	84430	1143	39	3267	10	714	39	2002	7	1904	11	238	9	1428	13	1760	49
41	84431	1837	25	2794	32	1761	22	1793	15	2836	1	238	9	2142	8	2201	12
42	84432	1905	24	1944	57	-	-	1877	12	2047	9	238	9	1190	14	1793	47
43	84433	1667	10	2111	53	1642	26	1168	41	904	29	714	3	3332	3	1804	46
44	84434	2667	10	3206	19	1095	32	1793	15	476	35	48	14	3094	4	2035	19
45	84435	1619	31	2944	27	881	35	1814	14	1285	22	476	5	1428	13	1662	61

cont...

## Appendix 22 cont...

Bdry No.	ICCL./ ICC.No.	Bisar	Bert-hin	Now Delhi	Farid-hot	Lodhi-ana	Fant-nagar	Kemper	Mean								
46	84436	1667	30	2472	46	-	-	2168	4	1095	25	238	9	1904	10	1861	35
47	84437	1714	29	2167	51	1904	15	1605	24	2380	4	143	11	2618	6	2065	17
48	84438	2810	9	2617	40	2808	1	2377	2	1428	17	357	6	2618	6	2442	6
49	84439	2381	15	3222	18	2332	7	709	52	1238	23	238	9	3094	4	2163	14
50	84440	1762	27	1889	39	1904	15	1668	21	1238	23	357	6	952	15	1569	66
51	84441	1810	26	2556	42	1737	23	1209	39	2475	3	238	9	1904	10	1949	26
52	84442	1857	25	3667	3	785	36	1751	17	1856	12	238	9	2380	7	2049	30
53	84443	3667	1	3817	2	1880	16	1084	43	1428	17	95	12	2856	5	2455	4
54	84444	1667	30	2361	48	2237	10	876	48	1142	24	476	5	952	15	1539	67
55	84445	2286	17	1089	72	1642	26	751	51	2380	4	95	12	1904	10	1675	60
56	84446	2048	21	833	74	2166	12	1522	28	762	31	48	14	952	15	1381	76
57	84447	3190	3	2861	30	1690	24	1605	24	476	35	24	15	1428	13	1875	33
58	84448	2286	17	2517	43	2523	3	1460	30	1000	27	238	9	1904	10	1948	27
59	84449	952	42	3456	6	762	37	2231	3	1000	27	238	9	1428	13	1638	62
60	84450	3000	5	2667	36	2737	2	1647	22	762	31	476	5	1428	13	2040	22
61	84451	1810	26	1322	67	571	42	1668	21	476	35	476	5	2618	6	1411	74
62	84452	2048	21	4350	1	1952	14	1981	8	1714	14	238	9	2142	8	2365	7
63	84453	2000	22	3106	21	1952	14	1376	33	1952	10	714	3	1904	10	2048	21
64	84454	1714	29	2594	41	1190	31	2481	1	1952	10	238	9	1904	10	1973	23
65	84455	1476	34	1556	64	2380	6	1939	10	2856	1	476	5	952	15	1860	36
66	84456	2476	14	1750	63	1523	27	1772	16	2380	4	143	11	1904	10	1968	24
67	84457	1810	26	3417	7	1785	21	751	51	1000	27	190	10	1904	10	1778	48
68	84458	1381	36	3000	24	1642	26	2002	7	1285	22	714	3	2380	7	1948	27
69	84459	2381	15	2833	31	2523	3	1960	9	1428	17	24	15	3570	2	2449	5
70	84460	3476	2	3533	5	1476	28	1710	19	2618	2	238	9	2380	7	2532	2
71	84461	1381	36	2056	55	1809	19	1626	23	952	28	48	14	1904	10	1621	63
72	84462	1476	34	2883	29	-	-	1334	35	1428	17	238	9	1666	12	1757	50
73	84463	2667	10	1750	63	2261	9	792	50	1666	15	476	5	1904	10	1840	42
74	84464	2143	20	3361	11	2309	8	1731	18	476	35	476	5	2618	6	2106	16
75	84465	1857	25	1794	61	-	-	1731	18	2047	9	714	3	2856	5	2057	18
76	84466	2476	14	3339	13	1833	18	2022	6	952	28	357	6	3094	4	2286	9
77	84467	2381	15	2639	39	2628	5	1710	19	524	34	48	14	1428	13	1852	38
78	84468	1857	25	2906	28	-	-	1460	30	1428	17	48	14	1904	10	1911	30
79	1762	2000	22	3256	15	-	-	1314	36	952	28	238	9	1904	10	1885	32
80	6819	2333	16	2667	36	1428	29	1814	14	2047	9	476	5	1190	14	1913	29
81	4948	2185	19	2658	37	1652	25	1251	38	1416	18	338	7	1993	9	1859	37
82	4954	1738	28	2105	54	1804	20	1147	42	1476	16	292	8	1815	11	1681	59
83	Lo.-ch	1595	32	2382	47	1845	17	1574	25	1309	21	497	4	1993	9		
SE		125.5		112.8		41.5		91.0		34.5		44.0		42.1			
MEAN		2010.3		2498.2		1662.4		1529.2		1399.8		272.4		1933.8			
CV		16.7		11.6		5.8		16.8		6.0		28.7		5.3			

Fantnagar not considered for mean

Appendix 44. Days to 50% flowering of entries in ICSN-DL at 6 locations in 1984-85

Entry No.	ICCL/ ICC.No	Hisar	Bert-hin	New Delhi	Ludhi-ana	Pant-nagar	Kan-pur	Mean
1	81290	85	120	84	94	82	68	89
2	81299	76	121	84	92	82	64	87
3	82436	85	121	85	86	83	70	88
4	82439	102	124	89	91	80	65	92
5	82441	83	122	93	91	80	63	89
6	83410	98	124	93	102	86	60	94
7	83425	87	121	89	94	82	72	91
8	83430	84	122	84	92	83	70	89
9	83447	110	121	89	90	82	65	93
10	83448	84	124	89	92	82	68	90
11	84401	60	119	86	90	84	68	85
12	84402	84	120	83	94	83	70	89
13	84403	102	122	92	87	83	68	92
14	84404	86	120	87	93	83	69	90
15	84405	86	120	86	92	81	70	89
16	84406	85	122	86	88	84	69	89
17	84407	104	122	93	100	81	69	95
18	84408	102	122	93	100	84	70	95
19	84409	89	124	91	95	83	73	93
20	84410	102	122	102	101	81	65	96
21	84411	89	121	90	97	84	60	90
22	84412	92	121	102	100	85	65	94
23	84413	102	122	95	100	85	67	95
24	84414	78	120	86	91	81	64	87
25	84415	92	122	86	95	82	60	90
26	84416	103	124	90	101	85	65	95
27	84417	103	126	91	102	83	65	95
28	84418	90	120	87	95	83	62	90
29	84419	105	123	92	100	83	70	96
30	84420	90	120	89	99	85	68	92
31	84421	90	123	91	93	83	71	92
32	84422	100	121	90	99	83	72	94
33	84423	104	120	87	100	84	65	93
34	84424	105	126	92	95	85	70	96
35	84425	90	122	94	99	85	72	94
36	84426	84	122	87	95	83	60	89
37	84427	84	122	89	97	84	75	92
38	84428	77	120	87	88	81	65	86
39	84429	86	123	89	95	84	66	91
40	84430	106	124	89	96	82	68	94

cont...

## Appendix 44. cont..

Entry No.	ICCL./ ICC.No	Hisar	Bert-hin	Now Delhi	Ludhi-ana	Pant-nagar	Kan-pur	Mean
41	84431	104	120	85	95	83	65	91
42	84432	102	121	96	99	84	65	95
43	84433	86	120	87	92	80	69	89
44	84434	84	121	84	93	82	70	89
45	84435	106	123	89	100	82	74	96
46	84436	82	121	84	91	81	69	88
47	84437	77	122	84	93	82	66	87
48	84438	76	122	83	91	81	70	87
49	84439	87	121	88	90	82	63	89
50	84440	90	120	88	96	84	65	91
51	84441	85	120	88	90	80	71	89
52	84442	85	123	89	95	80	70	91
53	84443	101	122	93	100	85	72	96
54	84444	83	127	86	91	81	65	89
55	84445	85	122	88	94	83	66	91
56	84446	77	121	89	92	84	69	89
57	84447	76	122	84	92	84	76	89
58	84448	94	128	92	100	80	63	91
59	84449	87	124	86	24	83	73	80
60	84450	103	123	92	92	84	65	93
61	84451	104	120	90	99	82	61	93
62	84452	92	122	91	92	84	69	92
63	84453	104	123	99	101	83	67	96
64	84454	102	125	93	100	86	68	96
65	84455	107	122	97	100	82	65	96
66	84456	86	127	92	95	85	75	91
67	84457	104	123	89	94	82	62	92
68	84458	83	124	102	100	84	65	91
69	84459	104	123	87	101	85	72	95
70	84460	106	123	88	99	85	67	95
71	84461	89	120	89	94	81	66	90
72	84462	74	122	88	91	81	69	89
73	84463	92	122	87	101	83	63	91
74	84464	87	126	95	100	83	75	94
75	84465	93	120	86	97	83	65	91
76	84466	86	122	85	96	82	74	91
77	84467	104	123	91	102	85	70	96
78	84468	87	123	87	92	84	64	91
79	1762	102	124	85	97	82	65	91
80	6819	88	122	87	96	80	71	91
81	4948	94	123	90	95	83	68	92
82	4954	91	121	88	93	83	69	91
83	Lo.Ch	75	121	86	92	84	69	
	SE	4.1	0.3	0.7	0.5	0.3	0.4	
	MEAN	91.4	122.2	89.3	94.4	82.8	67.6	
	CV	11.7	0.6	2.1	1.3	1.0	1.4	

Appendix 45. Mean days to maturity of entries in  
ICSM-DL at 5 locations in 1984-85

Entry No.	ICCL./ ICC.No	Hisar	Bert-hin	New Delhi	Pant-nagar	Mean
1	81290	166	167	-	125	153
2	81299	165	167	132	126	148
3	82436	167	173	129	129	150
4	82439	167	172	125	130	149
5	82441	167	160	135	126	147
6	83410	167	173	139	130	152
7	83425	165	154	126	125	143
8	83430	166	166	134	128	149
9	83447	167	160	-	128	152
10	83448	167	173	125	124	147
11	84401	167	169	125	131	148
12	84402	166	173	125	126	148
13	84403	167	158	137	125	147
14	84404	166	165	127	125	146
15	84405	166	160	127	131	146
16	84406	167	167	124	125	146
17	84407	166	167	127	130	148
18	84408	167	166	-	130	154
19	84409	167	173	134	130	151
20	84410	165	172	134	132	151
21	84411	166	172	127	132	149
22	84412	165	165	132	132	149
23	84413	167	167	135	131	150
24	84414	166	166	124	130	147
25	84415	165	172	126	132	149
26	84416	167	156	124	125	143
27	84417	167	173	-	132	157
28	84418	166	165	124	131	147
29	84419	166	167	124	128	146
30	84420	165	154	-	125	148
31	84421	166	173	127	131	149
32	84422	166	160	133	131	148
33	84423	167	172	-	131	157
34	84424	167	173	-	130	157
35	84425	165	173	132	131	150
36	84426	166	154	125	127	143
37	84427	167	172	128	131	150
38	84428	167	156	128	126	144
39	84429	167	167	125	125	146
40	84430	165	173	-	130	156

cont...

Appendix 45. Cont...

Entry No.	ICCL./ ICC.No	Hisar	Bert-hin	New Delhi	Pant-nagar	Mean
41	84431	165	167	127	130	147
42	84432	165	159	131	131	147
43	84433	166	159	131	128	146
44	84434	166	172	-	125	154
45	84435	165	170	-	133	156
46	84436	166	167	124	125	146
47	84437	166	166	127	126	146
48	84438	166	173	127	125	148
49	84439	167	169	129	129	149
50	84440	167	159	125	126	144
51	84441	167	159	129	125	145
52	84442	166	172	-	125	154
53	84443	167	173	132	127	150
54	84444	166	159	125	127	144
55	84445	165	159	132	125	145
56	84446	165	156	131	124	144
57	84447	165	167	126	125	146
58	84448	167	173	136	124	150
59	84449	165	173	126	130	149
60	84450	167	169	127	129	148
61	84451	167	156	-	130	151
62	84452	167	172	132	129	150
63	84453	166	173	135	134	152
64	84454	166	173	-	127	155
65	84455	166	156	138	130	148
66	84456	165	160	137	130	148
67	84457	165	172	136	130	151
68	84458	165	173	134	132	151
69	84459	166	167	128	123	146
70	84460	167	173	127	133	150
71	84461	167	158	127	125	144
72	84462	165	173	126	132	149
73	84463	167	159	128	131	146
74	84464	167	173	137	125	151
75	84465	166	159	124	130	145
76	84466	166	173	125	132	149
77	84467	167	167	135	125	149
78	84468	165	173	127	124	147
79	1762	165	173	127	127	148
80	6819	166	172	128	128	149
81	4948	166	169	130	130	149
82	4954	166	166	128	129	147
83	Lo.Ch	166	166	130	131	264
SE		0.1	0.6	0.5	0.4	11.9
MEAN		166.1	166.8	129.2	128.3	229.0
CV		0.1	0.8	0.9	0.8	12.3



Appendix 46. Plant height (cm) of entries  
in ICSM-DL at 5 locations in 1984-85

Entry No.	ICCL./ ICC.No	Risar	Bert-hin	New Delhi	Ludhi-ana	Pant-nagar	Mean
1	81290	70	46	40	47	28	46
2	81299	49	53	-	60	34	49
3	82436	59	51	48	48	28	47
4	82439	65	43	50	63	33	51
5	82441	70	54	-	59	43	57
6	83410	59	53	45	50	36	49
7	83425	62	31	45	49	30	43
8	83430	63	47	-	45	41	49
9	83447	69	43	40	48	40	48
10	83448	71	44	55	64	31	53
11	84401	61	29	47	56	44	47
12	84402	54	43	53	46	42	48
13	84403	71	41	-	56	30	50
14	84404	61	47	52	46	46	50
15	84405	50	52	56	47	29	47
16	84406	71	37	42	64	24	48
17	84407	75	41	54	72	38	56
18	84408	68	41	34	53	36	46
19	84409	72	53	-	42	44	53
20	84410	64	56	51	68	35	55
21	84411	81	57	48	72	37	59
22	84412	69	52	51	61	43	55
23	84413	89	47	51	46	34	53
24	84414	65	45	54	48	34	49
25	84415	61	46	49	59	35	50
26	84416	83	43	57	52	27	52
27	84417	85	52	37	48	43	53
28	84418	81	48	55	60	44	58
29	84419	76	50	56	60	36	56
30	84420	83	38	46	60	27	51
31	84421	78	53	55	47	44	55
32	84422	64	35	-	49	41	47
33	84423	52	50	41	50	48	48
34	84424	65	54	41	49	33	48
35	84425	60	58	-	52	30	50
36	84426	66	31	55	48	39	48
37	84427	60	52	47	58	29	49
38	84428	83	44	49	42	32	50
39	84429	63	54	52	50	34	51
40	84430	72	54	47	60	34	53

cont...

## Appendix 46. cont...

Entry No.	ICCL./ ICC.No	Hisar	Bert-hin	Bew Delhi	Ludhi-ana	Pant-nagar	Mean
41	84431	72	46	54	56	47	55
42	84432	65	45	60	60	50	56
43	84433	59	51	53	48	36	49
44	84434	70	49	47	49	30	49
45	84435	72	58	45	66	40	56
46	84436	63	43	57	64	42	54
47	84437	79	48	58	50	31	53
48	84438	75	54	61	61	33	57
49	84439	87	52	49	42	47	55
50	84440	72	42	46	45	30	47
51	84441	49	45	39	45	39	43
52	84442	62	53	42	45	29	46
53	84443	68	56	-	48	35	52
54	84444	72	45	49	43	48	51
55	84445	74	39	48	49	45	51
56	84446	73	34	44	50	25	45
57	84447	82	50	49	62	39	56
58	84448	62	51	50	62	44	54
59	84449	57	52	52	47	38	49
60	84450	74	46	46	49	43	52
61	84451	65	36	42	61	44	50
62	84452	69	50	44	43	36	48
63	84453	61	48	44	58	42	51
64	84454	58	41	47	57	41	49
65	84455	59	47	44	58	33	48
66	84456	82	40	-	48	28	50
67	84457	65	58	43	42	41	50
68	84458	59	41	44	46	39	46
69	84459	65	47	52	57	37	52
70	84460	72	55	52	55	30	53
71	84461	52	45	43	53	48	48
72	84462	55	43	50	63	30	50
73	84463	68	44	53	42	37	49
74	84464	60	48	41	45	34	46
75	84465	70	44	53	62	23	50
76	84466	63	43	51	71	27	51
77	84467	87	45	-	55	26	53
78	84468	63	51	50	60	38	52
79	1762	71	40	53	57	28	50
80	6819	72	52	37	50	35	49
81	4948	65	46	47	54	35	49
82	4954	65	42	46	51	32	47
83	Lo.Ch	61	46	47	52	35	
SE	0.8	0.9	0.3	0.6	0.6		
MEAN	67.6	46.8	48.2	53.4	36.2		
CV	3.0	4.9	1.7	3.0	4.4		

Appendix 47. Weight of 100 seeds (g) of entries  
in ICSN-DL at 5 locations in 1984-85

Entry No.	ICCL./ ICC.No	Hisar	Bert- hin	Nav Delhi	Ludhi- ana	Pant- nagar	Mean
1	81290	11	13	10	17	14	14
2	81299	10	11	10	15	12	12
3	82436	16	21	20	21	20	21
4	82439	16	24	-	28	20	24
5	82441	16	23	20	18	15	19
6	83410	10	13	10	14	13	13
7	83425	12	13	-	14	11	13
8	83430	9	12	10	14	12	12
9	83447	10	15	11	16	13	14
10	83448	12	15	-	16	16	16
11	84401	11	16	11	15	13	14
12	84402	9	12	10	12	12	12
13	84403	11	15	14	15	13	14
14	84404	10	12	10	15	10	12
15	84405	9	13	12	15	13	13
16	84406	10	15	-	16	12	14
17	84407	10	13	-	14	12	13
18	84408	11	13	13	15	12	13
19	84409	11	11	11	16	12	13
20	84410	10	10	-	15	13	13
21	84411	11	12	-	16	14	14
22	84412	15	19	15	18	19	18
23	84413	16	21	-	0	16	18
24	84414	12	13	-	14	17	15
25	84415	9	12	12	14	11	12
26	84416	13	21	-	22	19	21
27	84417	11	16	-	14	13	14
28	84418	11	14	-	14	17	15
29	84419	9	11	-	12	10	11
30	84420	10	11	14	13	14	13
31	84421	10	12	-	14	11	12
32	84422	10	14	11	14	13	13
33	84423	9	11	10	14	11	12
34	84424	11	12	12	17	13	14
35	84425	13	13	10	17	16	14
36	84426	10	12	17	15	12	14
37	84427	10	9	12	14	12	12
38	84428	10	13	11	15	11	13
39	84429	9	11	-	15	11	12
40	84430	10	13	11	16	15	14

cont...

## Appendix 47. cont...

Entry No.	ICCL/ICC.No	Hisar	Bert-hin	New Delhi	Ludhi-ana	Pant-nagar	Mean
41	84431	11	14	13	15	11	13
42	84432	16	22	-	25	21	23
43	84433	14	21	16	23	21	20
44	84434	10	12	10	18	12	13
45	84435	13	18	17	23	18	19
46	84436	10	13	-	17	11	14
47	84437	9	13	11	11	12	12
48	84438	22	28	25	30	22	26
49	84439	10	11	11	16	13	13
50	84440	9	13	11	15	10	12
51	84441	10	13	-	11	11	12
52	84442	9	11	11	15	12	12
53	84443	15	19	16	22	16	18
54	84444	8	11	9	13	11	11
55	84445	10	12	10	15	12	12
56	84446	23	13	-	14	18	15
57	84447	10	11	-	13	12	12
58	84448	16	19	14	20	12	16
59	84449	10	12	10	77	11	28
60	84450	11	15	11	12	13	13
61	84451	10	16	12	18	14	15
62	84452	12	14	13	18	15	15
63	84453	10	14	10	12	13	12
64	84454	14	20	16	17	18	18
65	84455	12	18	15	16	16	16
66	84456	11	15	12	14	13	14
67	84457	11	12	-	15	11	13
68	84458	9	12	11	15	13	13
69	84459	10	14	13	18	12	14
70	84460	12	12	12	12	14	13
71	84461	10	14	12	15	12	13
72	84462	13	15	-	17	14	15
73	84463	12	15	13	18	13	15
74	84464	10	12	11	15	14	13
75	84465	10	13	-	14	12	13
76	84466	10	12	11	14	12	12
77	84467	14	19	15	2	15	13
78	84468	11	13	-	15	12	13
79	1762	9	12	-	14	12	13
80	6819	10	10	9	15	12	12
81	4948	13	14	12	15	12	13
82	4954	10	12	13	14	12	13
83	Lo.Ch	21	12	11	16	13	
	SE	2.3	0.3	0.4	0.3	0.2	
	MEAN	11.5	13.9	12.4	16.3	13.6	
	CV	39.6	6.3	8.4	4.3	4.1	

Appendix 48. Entries in International Chickpea Cooperative Trial Desi  
short Duration (ICCT-DS) 1984-85

Entry	Acc.No.	Pedigree	Origin
1	ICC-4918	Annigeri	UAS, Karnataka, India
2	ICC-5003	K-850	CSAUAT, U.P., India
3	ICC-11141	BDN-9-3	MPKV, Maharashtra, India
4	ICC-13818	AI-97	UAS, Karnataka, India
5	ICCL-83149	(G-130 x B-108) x (NP-34 x GW 5/7)	ICRISAT
6	ICCL-83227	JG-62 x NEC-802	ICRISAT
7	ICCL-83319	T-103 x P-619-1	ICRISAT
8	ICCL-82236	(E-100 x P-436) x (L-550 x F-378)	ICRISAT
9	ICCL-83132	WR-315 x P-619-1	ICRISAT
10	ICCL-83135	P-514 x F5 (K-850 x F-378)	ICRISAT
11	ICCL-83214	JG-62 x (L-550 x SP-405)	ICRISAT
12	ICCL-82115	ICCC-4 x P-436-2	ICRISAT
13	ICCL-83302	[GW-5/7 x (Pant G-104 x C-235)] x	
14	ICCL-83328	WP-2654-A x (P-1214 x P-1231)	ICRISAT
15	ICCL-81215	WR-315 x P-726-2	ICRISAT
16	Local check		

Appendix 49. Mean seed yield (kg/ha) and ranks of entries in ICCT-D8 at 8 locations in 1984-85

Entry No.	ICC/ICCL No.	Patan-cheru	Dohad	Juna-gadh	Sehore	Naya-gadh	Keon-jhar	Ludhiana	Berhampore	Mean	
1	4918	1905	2 2410	7 4911	1 521	7 1724	4 459	15 720	16 641	12 2282	4
2	5003	828	13 1428	13 2689	15 247	14 2394	1 788	14 1868	1 1018	6 1625	15
3	11141	1774	5 1071	15 4500	3 428	12 1176	12 1390	8 1618	4 753	11 1982	10
4	13818	1816	3 2529	6 4088	9 536	6 1864	3 1237	10 1172	13 1007	8 2307	3
5	83149	1935	1 2261	8 4143	8 562	4 1118	13 1413	7 1408	9 1122	3 2174	7
6	83227	1804	4 2142	9 3545	12 553	5 1679	6 1645	3 1499	8 1010	7 2163	9
7	83319	1530	10 1845	10 4088	9 491	10 1067	15 1307	9 1059	15 1103	5 1967	12
8	82236	1363	11 1279	14 3913	11 553	5 1079	14 1552	5 1511	7 638	13 1837	13
9	83132	1774	5 3511	3 4406	4 536	6 1276	9 1631	4 1761	2 1202	1 2520	1
10	83135	1756	6 1785	11 4302	6 467	11 1505	8 1691	2 1517	6 1152	2 2208	5
11	83214	1750	7 2261	8 4774	2 646	2 918	16 1900	1 1184	12 769	10 2321	2
12	82115	1816	3 2737	4 3507	13 500	9 1543	7 1237	10 1529	5 805	9 2168	8
13	83302	834	12 3689	2 2711	14 381	13 1711	5 904	13 1261	11 630	14 1970	11
14	83328	542	14 1666	12 4044	10 506	8 1934	2 996	12 1154	14 339	16 1836	14
15	81215	1566	9 2678	5 4313	5 634	3 1245	10 1205	11 1309	10 1117	4 2201	6
16	Lo.ch	1726	8 3868	1 4154	7 824	1 1224	11 1436	6 1642	3 619	15 -	-
SE	114.6	134.7	332.2	87.2	209.1	140.9	262.2	191.5			
MEAN	1544.8	2322.4	4005.5	524.0	1465.9	1299.4	1393.4	870.4			
CV	14.8	11.6	16.6	33.3	28.5	18.8	37.6	44.0			

\* Sehore, Ludhiana and Berhampore not considered for mean.

Appendix 50. Mean days to 50% flowering of entries in ICCT-DS at 6 locations in 1984-85

Entry No	ICC./ICCL.No	Patan-Dohad cheru	Juna-gadh	Keon-jhar	Ludh-iana	Berha-mpore	Mean	
1	4918	46	52	54	59	87	64	55
2	5003	57	58	61	62	62	65	61
3	11141	45	51	51	55	51	64	53
4	13818	49	52	54	56	90	63	55
5	83149	49	49	52	55	83	63	54
6	83227	50	57	52	54	89	61	55
7	83319	51	52	52	55	93	60	54
8	82236	52	53	54	55	72	64	56
9	83132	52	58	55	53	90	60	56
10	83135	49	58	52	54	64	60	55
11	83214	49	58	54	53	65	66	56
12	82115	53	57	55	55	91	64	57
13	83302	45	50	52	57	67	63	53
14	83328	50	54	53	55	64	66	56
15	81215	52	52	53	56	90	60	55
16	Lo.ch	46	55	51	59	93	66	
SE		0.6	2.6	0.9	0.8	0.1	0.7	
MEAN		49.7	54.0	53.2	55.9	78.2	63.0	
CV		2.5	9.5	3.5	2.3	0.3	2.3	

Appendix 51. Mean days to maturity of entries in ICCT-DS at 6 locations, 1984-85

Entry No	ICC./ICCL.No	Patan-Dohad cheru	Juna-gadh	Keon-jhar	Ludh-iana	Berha-mpore	Mean	
1	4918	95	115	99	99	154	117	113
2	5003	100	120	106	98	155	112	115
3	11141	94	115	97	93	158	116	112
4	13818	95	119	102	94	155	118	114
5	83149	95	121	97	94	153	116	113
6	83227	95	123	102	93	152	113	113
7	83319	95	110	103	94	150	112	111
8	82236	95	116	102	93	153	110	112
9	83132	96	121	103	94	157	114	114
10	83135	96	119	103	94	157	112	114
11	83214	93	121	94	93	151	114	111
12	82115	97	114	105	96	153	113	113
13	83302	90	114	98	95	155	113	111
14	83328	97	120	104	95	152	117	114
15	81215	94	118	98	95	153	112	112
16	Lo.ch	94	111	95	96	155	117	
SE		0.8	2.7	2.0	0.8	1.2	0.9	
MEAN		94.8	117.5	100.4	94.8	153.8	114.0	
CV		1.6	4.5	3.9	1.4	1.5	1.5	

Appendix 52. Mean plant height of entries in ICCT-DS at 7 locations in 1984-85

Entry No	ICC/ICCL No	Patan-cheru	Dohad	Juna-gadh	Naya-gadh	Keonjhar	Ludhiana	Berhampur	Mean
1	4918	25	31	39	27	26	51	41	34
2	5003	34	38	38	33	36	52	49	40
3	11141	26	34	34	30	31	49	38	35
4	13818	27	31	36	27	30	49	38	34
5	83149	28	35	31	30	30	52	33	34
6	83227	27	37	33	29	32	54	35	35
7	83319	28	36	37	31	34	52	38	37
8	82236	29	31	36	29	32	51	37	35
9	83132	29	38	36	31	38	50	39	37
10	83135	32	32	35	30	38	48	47	37
11	83214	26	35	32	29	34	49	38	35
12	82115	34	36	33	30	35	57	45	39
13	83302	27	36	31	29	30	51	43	35
14	83328	27	37	39	30	32	49	37	36
15	81215	33	41	31	32	35	49	46	38
16	Lo.ch	27	37	34	31	30	60	51	
SE		0.7	1.8	0.9	1.4	1.9	0.4	1.2	
MEAN		28.5	35.3	34.6	29.9	32.6	51.4	40.8	
CV		5.2	10.5	5.1	9.2	10.3	1.7	6.0	

Appendix 53. Mean weight of 100 seeds (g) of entries in ICCT-DS at 6 locations, 1984-85

Entry No	ICC/ICCL No	Patan-cheru	Dohad	Juna-gadh	Sehore	Ludhiana	Berhampur	Mean
1	4918	20	22	20	17	21	17	20
2	5003	23	13	26	22	26	21	21
3	11141	15	13	15	14	8	14	13
4	13818	19	18	22	19	21	19	20
5	83149	18	16	19	17	23	17	18
6	83227	19	17	19	18	21	19	19
7	83319	17	17	17	15	18	17	17
8	82236	15	16	15	13	11	14	14
9	83132	18	15	18	15	19	18	18
10	83135	18	15	19	15	22	19	18
11	83214	18	16	18	15	23	18	18
12	82115	17	17	17	16	20	15	17
13	83302	16	16	20	17	24	20	19
14	83328	16	14	18	15	20	16	17
15	81215	16	14	16	15	19	15	16
16	Lo.ch	18	18	14	15	18	13	
SE		0.4	0.1	0.1	1.0	1.8	0.9	
MEAN		17.6	16.2	18.3	16.0	19.6	17.1	
CV		5.0	1.8	1.1	12.0	18.8	10.3	



Appendix 54. Entries in International Chickpea Cooperative Trial Desi  
Long Duration (ICCT-DL) 1984-85

ry	Acc.No.	Parentage	Origin
1	ICC-4948	G-130	PAU, Punjab, India
2	ICC-10136	Pant G-114	CSPPSAT, U.P., India
3	ICC-11508	GL-769	PAU, Punjab, India
4	ICC-11507	CG-588	PAU, Punjab, India
5	--	Anupam	CSAUAT, Kanpur India
6	ICC-1881	P-1506-3	Kanpur, U.P. India
7	--	H-81-73	HAU, Haryans, India
8	--	GNG-146	UAU, Rajasthan, India
9	ICCL-79079	F2 (B-108 x JG-24) x F2 (K-4 x JG-62)	ICRISAT
10	ICCL-80107	F4 (RS-11 x C-214) x F4 (L-550 x GW-517)	ICRISAT
11	ICCL-82403	G-543 x IC-7341-8-1-B	ICRISAT
12	ICCL-82411	K-468 x NEC-2561	ICRISAT
13	ICCL-82435	F3 (H-208 x P-1630) x [F3 (K-850 x GW-517) x P-458]	ICRISAT
14	ICCL-82445	B-108 x C-235	ICRISAT
15	ICCL-84469	C-214 x (WR-315 x G1-751)	ICRISAT
16		Local check	

Appendix 55. Mean seed yield (kg/ha) and ranks of entries in ICCT-DL at 9 locations in 1984-85

Entry No.	ICC/ICCL No	Ranchi	Hisar	Berthia	Dhaul-salan	New Delhi	Faridkot	Sriganganagar	Pantnagar	Kanpur	Mean*										
1	4948	428	1968	2	2408	4	2076	8	2209	3	1168	7	3108	7	134	7	1156	4	2156	1	
2	10136	315	1770	5	2212	6	1837	13	2113	4	1300	2	3017	10	194	3	1430	2	2042	7	
3	11508	95	14	1909	3	2443	2	2027	9	2110	5	1157	8	3198	5	84	12	766	15	2141	2
4	11507	666	4	1845	4	2211	7	2208	6	1690	14	1300	2	3202	4	119	9	938	9	2076	4
5	Anupam	589	6	695	16	1876	14	1902	11	1685	15	1126	9	2941	14	60	14	875	11	1704	15
6	P-1506-3	601	5	1417	11	2124	11	2253	4	1723	13	1188	6	2955	13	111	10	1125	5	1943	13
7	H-81-73	69	15	1655	7	2075	12	2211	5	2113	4	1206	5	2886	15	224	1	953	8	2024	8
8	GNC-416	882	1	1290	15	1764	15	2833	1	2086	6	1126	9	3312	1	75	13	1234	3	2069	5
9	79078	95	14	1599	9	1733	16	2684	2	1926	11	890	13	3073	8	152	5	984	7	1984	11
10	80107	417	9	1413	12	2434	3	2156	7	2006	8	1015	12	3281	2	93	11	1156	4	2051	6
11	82403	346	12	1457	10	1957	13	1857	12	1878	12	1088	10	2663	16	149	6	831	12	1817	14
12	82411	863	2	1639	8	2335	5	1673	15	1950	10	1265	4	2993	11	164	4	906	10	1976	12
13	82435	411	10	1314	14	2174	8	2156	7	2324	2	1046	11	3038	9	209	2	1438	1	2009	9
14	82445	643	7	1659	6	2139	10	1684	14	1994	9	1265	4	3195	6	119	9	797	14	1989	10
15	84469	678	3	1409	13	2583	1	2371	3	2060	7	1286	3	2990	12	122	8	828	13	2117	3
16	Lo.ch	350	11	2004	1	2147	9	2021	10	2369	1	1946	1	3271	3	164	4	1109	6	-	-
SE		213.4	139.3	197.4	315.3	194.0	135.1	122.2	57.1	227.6											
MEAN		445.6	1564.9	2164.3	2121.8	2014.7	1210.6	3070.1	135.6	1032.9											
CV		95.8	17.8	16.4	25.7	19.3	22.3	8.0	84.3	44.1											

\*Ranchi, Faridkot and Kanpur are 3 replicated; 1:1 Mean because of highest CVs.

Appendix 56. Mean days to 50% flowering of entries in ICCT-DL at 8 locations in 1984-85

Entry No.	ICC/ICCL No.	Ran- chi	His- ar	Bert- hin	Dhaul- alsan	Sri- ganga nagar	Pant- nagar	Kampur	Mean
1	4948	82	93	123	101	93	85	68	92
2	10136	84	89	124	103	90	88	67	92
3	11508	82	88	123	100	89	81	69	90
4	11507	81	90	122	99	91	84	70	91
5	Anupam	69	75	122	97	78	80	57	83
6	P-1506-3	79	91	125	99	91	82	67	91
7	H-81-73	97	102	123	101	96	84	69	96
8	GNC-416	77	87	123	98	87	81	72	89
9	79078	82	86	122	98	84	82	69	89
10	80107	78	90	120	101	90	83	72	91
11	82403	99	102	127	101	93	84	72	97
12	82411	81	91	125	101	88	86	69	92
13	82435	73	88	125	98	88	85	68	89
14	82445	78	88	120	99	87	81	72	89
15	84469	80	92	125	102	88	81	69	91
16	Lo.ch	90	89	124	100	90	85	67	-
	SE	1.2	0.9	1.3	0.9	0.8	0.8	1.6	
	MEAN	82.0	90.0	123.2	100.0	88.7	83.1	68.5	
	CV	2.8	2.1	1.9	1.5	1.9	2.0	4.6	

Appendix 57. Mean days to maturity of entries in ICCT-DL at 6 locations in 1984-85

Entry No.	ICC/ICCL No.	Ran- chi	His- ar	Bert- hin	Dhaul- alsan	Pant- nagar	Kan- pur	Mean
1	4948	149	167	165	158	130	147	153
2	10136	148	167	166	160	131	149	154
3	11508	150	165	162	155	128	150	152
4	11507	146	166	161	155	130	150	151
5	Anupam	142	165	160	149	125	132	146
6	P-1506-3	147	167	162	155	128	150	152
7	H-81-73	152	167	161	155	132	149	153
8	GNC-146	145	166	161	152	129	150	151
9	79078	150	166	159	153	131	151	152
10	80107	147	166	160	154	128	150	151
11	82403	155	167	164	158	133	149	154
12	82411	150	167	169	158	129	147	153
13	82435	145	167	168	156	130	147	152
14	82445	150	165	159	155	129	150	151
15	84469	150	167	164	155	129	150	153
16	Lo.ch	151	166	160	154	133	147	-
	SE	0.7	0.4	2.2	1.4	1.9	1.7	
	MEAN	148.3	166.1	162.6	155.1	129.6	147.8	
	CV	0.9	0.5	2.3	1.5	2.9	2.3	

Appendix 58. Mean plant height (cm) of entries in ICCT-DL at 5 locations in 1984-85

Entry No.	ICC/ICCL No.	Ran-chi	His-ar	Bert-hin	Sri gange nagar	Pant-nagar	Mean
1	4948	51	67	43	65	37	61
2	10136	38	58	41	57	31	54
3	11508	50	66	45	66	45	62
4	11507	52	65	42	63	32	59
5	Anupam	49	60	43	65	33	58
6	P-1506-3	56	65	44	67	37	62
7	H-81-73	58	66	39	71	40	62
8	GNG-146	54	61	44	68	35	60
9	79078	46	59	42	64	36	57
10	80107	54	63	47	64	38	61
11	82403	46	62	41	65	34	58
12	82411	51	66	41	59	33	58
13	82435	44	57	37	60	32	55
14	82445	54	68	43	65	41	62
15	84469	59	73	44	63	39	63
16	Lo.ch	35	63	44	64	38	-
	SE	4.5	2.1	1.5	2.0	2.5	
	MEAN	49.8	63.8	42.5	64.1	36.1	
	CV	18.2	6.7	6.1	6.3	13.7	

Appendix 59. Mean weight of 100 seeds (g) of entries in ICCT-DL at 7 locations in 1984-85

Entry No.	ICC/ICCL	Ran-chi	His-ar	Bert-hin	Dhaul-alaan	New Delhi	Pant-nagar	Kan-pur	Mean
1	4948	16	11	14	15	12	12	13	13
2	10136	15	11	14	12	11	12	13	13
3	11508	16	10	13	13	12	12	13	13
4	11507	15	10	14	14	12	12	13	13
5	Anupam	15	11	14	15	13	15	16	14
6	P-1506-3	13	10	13	14	11	12	13	12
7	H-81-73	20	14	16	15	16	16	14	16
8	GNG-146	16	10	13	11	12	12	15	13
9	79078	17	11	14	15	14	12	14	14
10	80107	15	11	14	13	12	12	13	13
11	82403	16	11	13	14	13	13	13	13
12	82411	14	10	14	13	11	13	13	13
13	82435	14	12	13	13	12	12	13	13
14	82445	17	11	14	13	13	12	14	13
15	84469	19	11	15	15	14	15	15	15
16	Lo.ch	13	10	13	12	11	13	13	-
	SE	0.0	0.3	0.9	0.8	0.3	0.2	0.3	
	MEAN	15.7	11.0	13.8	13.6	12.4	12.7	13.6	
	CV	0.6	5.4	11.1	10.8	4.6	3.9	3.7	

Appendix 60. Entries in Plant Type Multilocational Trial  
(PT MLT)-1984-85

Entry No.	ICCL.No/ Name	Selection No.	Parentage
1	845001	750082-60-1P-1H-1P-BP	H-208 x K-1258
2	845002	750073-74-BP	F-378 x K-1184
3	845003	750016-33-1P-2P-1H-1P-BP	NEC-240 x NEC-139
4	845004	770377-BH-1H-BH	Pant G-115 x K-1174
5	845005	770909-BH-5H-1P-BP	K-850 x (K-1189 x Ponafior)
7	845006	750016-42-1P-1P-1P-1P-BP	Pant-115 x K-1170
8	845007	770376-BP-12H-2H-BH	NEC-240 x NEC-139
9	K-850		
10	Local Check		

Appendix 61. Mean seed yield (kg/ha) of entries in PTMLT in 1984-85

Entry No	ICCL/ ICC.No	Patan-cheru	Ranchi	Hisar	Bert-hin	Gwal-ior	Srigan-ganagar	Pant-nagar	Mean
1	845001	1285 4	1349 2	1222 9	584 7	1690 3	1563 8	32 9	1195 3
2	845002	905 8	1015 5	1413 6	482 8	1190 7	1500 9	159 5	976 8
3	845003	1159 5	1031 4	1238 8	473 9	1063 10	1667 6	135 6	1083 5
4	845004	968 7	873 8	1548 4	602 6	3053 1	1713 5	278 2	1039 6
5	845005	1317 3	928 7	1349 7	436 10	1595 5	2188 2	119 7	1217 2
6	845006	683 9	1008 6	1540 5	769 4	1190 7	1663 7	175 4	1031 7
7	845007	1079 6	651 9	1706 2	871 1	1428 6	2138 4	198 3	1185 4
8	845008	286 10	1031 4	937 10	667 5	1111 9	1438 10	198 3	856 9
9	5003	1683 1	1182 3	1611 3	806 3	1761 2	2188 2	63 8	1465 1
10	Lo.ch	1619 2	2063 1	1889 1	834 2	1634 4	2308 1	476 1	1706
	SE	137.1	140.5	264.3	77.8	588.0	114.8	45.8	
	MEAN	1098.4	1113.0	1445.2	652.4	1571.4	1836.3	183.3	
	CV	21.6	21.9	31.7	20.6	64.8	10.8	43.3	

Hisar, Gwalior and Pantnagar not considered for mean

Appendix 62. Mean days to 50% Flowering of entries in PTMLT in 1984-85

Entry No.	ICCL. ICC.No	Patan-Rnchi cheru	Hisar	Bert-hin	Gwal-ior	Briga-ngana	Pant-nagar	Mean
1	845001	48	71	72	123	74	78	79
2	845002	53	73	84	125	81	89	80
3	845003	63	93	93	123	75	92	83
4	845004	59	91	88	127	76	90	82
5	845005	54	92	79	124	81	78	80
6	845006	69	94	102	128	89	97	82
7	845007	60	94	92	124	83	93	81
8	845008	71	91	103	123	90	94	80
9	5003	53	91	84	129	81	81	82
10	Lo.Ch	43	79	92	123	64	91	85
SE								
	1.1	0.6	1.3	1.0	4.1	0.7	0.5	
MEAN								
	57.3	87.0	89.0	124.9	79.5	88.3	81.3	
CV								
	3.3	1.1	2.4	1.4	9.0	1.4	1.1	

Appendix 63. Mean days to maturity of entries in PTMLT in 1984-85

Entry No.	ICCL. ICC.No	Patan-Rnchi cheru	Hisar	Bert-hin	Gwal-ior	Pant-nagar	Mean	
1	845001	101	134	166	159	127	128	137
2	845002	103	135	166	165	129	132	140
3	845003	104	141	166	169	128	128	142
4	845004	108	140	165	171	129	132	143
5	845005	101	140	166	164	129	127	140
6	845006	110	139	166	165	130	130	142
7	845007	103	139	166	165	130	129	141
8	845008	109	139	166	163	132	130	142
9	5003	98	140	167	167	130	130	140
10	Lo.ch	90	137	166	162	126	130	
SE								
	0.6	0.2	0.5	1.1	1.1	1.2		
MEAN								
	102.8	138.4	165.9	164.8	129.0	129.6		
CV								
	1.0	0.2	0.5	1.1	1.4	1.7		

Appendix 64. Mean plant height (cm) of entries in PTHLT in 1984-85

Entry No.	ICCL./ ICC.No	Patan-Rnchi cheru	Hisar	Bert-hin	Gwal-ior	Briga-ngana gar	Pant-nagar	Mean	
1	845001	47	71	95	45	68	95	42	66
2	845002	46	75	98	40	64	91	39	65
3	845003	44	67	83	37	65	80	35	59
4	845004	47	65	85	37	65	78	35	59
5	845005	41	59	71	38	48	73	33	52
6	845006	42	60	87	36	61	82	37	58
7	845007	48	70	88	41	59	86	39	62
8	845008	51	72	87	45	65	77	45	63
9	5003	38	56	69	32	48	69	31	49
10	Lo.ch	26	48	65	31	46	70	30	
SE	1.5	3.0	4.7	1.8	3.6	4.7	2.2		
MEAN	43.1	64.2	82.5	38.2	58.9	80.0	36.5		
CV	6.1	8.2	9.9	8.0	10.5	10.2	10.3		

Appendix 65. Mean weight of 100 seeds (g) of entries in PTHLT 1984-85

Entry No.	ICCL./ ICC.No	Patan-Rnchi cheru	Hisar	Bert-hin	Gwal-ior	Pant-nagar	Mean	
1	845001	22	17	22	19	18	19	20
2	845002	19	14	20	16	17	18	17
3	845003	18	13	14	15	15	17	15
4	845004	17	14	19	16	14	16	16
5	845005	31	26	31	30	26	25	28
6	845006	17	12	17	16	15	16	16
7	845007	17	16	19	17	15	17	17
8	845008	13	11	13	13	14	13	13
9	5003	28	20	25	27	24	24	25
10	Lo.ch	19	10	12	12	12	13	
SE	0.6	1.6	0.1	0.7	1.1	0.9		
MEAN	20.1	15.3	19.3	18.2	16.5	17.7		
CV	4.9	17.8	0.6	6.4	8.7	8.3		

Appendix 66. The number of chickpea materials supplied within India in 1984-85.

State	Segregating populations	Advanced lines	Parental lines	Total
Andhra Pradesh		289	38	327
Assam	7	-	-	7
Bihar	96	143	55	294
Gujarat	18	71	13	102
Haryana	0	18	49	67
Himachal Pradesh	6	-	-	6
Karnataka	5	10	25	40
Madhya Pradesh	296	27	-	323
Maharashtra	41	60	18	119
New Delhi	36	21	11	68
Orissa	13	-	-	13
Punjab	352	10	23	385
Rajasthan	174	70	9	253
Tamil Nadu	11	3	1	15
Uttar Pradesh	213	275	6	494
West Bengal	1	-	-	1
Total	1461	1070	136	2667