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REPORT OF THE WORK DONE DURING 1982-83 AT HISAR SUB-CENTER

PROJECT - PF-brd-1

(Development of Early Maturing Cultivars and Superior Breeding Lines for Grain Production).

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LOCATION

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**PROJECT - PP-brd-1 : DEVELOPMENT OF EARLY MATURING CULTIVARS AND SUPERIOR BREEDING LINES FOR GRAIN PRODUCTION.**

**OBJECTIVES :** a) To develop high yielding early maturing cultivars with acceptable grain quality suited to use in pure stands or with short duration companion crops.

b) To contribute breeding lines and populations to breeders throughout the SAT.

**A. INTRODUCTION**

The Hisar Cooperative Research Station is situated at 29°10'N latitude and 75°46' E longitude at an altitude of 215.2 m. Table 1.1 summarizes the monthly mean temperature and rainfall received during 1982 along with twelve year (1970-81) mean. Although, the yearly total rainfall was normal but the main pigeonpea growing season (Jul.-November) was dry. The mean minimum temperature during pigeonpea growing period was higher by 3-4°C as compared to 12 years mean.

Most of the experiments were sown on June 1 and 9. Except 20 kg F<sub>2</sub>O<sub>5</sub> per hectare (Single Super Phosphate), no other nutrients were supplied to the crop. Seeds were not inoculated with Rhizobium culture. Except the crossing block and the ICPL maintenance and purification block, none of the pigeonpea trials and properties received any insecticidal spray.

Entries in majority of the station trials were tested at two row spacing (30 and 60 cms) in paired plots.

**B. CROSSES MADE**

During 1982, total of 34 crosses were made. The details of the crosses are listed in table 1.2. Of 34, 10 crosses were made to incorporate dwarfness in promising early maturing lines using early maturing dwarf lines. One cross was attempted to incorporate the profuse branching characteristics of ICPL 186 to a promising large podded line (ICPL 317). Two extra-early maturing dwarf lines (ICPL 316 and 78353-H4-HB-HB) were crossed to a tall extra-early line (ICPL 4) to study the genetics of dwarfness associated with earliness. To utilize new sources (other than ICF 8504) of large pod and large seed characteristics from medium and late maturing groups, 9 crosses were made involving promising early maturing lines and late maturing donors (ICF 8014, ICF 8547, ICF 8915 and ICF 8514).

Three early maturing pigeonpea hybrids using DT Prabhani (MS) line and 6 hybrids using NDT Prabhani (MS) line were also produced.

## C. BREEDING MATERIALS

### 1. BULL POPULATIONS

F1 : One hundred-eighteen F1's made during 1981 were grown in one row plot flanked with parents. Of 118, 58 crosses made for incorporation of disease resistance, were transferred to disease resistance project (FF-brd-path-19). Ten F1s were rejected because they seemed to be selfed female parent. Fifty F1s were selected for growing next year.

F2 : From 107 F2s, 452 determinate and 757 indeterminate plants were selected for evaluating as single plant progenies with close check next year.

F4 : Three triple cross F4 populations of crosses 78321, 78324 and 78326 were grown in large plots. The selections made in these are summarized in Table 1.3. A total of 91 indeterminate plants were selected for further evaluation.

### BULL POPULATION RELATED YIELD TRIALS

#### F2-F3 Bull Population Trial -

Fourteen F2 and 6 F3 bull populations along with two checks (ICPL 4 and ICPL 1) were grown in a yield trial replicated thrice. Each plot consisted of 4 meter long 6 rows spaced 60 cms apart. The trial was planted on 20 June. Observations recorded and single plant selections made are summarized in Table 1.4.

Four large seeded, variable and high yielding populations (ICPX 80572, 80491, 80497 and 79333) were selected for growing next year for practising plant selections.

#### F2 Bull Population Trial -

Twenty F2 bull populations along with two checks (ICPL 4 and ICPL 1) were tested in a yield trial replicated thrice and sown on 20 June. The plot size consisted of 4 meter long 6 rows spaced 60 cms apart. Characteristics of the populations and the single plant selections made are summarized in Table 1.5. Four high yielding populations (ICPX 80600, 80528, 80519, 80514) were selected for growing next year for practising single plant selections.

**Early Pigeonpea Unselected Bulk (EPUB) Population Trial -**

F4 bulk populations along with two checks (ICPL 4 and ICPL 1) were tested for their yield performance in a trial replicated thrice and sown on 22 June. The plots consisted of 4 m long 4 rows spaced 60 cms apart. Table 1.6 summarizes the observations recorded on these populations. A top yielding population (ICPX 78321) was selected for growing next year in a large plot for making further selections.

**2. SINGLE PLANT PROGENY EVALUATIONS**

The single plant and progeny bulk selections practised in single plant progeny (SPP) evaluations are summarized in Table 1.7. A total of 2020 SPPs (858 DT and 1162 NDT) of F3 to F9 generations from 92 crosses were evaluated in unreplicated one row plots. Rows were spaced at 60 cms. Sowing was done on 20-21 June 1962. Every fifth plot was planted with checks, ICPL 4 or ICPL 1, respectively for DT and NDT progenies. Of these, 706 single plants (257 DT and 449 NDT) were selected from different progenies for further evaluation as SPPs next year. In addition 141 (62 DT and 79 NDT) high yielding uniform progeny bulks were selected for testing in replicated station yield trials next year. The characteristics of the selected SPP bulks and their nearest check is summarized in Table 1.8 (DT) and 1.9 (NDT).

**Composite :** Of 105 SPPs (100 DT and 35 NDT) evaluated 14 single plants (7 DT and 7 NDT) and 14 progeny bulks (7 DT and 7 NDT) were selected for further evaluation (Table 1.7). The characteristics of selected progeny bulks are presented in Table 1.8 and 1.9.

**GRU Lines :** Of 125 (44 DT and 81 NDT) germplasm lines evaluated, 15 single plants from good looking but variable progenies were selected for further evaluation as SPPs. Six high yielding indeterminate lines (ICP 6963, 7137, 7390, 7599, 7636 and 7639) were selected for replicated yield testing next year. The characteristics of these lines are presented in Table 1.9.

**QP Lines :** One hundred-forty determinate SPPs selected from QP lines from University of Queensland were evaluated in unreplicated one row plots. Of these, 40 single plants were selected for further evaluation as SPPs (Table 1.7). In addition, 6 high yielding QP lines were selected for further evaluation in replicated yield trials next year (Table 1.8).

**D. REPLICATED YIELD TESTS**

**1. ALL INDIA COORDINATED PULSE IMPROVEMENT PROJECT (AICPIP) TESTS**

a) Extra Early Arhar Coordinated Trial (EXACT) -

Twelve extra-early maturing entries and two checks (Prabhat and UPAS 120) were tested in EXACT sown on 22 July 1982. The test was grown in RBD with four replications. Each plot consisted of 4m long, 8 rows spaced 30 cms apart. The trial was harvested on 16 November. The characteristics of the lines tested in EXACT are summarized in Table 1.10. Except DL-82 and UPAS 120, all the lines matured in less than 105 days. An ICRISAT line ICPL 267 yielded 2356 kg per hectare in comparison to check yields of 2177 (UPAS 120) and 2094 (Prabhat) kg/ha.

b) Early Arhar Coordinated Trial (EACT) -

An EACT consisting of 14 entries, including UPAS 120 as check was grown on 1 June in RBD with four replications. Plot size consisted of 8 rows spaced 30 cms apart. The trial was harvested on 16 November. Mean observations recorded on the entries are tabulated in Table 1.11. Five entries (ICPL 87, 161, 151, H77-216 and Pusa 33) yielded more than 3000 kgs grain per hectare as against 2841 kg/ha for check, UPAS 120. The seed size of three ICRISAT entries yielding more than 3000 kg/ha was more than 10 gms/100 seeds as against about 7 gms/100 seeds for H77-216, Pusa 33 and UPAS 120. The high values for days to flower, days to mature and plant height is mainly due to early sowing on 1st June.

c) Arhar Coordinated Trial (ACT)-1 -

Eight entries including check (T-21) were tested in ACT-1 sown on 1 June in RBD with four replications. Plot size consisted of 4 rows (4 meter long) spaced 60 cms apart. The trial was harvested on 18 November. Yield and other characteristics of the entries tested are summarized in Table 1.12. ICPL 6 was the top yielding (2869 kg/ha) followed by ICPL 189 (2830 kg/ha) and T-21 (2654 kg/ha).

## 2. MULTILLOCATION TRIALS

### Early Pigeonpea Adaptation Yield (EPAY) Trial -

An EPAY consisting of 18 entries was sent to 16 locations. The data was reported from 10 locations in India and one location (Buwan Farm, Thailand) from outside India. Except at ICRISAT Sub-Center, Hisar, the trial was sown in RBD. Plot size consisted of 4 rows spaced 30 cms apart. At Hisar the trial consisting of 20 entries was sown on 1st June. Of 4 replications, two consisted of 8 row plots spaced 30 cms and two of 4 row plots spaced 60 cms. The characteristics of the lines tested at two row spacings at Hisar is summarized in Table 1.13. Of 20 entries tested, 7 yielding more at 60 cms spacing and other 13 at 30 cms row spacing. The yield performance of EPAY entries at different locations are presented in Table 1.14. ICPL 155 was among the first 5 at 7 of the 10 locations in India.

### 3. ADVANCED LINES STATION TRIALS

In 1982, 279 advanced lines (191 DT and 88 NDT) were evaluated in 7 determinate and 4 indeterminate lines trials sown in the first week of June. Prabhat and UPAS 120 were included as checks. The trials were harvested latest by 20 November. The entries in all the tests, except advanced determinate lines test (ADLT) 4 and 5, were tested at two row spacings (30 and 60 cms) in two replications each. The details about the advanced lines trials are presented in Table 1.15.

Advanced Determinate Lines Test (ADLT)-14 In ADLT-1, 22 extra-early determinate entries along with 2 checks (Prabhat and UPAS 120) were tested at two row spacings sown on 9 June and harvested on 20 October. The characteristics of the entries tested are summarized in Table 1.16. Eight entries yielding more than 3000 kgs/ha at 30 cms row spacings were selected for further evaluations next year. The entry number 22 was also selected for further evaluation because of its large seed. The grain yield obtained at 30 cm row spacings was significantly higher.

ADLT-2: Twenty-two extra-early DT entries and two checks (Prabhat and UPAS 120) were evaluated at two row spacings (30 and 60 cms) sown on 9 June and harvested on 23 October. The observations recorded are summarized in Table 1.17. Eight lines (Entry Nos. 3, 6, 7, 9, 13, 16, 23 and 24) were selected for further evaluation. Four lines (ICPLs 312, 141, 179 and 287) were selected because of their higher yield, one (ICPL 176) because of sterility mosaic resistance, one (ICPL 92) because of its higher yield in Himachal Pradesh and two (Entries 23 and 24) due to their earliness. Overall yield at 30 cm row spacings was significantly higher than at 60 cms. Seventeen entries yielded better at 30 cm row spacings.

ADLT-3: The trial consisting of 22 early determinate entries and 2 checks was sown on 9 June and harvested on 26 October. The rows in two replications were spaced at 30 cm and other two at 60 cms. The characteristics of the entries at both the row spacings are summarized in Table 1.18. Seven entries (Nos. 3, 4, 8, 9, 16, 21 and 23) yielding higher than the checks were selected for further evaluation. Fourteen, of the 24 entries yielded more at 30 cm row spacing. Overall test mean yield was higher at 30 cm row spacing.

ADLT-4: In ADLT-4, 47 early determinate entries along with two checks (Prabhat and UPAS 120) were tested at 30 cm row spacings in three replications. The test was sown on 1 June and harvested on 8 November. The yield and other characteristics of the entries tested are presented in Table 1.19. Eleven entries yielding higher than both the checks and three yielding higher than Prabhat were selected for further testing next year.



**ADLT-5:** In this test, 34 entries with 2 checks (Prabhat and UPAS 120) were tested at 60 cm row spacing sown on 9 June and harvested on 12 November. The observations recorded are summarized in Table 1.20. Four entries (Nos. 4, 14, 28 and 32) yielding higher than both the checks and 9 entries yielding higher than Prabhat were selected for further testing.

**ADLT-6:** Twenty-two entries along with two checks (Prabhat and UPAS 120) were evaluated at 30 and 60 cms row spacings sown on 1 June and harvested on 10 November. Observations recorded for the entries at both the row spacings are presented in Table 1.21. Seven entries (Nos. 4, 9, 11, 14, 18, 23 and 24) yielding higher than the checks were selected for further testing. Nineteen entries yielded equal to or more at 30 cm row spacing as compared to 60 cms.

**ADLT-7:** The test consisted of 24 entries including checks sown at 30 and 60 cms row spacings (two replication each) on 9 June. Harvesting was completed on 10 November. Yield and other characteristics of the entries at both the spacing are summarized in Table 1.22. Three entries (Nos. 9, 11 and 22) were selected for further testing. Grain yield obtained from 17 entries (of 24) at 30 cm spacing was equal to or more than at 60 cms.

**ANDLT-1:** Twenty-four entries including checks (ICPLs 1 and 6) were tested at 30 and 60 cms row spacings sown on 9 June and harvested on 17 November. The characteristics of the lines tested are tabulated in Table 1.23. Six lines (Entry Nos. 11, 12, 15, 18, 19 and 21) were selected for further testing. On an average there was no significant difference between yields obtained at 30 and 60 cms spacings in early June sowing.

**ANDLT-2:** This consisted of 24 entries at 30 and 60 cms row spacings (two replication each) sown on 1 June and harvested on 14 November. The results are summarized in Table 1.24. Four entries (Nos. 3, 11, 13 and 15) were selected for further testing. Based on mean of all the entries tested, there was no significant difference between yields at 30 and 60 cm row spacings.

**ANDLT-3:** Twenty-four entries including checks (ICPLs 1 and 6) were tested at two row spacings (30 and 60 cms) in ANDLT-3 sown on 1 June and harvested on 13 November. Six entries (Nos. 13, 17, 19, 21, 23 and 24) were selected for further testing (Table 1.25). Yield and the other characteristics of entries summarized in Table 1.25 shows that on an average yield at 30 cm spacing was higher than at 60 cm row spacing.

**ANDLT-4:** Of 24 entries (including checks) tested at two row spacings sown on 1 June and harvested on 20 November, three (Nos. 13, 20 and 23) were selected for further testing (Table 1.26).

#### Lines Selected For Multilocation Testing -

From different station yield trials, 32 promising advanced lines (24 determinate and 8 indeterminate) were selected for different ICRISAT multilocation yield trials (EXPAY, EPAY-DT and EPAY-NDT). The new (1983) ICPL numbers were allotted to them. The characteristics of these lines with their pedigree and 1983 ICPL numbers are summarized in Table 1.27.

#### 4. EVALUATION OF ADVANCED LINES IN SUMMER

Eighteen (6 determinate and 12 indeterminate) promising early maturing pigeonpea lines were tested in a trial sown on 30 March. Plot size consisted of 4 meter long 4 rows spaced 60 cms apart. In between two rows of pigeonpea, two mungbean rows spaced 30 cm apart were intersown. Yield and other characteristics of the lines are summarized in Table 1.28. Mungbean yield in the plots of different pigeonpea entries ranged from 1112 to 1344 kg/ha. Pigeonpea grain yield ranged from 1926 to 2630 kg/ha and dried stalk yield ranged from 6806 to 14630 kg/ha. ICPL 1 was the highest grain yielder (2630 kg/ha) and ICPL 292 the highest stalk (wood) yielder (14630 kg/ha).

To compare the performance of lines in summer and normal (June) sowings, the summer sown trial was also sown on 1 June at two row spacings (30 and 60 cms). The date of sowing in June was early than normally recommended. The characteristics of the lines in June sowing are summarized in Table 1.29. On an overall mean, there was no difference between the yields obtained at 30 cm and 60 cm row spacings. Days to flower, days to mature, plant height and grain yield of different entries in summer and June sowings are compared in Table 1.30. Most of the lines flowered about 50 days earlier in summer (30 March sowing) than in 1 June sowing. This is because of favourable temperature and day length for flowering in May. But for maturity, March sown entries took about 55 days more than 1 June sowing. Unexpectedly the height at both the sowings was similar. This is because of favourable weather for vegetative growth in rainy-season, which resulted in increased plant height and delayed maturity. Grain yield was higher in June sowing but it was compensated with higher dried stalk (wood) and additional mungbean yields. Five higher grain yielding lines in March sowing were also the higher yielding (among top 5) in June sowing.

#### 5. EVALUATION OF ADVANCED LINES IN LATE SOWING

A trial consisting of 12 promising advanced early maturing pigeonpea lines were sown on 26 July to see the yield potential of the lines tested in late sowing situations. Plot size consisted of 5 rows spaced 20 cm apart. Yield and other characteristics of the lines tested are presented in Table 1.31.

Yield levels obtained were similar to the ones obtained in June sowings (Table 1.29). ICPLs 155 and 269, all matured by mid-November allowing enough time for wheat sowing.

The dried stalk (weed) yield may have gone down in late sowing due to reduced plant height. But the reduced plant height, the so called agronomic dwarfing, will facilitate in better management of the crop e.g. spraying etc.

## E. SCREENING FOR DISEASE RESISTANCE

Promising early maturing pigeonpea lines showing less than 20% sterility mosaic (SM) or Phytophthora blight (PB) or wilt (W) in disease nursery during 1981 at Patancheru were tested for their yield performance in replicated trials separately for SM, PB and W resistant/tolerant lines along with checks (ICPLs 1 and 87). Yield and other characteristics of these lines are summarized in Table 1.32, 1.33 and 1.34, respectively. Based on their yield, seed size, earliness and disease rating, 6 from SM, 4 from PB and 8 from W tolerant lines trial were selected for further testing.

All the 412 entries of different replicated yield trials grown at Miser during 1982 were monitored for their reaction to sterility mosaic and wilt in respective disease nurseries at Patancheru. Of 412 screened, 121 showed less than 20% wilt and 41 less than 20% sterility mosaic. The yield and other plant characteristics of the lines showing less than 20% sterility mosaic is summarized in Table 1.35.

## F. MAINTENANCE AND PURIFICATION OF ICPL LINES AND CULTIVARS

About 100 single plant progenies of each of the 17 promising advanced lines (ICPLs 1, 4, 6, 8, 81, 85, 87, 94, 142, 148, 150, 151, 161, 179, 185, 189 and 289) and Baigani were grown for purification and maintenance. One to two hundred single plants from uniform and true to type progenies of each ICPL were selfed to continue maintenance program. Bulk seed of the uniform progenies was used for seed supply. In addition to the above bulk of 8 more lines (ICPLs 83, 92, 95, 146, 154, 155, 267 and 312) was grown to select single plants for further maintenance.

## G. MISCELLANEOUS OBSERVATIONS/STUDIES

### 1. Effect of Temperature on Bud Initiation and Flowering -

To see the effect of naturally occurring high temperature in summer on bud initiation and flowering, four early maturing pigeonpea lines were sown in unreplicated one row plots at three dates of sowing (12 March, 30 March and 1 May).

The observations recorded are summarized in Table 1.36. The microscopic bud initiation (MBI) was recorded by Mr. Ratnam. For 12 March sowing MBI could not be recorded.

Because of comparatively low temperatures in April, the lines took more time in bud initiation and flowering. Time taken from VBI to DF in 30 March sowing ranged from 10-12 days as compared to 5-7 days in 1 May sowing. This is probably because of higher temperature in June which enhances the opening of the buds into flowers.

## 2. Flowering Behaviour of Lines in different Dates of Sowing -

To study the flowering behaviour in different sowing dates, twenty early maturing pigeonpea lines (C1 to C20) were sown in unreplicated one row plots on 16 different dates (D1 to D16) at 10 days interval from 12 March onwards. The lines included in the study are as follows:

C1	ICPL 81	NDT
C2	ICPL 267	DT
C3	QP 219-HB-HB	DT
C4	QP 227-HB-HB	DT
C5	QP 240-HB-HB	DT
C6	ICPL 312	DT
C7	ICPL 189-H1-HB	NDT
C8	ICPL 184-H1-HB	DT
C9	ICPL 4	DT
C10	ICPL 268	DT
C11	ICPL 147	DT
C12	ICPL 159	DT
C13	ICPL 287	DT
C14	ICPL 92	DT
C15	ICPL 180	DT
C16	750080-5-B-H4-H1-HB-HB	DT
C17	740068-5-B-1-H9-HB-HB-HB	DT
C18	740075-5-B-3-1-H2-HB-HB-HB	DT
C19	Comp.1-H10-HB-HB-HB	DT
C20	Comp.1-H1-HB-HB	DT

The maximum and minimum temperature and rainfall during the experimental period is given in Table 1.37 and graphically presented in Fig. 1.1. All the 20 lines tested, behaved similarly as far as their response to date of sowing is concerned. Therefore, individual entry wise data is not presented here instead mean of all the lines is given and discussed here. The mean number of days taken to bud initiation, flower, first and second flush maturity, plant height, etc. are summarized in Table 1.38 and graphically shown in Fig. 1.2.

Time taken to bud initiation and flowering increased after 20 April sowing because of increased temperatures and days. Time taken to bud initiation remained comparatively higher than 12 March to 20 April sowing but days taken to flower reduced gradually from 20 May sowing onwards indicating that flower opening after bud initiation is more sensitive to high temperatures.

First flush of all the lines sown upto 8 April (D1 to D4) and many lines sown on 20 April (D5) matured in about 90 days by completing their pod filling before temperatures started rising above 35°C/22°C. Second flush of D1 (12 March) sown took 212 days to mature. As the sowings were delayed, the days taken to mature decreased linearly till D14 (30 July). Days taken to mature increased in August sowing due to cold temperatures at the time of pod filling.

The plant height reduced from D1 to D4/D5 and then increased upto D8. The reduction in height from D1 to D4 may be because the lines came in reproductive phase soon to produce first flush of pods due to favourable temperatures. With the increase in temperatures, the plant height also increased upto 20 May sowing (D8). After D8 onwards the height decreased linearly till D15 (10 August) as also the time taken to mature decreased.

Table 1.1. : Monthly Mean Temperature (°C) and Rainfall (mm) during 1982 at Hisar.

Month	Mean (1970-1980)			Mean 1982		
	Temperature (°C)		Rainfall (mm)	Temperature (°C)		Rainfall (mm)
	Minimum	Maximum		Minimum	Maximum	
June	23.8	40.1	37.4	26.6	40.0	47.8
July	23.8	35.9	152.5	26.7	37.7	106.0
August	23.9	34.5	128.1	25.7	34.9	100.8
September	18.6	34.7	47.2	22.5	37.0	-
October	13.5	31.7	4.2	18.1	33.6	-
November	9.0	28.4	10.0	11.7	28.3	0.4
December	4.5	27.0	4.9	6.0	22.5	8.5
January	4.3	20.7	11.5	5.8	20.0	9.1
February	6.9	21.7	27.2	7.2	19.4	17.7
March	10.1	24.9	14.0	10.4	24.2	41.6
April	16.5	36.1	5.1	16.9	33.5	54.1
May	20.8	40.7	28.7	21.2	35.6	78.1
Total			470.8			464.1

Table 1.2. : Early Maturing Pigeonpea Crosses made during 1977

Cross No.	Female Parent		Male Parent
<b>(A) To incorporate dwarfness from early maturing dwarf lines -</b>			
ICPX 820001	ICPL 314	X	77324-2-2-IIDT2-HB
ICPX 820002	ICPL 316	X	77324-2-2-IIDT2-HB
ICPX 820003	ICPL 151	X	78353-H4-HB-HB
ICPX 820004	ICPL 312	X	78353-H4-HB-HB
ICPX 820005	ICPL 316	X	78353-H4-HB-HB
ICPX 820006	ICPL 314	X	78353-H4-HB-HB
ICPX 820007	ICPL 185	X	78353-H4-HB-HB
ICPX 820008	ICPL 267	X	(73081-40D2-CB x ICPL 179)
ICPX 820009	ICPL 316	X	(73081-40D2-CB x ICPL 179)
ICPX 820010	ICPL 314	X	(ICPL 185 x 77324-2-2-IINDT2)
<b>(B) To increase branches in large podded determinate line -</b>			
ICPX 820011	ICPL 312	X	ICPL 186
<b>(C) To study the inheritance of dwarfness associated with earliness -</b>			
ICPX 820012	ICPL 4	X	ICPL 316
ICPX 820013	ICPL 4	X	78353-H4-HB-HB
<b>(D) To increase pod and seed size using sources other than ICP 8504 -</b>			
ICPX 820014	ICPL 267	X	ICP 8015-GB
ICPX 820015	ICPL 316	X	ICP 8547
ICPX 820016	ICPL 316	X	ICP 8014-GB
ICPX 820017	ICPL 316	X	ICP 6915
ICPX 820018	ICPL 316	X	ICP 8514
ICPX 820019	ICPL 185	X	ICP 8514
ICPX 820020	ICPL 314	X	ICP 6915
ICPX 820021	ICPL 185	X	ICP 6915
ICPX 820022	ICPL 185	X	ICP 8014
ICPX 820023	ICPL 267	X	73047-14-1-B-1-B-B-HB*-HB-HB-HB*
ICPX 820024	ICPL 316	X	-do-
ICPX 820025	ICPL 185	X	-do-

(E) To produce hybrids using determinate Prabhat (MS) line -

ICPX 820026	Prabhat x (MS-3AxPrabhat) x PrabhatxPrabhat-DT	x	ICPL 312
ICPX 820027	-do-	x	ICPL 185
ICPX 820028	-do-	x	ICPL 150

(F) To produce hybrids using indeterminate Prabhat (MS) line -

ICPX 820029	Prabhat x (MS-3AxPrabhat) x PrabhatxPrabhat-NDT	x	ICPL 312
ICPX 820030	-do-	x	ICPL 186
ICPX 820031	-do-	x	ICPL 269
ICPX 820032	-do-	x	ICPL 314
ICPX 820033	-do-	x	ICPL 185
ICPX 820034	-do-	x	ICPL 150



Table 1.3 : Selections made in F4 populations during 1987 kharif at Hissar.

Cross	Number of Plants Selected		
	DT	NDT	Total
780321[(Pant A-2 x Baigani) x ICPL 1]	-	31	31
780324[(Pant A-2 x Baigani) x Sehore-197]	-	18	18
78326[(Baigani x 7035) x ICPL 1]	-	42	42

Table 1.0 : F2073 Bulk Population Trial grown during 1982K at Meer

Entry No.	Pedigree	Growth Habit	Days to Flower	Plant Height (cm)	Days to Maturity	Seeds/ Pod	Plant Stand (a2)	100 Seed wt (g)	Yield (kg/ha)	No. of Plant Selected	
										DT	NDT
22	ICPL 1	NDT	87	178	130	3.17	8.83	7.94	2330	-	-
17	80572-NB(78332-1x77007-12-1)	NDT	73	203	133	3.31*	7.64	10.11	2110	4	24
6	79243-NB-NB(78343-1x77007-12-1)	NDT	82	207	133	2.99	6.10	7.63	2074	45	14
19	80491-NB(ICPL 81 x ICPL 87)	NDT	85	237	131	2.45	7.95	8.05	2056	2	6
20	80493-NB(ICPL 81 x 80-227)	DT/NDT	76	201	130	3.03	8.87	8.88	2041	2	11
7	80511-NB(ICPL 81 x ICPL 9)	NDT	86	201	126	3.75	7.31	7.28	2012	1	8
5	79233-NB-NB(76115-51-1 x 76115-95-2)	DT	80	191	133	3.46	8.33	9.52	2006	31	-
3	79221-NB-NB(ICPL 81 x 75000 Prog)	NDT	84	219	127	3.13	9.11	8.47	1929	1	28
21	ICPL 4	DT	80	172	118	3.13	8.56	6.89	1863	-	-
12	80575-NB(ICPL 81 x DL-78-1)	NDT	73	190	133	2.83	6.10	8.31	1809	7	2
8	80512-NB(ICPL 81 x ICPL 94)	NDT	85	219	133	3.75	8.18	7.82	1806	2	6
4	79222-NB-NB(ICPL 4 x 74065 Prog)	DT	80	194	125	2.71	9.84	8.31	1786	4	-
1	79220-NB-NB(ICPL 81 x 74065 Prog)	NDT	79	201	127	2.99	9.07	8.15	1769	4	10

Entry No.	Pedigree	Growth Days to Plant		Days to Seeds/Plant		100 Yield		No. of Plant			
		Habit	Flower Height (cm)	Maturity	Pod	Straw (kg)	Seed (kg/ha)	DT	NDT		
9	80513-MB(ICPL-01 x ICPL 151)	NDT	84	212	127	3.10	9.03	8.15	1752	3	12
10	80515-MB(ICPL 01 x 77007-30-3)	NDT	85	212	128	3.47	8.18	8.71	1740	2	12
14	80541-MB(ICPL 07 x DL-78-1)	DT/NDT	73	179	129	3.28	6.10	9.01	1736	46	6
3	79223-MB-MB(ICPL 4 x 75080 Progi)	DT	75	171	122	3.35	9.34	8.33	1729	8	1
11	80529-MB(ICPL 4 x DL-78-1)	NDT	64	160	129	2.75	3.63	8.31	1570	4	6
16	80545-MB(ICPL 161 x 74068 Progi)	NDT	65	194	124	3.24	8.49	8.67	1547	3	19
15	80542-MB(ICPL 07 x 74068 Progi)	DT	79	169	131	3.27	8.91	9.75	1267	21	4
18	80584-MB(78337-1 x 77007-4-4)	DT	61	181	133	3.55	6.41	9.50	1235	5	14
13	80538-MB(ICPL 06 x DL-78-1)	NDT	82	190	137	2.84	5.05	9.77	1223	3	9
$\bar{x}$			80.08	194.56	128.00	3.19	7.86	8.54	1791.43		
SE <sub>e</sub>			1.24	12.7	2.48	0.19	1.15	0.23	130.2		
CV %			2.69	11.32	3.34	10.59	23.54	4.74	12.60		

Table 1.5 : F2 Bulk Population trial grown during 1982 at Hissar

Entry No.	Pedigree	Growth Habit	Days to Plant		Days to Seeds/Plant		100 Plant Stand (m <sup>2</sup> )	Yield (kg/ha)	No. of Plant Selected		
			Flower	Height (cm)	Maturity	Pod			BT	NDT	
6	80600-HB(78342-1 x 77007-4-4)	BT/NDT	90	222	129	3.21	9.76	7.62	2731	2	14
22	ICPL 1	NDT	91	193	128	3.13	-8.26	8.01	2537	-	-
17	80528-HB(ICPL 61 x 74065 Prog)	NDT	82	202	126	3.25	8.95	6.78	2481	2	8
2	80519-HB(ICPL 37 x ICPL 141)	BT/NDT	77	194	129	3.33	9.45	10.30	2338	10	5
16	80514-HB(ICPL 61 x ICPL 141)	BT/NDT	86	230	128	3.42	9.18	8.88	2311	1	15
14	80509-HB(ICPL 5 x ICPL 141)	BT	87	256	131	3.24	7.75	8.65	2213	2	9
3	80524-HB(ICPL 164 x ICPL 141)	NDT	85	230	129	3.45	8.40	9.37	2162	3	18
9	80587-HB(78337-1 x 77007-4-1)	BT	84	232	130	3.21	6.98	9.78	2110	7	22
11	80532-HB(78337-1 x 77007-12-2)	BT	84	283	129	4.19	7.64	10.05	2010	2	13
10	80536-HB(78115-30-3 x 78115-32-1)	BT	77	195	128	3.35	8.76	10.87	2006	9	2
1	80553-HB(75604 Prog x ICPL 1)	BT/NDT	81	236	129	2.87	6.75	9.12	1975	-	1
20	80604-HB(78343-1 x 77007-4-4)	BT	85	217	132	3.60	8.22	9.61	1970	9	26
21	ICPL 4	BT	74	190	120	3.17	8.80	8.77	1644	-	-

Entry No.	Pedigree	Growth		Days to Plant Height (cm)	Days to Maturity	Seeds/Plant		100 Seed Stand (m <sup>2</sup> )	Yield (kg/ha)	No. of Plant Selected	
		Nodes	Flower			Pod	Seed			BT	NOT
15	80570-MB(1)CPL 5 x 77007 Prog1	NOT	76	237	132	3.39	7.91	9.11	1867	2	9
4	80576-MB(78333-1 x 77007-4-4)	BT/NOT	79	202	129	3.07	5.86	11.25	1029	10	13
7	80607-MB(78344-1 x 77007-4-1)	BT	84	198	132	3.76	4.55	11.17	1734	10	6
12	80561-MB(76115-45-5 x 76115-49-1)	BT/NOT	77	208	131	3.76	8.95	10.05	1678	7	10
9	80555-MB(76115-27-1 x 76115-30-5)	BT NOT	84	226	150	3.19	8.06	11.01	1671	9	14
19	80586-MB(78338-1 x 77007-10-2)	NOT	80	199	133	3.52	10.03	11.18	1561	7	18
18	80582-MB(78337-1 x 77007-12-2)	BT/NOT	77	201	122	3.49	6.56	9.92	1542	-	-
17	80563-MB(76115-55-2 x 76115-59-5)	BT	77	193	135	3.31	7.41	10.18	1535	1	9
6	80583--B(76115-7-1 x 76115-14-7)	BT NOT	78	228	135	4.01	6.37	10.44	1277	1	9
			80.29	216.18	129.73	3.44	7.94	9.55	1976		
	SEn *		0.89	9.24	1.14	0.20	0.65	0.22	118		
	CV %		1.93	7.45	1.53	10.23	13.73	4.32	9		

Table 1.6. : Early Pigeonpea Unselected Bulk (EPUB) Population Trial grown during 1982 K at Meer.

Entry Pedigree No.	Gen.	Growth Habit	Days to Flower	Plant Height (cm)	Days to Maturity	Seeds/ Pod	Plant Stand (m <sup>2</sup> )	100 Seed wt(g)	Yield (Kg/ha)	No. of Plants Selected		
										BT	NDT	
0	ICPL 1	-	NDT	87	210	127	3.27	9.10	7.97	2890	-	-
3	78321	F4	NDT	87	195	126	3.41	10.80	8.21	2674	-	-
4	78326	F4	NDT	95	206	129	3.44	9.65	10.05	2091	-	-
1	78316	F4	NDT	76	188	127	3.92	8.49	9.95	2987	1	2
7	78331	F4	NDT	67	157	123	3.24	10.11	9.51	2045	6	3
11	ICPL 4	-	BT	76	162	120	3.31	7.25	6.11	2041	-	-
2	78320	F4	BT	77	184	122	3.52	9.10	7.71	2010	2	3
6	78342	F4	BT/NDT	75	166	127	3.03	7.41	9.01	1987	5	6
5	78325	F4	NDT	98	225	139	3.55	9.80	10.85	1667	-	7
8	74077	F4	NDT	97	245	131	3.47	8.97	9.58	1485	-	-
	i			63.43	194.0	127.23	3.33	9.06	6.88	2097.21		
	SEa -			0.87	14.1	1.5	1.1	1.53	0.23	125.1		
	CV %			1.32	12.65	2.15	3.33	29.37	4.42	16.33		

Table 1.7. : Summary of single plant progeny evaluations during 1982K at Hwar.

Gen.	No. of Crosses	No. of SPPs evaluated	No. of Plants Selected for SPPs evaluations	No. of Progeny bulks selected for yield test
F3	21 DT	257	176	13
	NDT	381	151	25
F4	42 DT	488	60	35
	NDT	619	261	43
F5	4 DT	16	11	5
	NDT	14	14	2
F6	4 DT	38	4	6
	NDT	42	12	3
F7	3 DT	8	-	-
	NDT	6	3	2
F8	13 DT	48	6	3
	NDT	91	8	4
F9	5 DT	3	-	-
	NDT	9	-	-
Comp. 1	DT	100	7	7
	NDT	35	7	7
GRU lines	DT	14	-	-
	NDT	81	15	6
QP lines	DT	140	40	7

Table 1.B : Characteristics of the determinate progenies selected, during 1982K at Hisar for yield test.

Plot No.	Pedigree	Gen.	Days to Flower	Days to Mature	Grain Yield (Kg/ha)
3380	ICPL 4		79	127	4744
3382	79237-H1-HB	F3	79	129	5192
3445	ICPL 4		79	125	3141
3446	(Pant A2 x A.albicans)-H2-HB	F4	74	129	4423
4378	ICPL 4		77	128	2532
4379	790232-H6-HB	F3	84	132	2500
4383	ICPL 4		77	128	2500
4384	790233-H4-HB	F3	79	129	2981
4435	ICPL 4		79	128	3590
4436	790237-H27-HB	F3	79	130	3397
4471	790236-H15-HB	F3	83	127	4551
4472	ICPL 4		79	119	2404
4474	790234-H1-HB	F3	83	125	2660
5196	790232-H3-HB	F3	84	135	3301
5197	ICPL 4		79	128	1987
5247	790237-H5-HB	F3	79	135	4359
5249	ICPL 4		79	128	3397
5262	790237-H15-HB	F3	84	135	4487
5264	ICPL 4		74	129	2276
7412	790243-H12-HB	F3	71	110	3205
7415	790243-H15-HB	F3	75	115	3013
7416	790243-H16-HB	F3	69	110	3718
3383	780351-H1-H1-HB	F4	65	126	2051
3384	780351-H2-H1-HB	F4	62	123	1410
3385	ICPL 4		79	128	4038
3405	ICPL 4		76	127	3141
3406	780376-H9-H2-HB	F4	74	129	4551
3414	780377-H4-H2-HB	F4	76	119	3654
3415	ICPL 4		76	126	4680
3430	ICPL 4		79	125	3686
3431	780380-H8-H2-HB	F4	76	139	3910
3450	ICPL 4		79	128	2308
3451	780352-H3-H2-HB	F4	79	130	4808
3455	ICPL 4		79	126	3397
3457	780352-H13-H1-HB	F4	72	126	4167



Plot No.	Pedigree	Gen.	Days to Flower	Days to Mature	Grain Yield (Kg/ha)
3463	780354-H4-H1-HB	F4	64	128	3526
3465	ICPL 4		79	125	2436
3467	780354-H5-H2-HB	F4	79	129	4103
3492	ICPL 4		84	128	4295
3493	780349-H1-H2-HB	F4	65	126	1955
3512	ICPL 4		79	128	5449
3513	780345-H9-H1-HB	F4	69	114	2244
3534	ICPL 4		79	126	3718
3535	780348-H11-H1-HB	F4	72	127	3654
3538	780348-H12-H2-HB	F4	72	118	3526
3544	ICPL 4		82	118	2372
3546	780348-H13-H2-HB	F4	79	129	3974
3568	780351-H2-H2-HB	F4	59	114	1699
3569	ICPL 4		84	125	2756
3586	780376-H4-H1-HB	F4	67	122	3397
3587	ICPL 4		79	125	4110
3654	ICPL 4		79	128	3141
3655	780354-H2-H1-HB	F4	86	128	4103
3681	ICPL 4		76	127	4103
3682	780320-H1-H1-HB	F4	84	129	4487
3686	ICPL 4		79	127	3654
3688	780345-H1-H3-HB	F4	63	116	3462
3977	780390-HB-H12-HB	F4	76	128	3718
3981	ICPL 8		98	148	3141
3982	ICPL 4		79	128	2372
3984	780348-HB-H4-HB	F4	79	129	4103
4007	ICPL 4		79	128	2885
4009	780350-HB-H5-HB	F4	79	129	5192
4015	780350-HB-H10-HB	F4	74	129	3910
4017	ICPL 4		79	128	3718
4031	780352-HB-H9-HB	F4	79	129	4551
4033	ICPL 4		74	128	3590
4067	ICPL 4		79	128	3462
4070	780343-HB-H11-HB	F4	72	129	3269
4076	780376-HB-H4-HB	F4	72	128	4038
4077	ICPL 4		79	128	2628
4079	780376-HB-H6-HB	F4	86	134	4038
4085	780376-HB-H11-HB	F4	79	140	5192
4088	ICPL 8		98	148	2692
4124	ICPL 4		79	128	3558
4126	780380-HB-H20-HB	F4	86	130	3269
4644	ICPL 8		98	150	2436
4648	780375-H3-H1-HB	F4	86	130	2564

Plot No.	Pedigree	Gen.	Days to Flower	Days to Mature	Grain Yield (Kg/ha)
4681	780344-HB-H1-HB	F4	89	145	6154
4682	ICPL 4		84	127	1538
4684	780344-H10-H1-HB	F4	89	136	5000
4690	780319-H1-HB-HB	F4	84	129	2949
4692	ICPL 4		84	128	3462
4811	780377-H1-H1-HB	F4	79	129	3558
4814	ICPL 4		79	127	2949
4998	ICPL 4		79	129	2051
4999	780376-HB-H2-HB	F4	98	135	1154
3582	ICPL 4		84	125	5256
3584	770007-H1-HB-HB-HB	F5	79	118	1603
4637	ICPL 4		77	128	3590
4640	770007-H1-HB-HB-HB	F5	86	130	4744
4682	ICPL 4		84	127	1538
4683	770007-H4-HB-H1-HB	F5	72	128	3333
4754	770007-H2-H2-H2-HB	F5	77	126	2885
4756	ICPL 4		84	128	2692
5334	ICPL 4		77	126	3013
5337	770007-H1-H1-HB-HB	F5	89	145	2885
3835	ICPL 4		76	128	4103
3836	760115-H7-H2-HB-H1-HB	F6	74	129	2756
4703	760115-H4-HB-H1-HB-HB	F6	84	142	2244
4704	ICPL 4		84	128	2308
4751	ICPL 4		74	121	2500
4752	760115-H3-H1-H1-HB-HB	F6	74	128	3269
4756	ICPL 4		84	128	2692
4757	760115-H4-H4-H1-HB-HB	F6	66	128	3077
4794	760052-H3-H2-H1-H2-HB	F6	77	129	3878
4796	ICPL 4		75	128	2756
4824	ICPL 4		77	124	3013
4825	760115-H7-H2-B-H1-HB	F6	76	129	3397
3728	ICPL 8		101	148	2244
3732	740092-102-HB*-HB-H5-H1-HB-HB	F8	79	138	5962
3813	ICPL 4		79	128	4840
3815	740068-B-H1-B*-HB*-H1-H2-HB	F8	63	108	2180
4493	ICPL 4		79	128	1923
4494	740092-52-1-HB*-112-HB-H1-HB	F8	84	124	3269
3756	ICPL 4		79	118	5224
3758	Comp. 1 ODT (LS)-H19-H1-HB		65	118	2885
3787	Comp. 1 ODT-HB-H2-H2-HB		70	118	3654
3788	ICPL 4		84	128	4359
3801	Comp. 1 ODT (SS)-H20-H1-HB		70	128	4615
3803	ICPL 4		79	128	4776

Plot No.	Pedigree	Imm.	Days to Flower	Days to Mature	Grain Yield (Kg/ha)
4729	ICPL 4		79	121	2436
4730	Comp. 1 ODT (LS)-H12-H2-HB		84	130	3782
4737	Comp. 1 ODT (LS)-H12-H1-HB		84	130	4455
4739	ICPL 4		79	128	2756
4764	Comp. 1 ODT-H7-H1-HB		79	121 <sup>o</sup>	3942
4766	ICPL 4		79	122	3430
5339	ICPL 4		79	129	2564
5341	Comp. 1 IIDT-H3-H1-HB		86	138	3526
3323	ICPL 4		84	127	5417
3326	QP-244-HB-H1-HB		79	130	3846
3366	QP-293-HB-H2-HB		91	135	4105
3368	ICPL 4		79	126	5269
4503	ICPL 4		84	128	2051
4505	QP-262-HB-H1-HB		89	128	3333
4560	ICPL 4		77	119	2821
4562	QP-154-HB-H2-HB		63	119	2147
4570	ICPL 4		77	120	3013
4571	QP-169-HB-H2-HB		84	126	2981
4588	QP-208-HB-H1-HB		89	129	3590
4590	ICPL 4		84	128	0769
4606	QP-278-HB-H1-HB		79	126 <sup>o</sup>	4263
4607	ICPL 4		77	125	3205

Table 1.9 Characteristics of the indeterminate progenies selected during 1982k at Hissar for yield trial in 1987.

Plot No.	Pedigree	Gen.	Days to Days to Flower	Days to Maturity	Grain Yield (kg/ha)
1157	790088-H3-HB	F3	101	135	3910
1158	ICPL 1		95	140	1474
1163	ICPL 1		95	138	1154
1164	790089-H3-HB	F3	95	138	4168
1152	ICPL 1		95	136	2756
1336	7902358-H19-HB	F3	90	130	3205
1340	7902358-H23-HB	F3	93	131	3910
1342	ICPL 1		93	130	3462
1361	7902358-H39-HB	F3	79	129	3335
1362	ICPL 1		93	135	4167
1378	ICPL 1		95	135	1282
1379	7902359-H2-HB	F3	88	132	3141
1388	ICPL 1		93	135	2212
1390	7902359-H11-HB	F3	79	132	3910
1443	ICPL 1		95	136	2180
1444	790243-H2-HB	F3	101	135	4038
1681	ICPL 1		95	134	1314
1681	790221-HB-HB	F3	79	131	2885
1695	ICPL 1		96	135	1859
1697	790224-HB-HB	F3	96	135	3462
1700	ICPL 1		91	135	2692
1702	790224-H15-HB	F3	93	135	3782
1708	790225-H3-HB	F3	94	135	3526
1710	ICPL 1		96	135	3205
1711	790225-H5-HB	F3	101	135	4551
1743	790235-H7-HB	F3	101	135	5256
1745	ICPL 1		96	135	2821
1751	790235-H13-HB	F3	96	135	4808
2685	790220-H1-HB	F3	101	138	4680
2687	ICPL 1		95	137	2885
2714	790221-H2-HB	F3	98	135	4295
2715	790221-H3-HB	F3	96	135	4744
2718	ICPL 1		95	135	3494
2733	ICPL 1		95	132	1795
2736	790224-H1-HB	F3	98	136	3269
2738	ICPL 1		95	135	3205
2760	790225-H6-HB	F3	96	135	2564
2769	ICPL 1		95	135	1603
2770	790227-H7-HB	F3	98	135	2756

Plot No.	Pedigree	Gen.	Days to Flower	Days to Mature	Grain Yield (kg/ha)
2786	790235-H3-HB	F3	95	135	2853
2789	ICPL 1		95	135	2276
3190	ICPL 1		96	135	2083
3191	790088-H3-HB	F3	104	138	4103
3203	790089-H1-HB	F3	101	145	4680
3205	ICPL 1		96	135	2885
3251	ICPL 1		95	135	1699
3253	790220-HB-HB	F3	98	136	4231
1019	780343-HB-H6-HB	F4	103	135	2724
1021	ICPL 1		97	135	1923
1022	780321-H3-H1-HB	F4	95	131	4135
1030	ICPL 1		95	138	1218
1031	780343-H2-H2-HB	F4	101	130	2821
1039	780345-H2-H3-HB	F4	88	126	2692
1040	ICPL 1		95	138	3846
1085	ICPL 1		95	138	2949
1088	780367-3-H1-HB	F4	95	140	3814
1118	ICPL 1		95	138	2404
1119	780322-H3-H1-HB	F4	95	140	5609
1181	780321-HB-H10-HB	F4	95	138	3974
1182	780321-HB-H11-HB	F4	95	138	4744
1184	ICPL 1		95	138	4872
1203	780322-HB-H9-HB	F4	95	138	3590
1204	ICPL 1		95	140	2628
1205	780322-HB-H10-HB	F4	95	138	3910
1217	780323-HB-H7-HB	F4	101	138	3077
1219	ICPL 1		95	140	1474
1228	780324-HB-H4-HB	F4	99	138	4583
1229	ICPL 1		95	138	1474
1233	780319-HB-H4-HB	F4	101	130	9968
1234	ICPL 1		95	130	4295
1244	ICPL 1		95	138	2308
1245	78326-HB-H6-HB	F4	101	138	3782
1254	ICPL 1		95	136	1667
1255	780327-HB-H4-HB	F4	101	138	4359
1269	ICPL 1		95	138	2468
1270	780330-HB-H9-HB	F4	95	132	3654

Plot No.	Pedigree	Gen.	Days to Flower	Days to Mature	Grain Yield (kg/ha)
1287	ICPL 1		95	136	1603
1289	780378-HB-H12-HB	F4	95	132	3910
1296	780379-HB-H1-HB	F4	95	135	3462
1297	ICPL 1		95	135	1987
1301	780379-HB-H5-HB	F4	94	136	4551
1302	ICPL 1		95	136	962
1303	780379-HB-H6-HB	F4	99	136	5385
1802	780356-H1-H1-HB	F4	96	135	2821
1803	ICPL 1		97	135	2051
1813	ICPL 1		95	135	2212
1814	780322-HB-H3-HB	F4	99	135	3269
1865	780326-HB-H2-HB	F4	97	135	2180
1866	ICPL 1		95	135	2596
1871	ICPL 1		99	137	2115
1872	780326-H10-H2-HB	F4	97	133	3397
1894	780328-HB-H1-HB	F4	101	136	4231
1896	ICPL 1		95	135	1923
1933	780322-HB-H2-HB	F4	95	135	1763
1937	ICPL 1		95	135	2564
2035	ICPL 1		95	135	2949
2036	780319-HB-H2-HB	F4	90	135	3045
2049	780326-HB-H1-HB	F4	101	138	3814
2050	ICPL 1		95	135	2744
2058	780326-HB-H14-HB	F4	105	145	3141
2060	ICPL 1		95	135	1154
2065	780326-HB-H5-HB	F4	97	135	4103
2065	ICPL 1		95	135	2885
2136	ICPL 1		95	135	3397
2137	780356-H1-H1-HB	F4	97	135	3718
2380	780321-HB-H6-HB	F4	95	135	3782
2383	ICPL 1		93	135	2981
2403	ICPL 1		95	135	3526
2411	780323-HB-H10-HB	F4	95	136	4776
2456	780330-HB-H4-HB	F4	105	145	4167
2458	ICPL 1		97	135	962
2473	780379-HB-H8-HB	F4	95	135	4231
2474	ICPL 1		93	135	3718
2892	780331-H5-H2-HB	F4	104	140	2949
2894	ICPL 1		96	136	1346

Plot No.	Podicree	Gen.	Days to Flower	Days to Maturity	Grain Yield (kg/ha)
2898	780332-H11-H1-HB	F4	104	143	2564
2899	ICPL 1		95	135	128
2920	ICPL 1		95	136	2115
2921	780335-H13-H1-HB	F4	96	136	2308
2924	780340-HB-H1-HB	F4	104	136	3141
2925	ICPL 1		95	134	1346
2966	ICPL 1		95	135	2564
2967	780341-H2-H1-HB	F4	101	135	3333
2979	780326-H3-H2-HB	F4	99	135	3590
2981	ICPL 1		95	135	833
2995	780328-H11-H1-HB	F4	99	138	4103
2996	ICPL 1		95	135	1402
3215	ICFL 1		95	135	2340
3216	780327-HB-H4-HB	F4	104	138	4487
3025	770007-H12-H2-H1-HB	F5	102	140	4103
3027	ICPL 1		95	135	1474
3029	770007-H40-H5-H1-HB	F5	98	136	2372
1762	760115-H263-H4-HB-H1-HB	F6	106	150	1923
1763	ICPL 1		96	135	1699
2079	760115-H78-H4-HB-H1-HB	F6	97	130	1699
2080	ICPL 1		95	135	2115
3026	760145-H1-H3-H2-H1-HB	F6	99	138	3333
3027	ICPL 1		95	135	1474
1084	750080-H6-B*-H1-HB-H1-HB	F7	88	130	1603
1085	ICPL 1		95	135	2949
3015	750001-HB*-2-B-B-H1-HB	F7	101	136	3397
3016	ICPL 1		95	135	2821
2080	ICPL 1		95	135	2115
2081	740216-2-HB*-H1-B-HB-H1-HB	F8	101	140	3462
3030	740146-1-H1-B*-H5-HB-H1-HB	F8	101	136	2981
3032	ICPL 1		95	135	1891
3047	ICPL 1		95	135	1282
3049	740209-B-B-1-78-H1-H1-HB	F8	96	135	3590
3170	ICPL 1		95	135	3205
3171	740120-F8	F8	104	136	3846
1070	ICFL 1		95	135	2083
1072	Comp.1 ODT-1*-B-H2-HB		88	130	4583

Plot No.	Pedigree	Gen.	Days to Flower	Days to Maturity	Grain Yield (kg/ha)
1097	Comp. 1 INDY-H5-H1-HB		93	132	5064
1098	ICPL 1		93	133	2372
1099	Comp. 1 INDY-HB-H1-HB		79	131	3462
1783	ICPL 1		96	135	2051
1784	Comp. 1 ODT-H3-HB-H1-HB		93	130	3077
2156	ICPL 1		95	135	1506
2157	Comp. 1 INDY-H12-H15-HB		92	132	3590
2166	ICPL 1		97	135	4423
2168	Comp. 1 INDY-H12-H16-HB		90	135	1923
3782	ICPL B		98	141	2885
3785	Comp. 1 ODT-H2-H2-H2-HB		105	148	4583
2238	ICP 7636-H1-HB		101	138	4167
2239	ICPL 1		95	135	3333
3078	ICPL 1		95	135	3526
3081	ICP 7390-H1-HB		108	138	3013
3093	ICPL 1		95	135	4038
3094	ICP 7599-H1-HB		99	135	4615
3103	ICPL 1		96	135	2628
3104	ICP 7639-H1-HB		99	140	5096
3143	ICP 7137-H1-HB		98	140	3654
3144	ICPL 1		96	135	3365
3149	ICPL 1		95	135	1923
3151	ICP 6963-H1-HB		98	135	3013



Table 1.10. : Performance of pigeonpea advanced lines in the BREC during 1982 (harif at Meer).

Entry No.	Podipore	Growth Habit	Days to Flower	Plant Height (cm)	Days to Maturity	Pods/Plant	Plant Stand (m <sup>2</sup> )	Seed wt (g)	100 Yield (kg/ha)	Plant Stand/Plot
12	ICPL 267	DT	55	110	101	3.30	28.78	7.96	2336	187
10	H-81-1	DT	62	127	102	3.12	23.53	6.56	2337	153
8	H-76-44	DT	61	127	102	3.47	26.27	6.94	2331	170
11	ICPL 4	DT	66	130	103	3.30	27.04	6.99	2292	175
9	H76-65	DT	57	116	101	3.42	25.23	7.46	2230	164
14	UPAS 120(C)	NBT	68	167	107	3.36	26.00	7.44	2177	169
13	Prabhat (C)	DT	66	130	104	3.30	27.74	6.89	2094	180
6	H76-51	DT	56	107	100	3.34	26.39	6.76	2024	171
4	DL-78-1	DT	57	120	100	3.60	24.96	7.73	2004	162
2	AL-1	NBT	64	127	105	3.11	24.19	7.13	1999	157
3	AL-15	DT	63	135	103	3.50	21.95	7.71	1960	142
7	H76-11	DT	62	130	102	3.39	23.73	8.44	1771	154
1	TAT-9	NBT	66	146	97	3.44	24.42	10.50	1693	158
5	DL-82	DT/NBT	68	161	115	3.36	20.25	10.76	1485	131
̄ (Grand Mean)			62.15	128.55	102.91	3.36	25.04	7.78	2054.27	162.23
SEe			0.81	5.7	0.82	0.07	-	0.18	57.9	9.2
CV %			2.61	8.86	1.60	4.22	-	4.86	5.57	11.36

Table 1.11. : Performance of pigeonpea advanced lines in the ERET during 1982 kharif at Nisar.

Entry No.	Pedigree	Growth Habit	Days to Flower	Plant Height (cm)	Days to Seed Maturity	Pod Stand (m <sup>2</sup> )	Plant Stand (m <sup>2</sup> )	100 Seed wt (g)	Yield (kg/ha)	Plant Stand/Plot
6	ICPL 87	BT	103	231	153	3.66	15.66	11.17	3306	102
4	ICPL 161	NDT	117	251	160	3.66	14.62	10.21	3172	95
7	ICPL 151	BT	102	197	143	3.91	15.95	10.68	3081	101
3	H77-216	NDT	105	249	147	3.17	15.08	6.96	3011	98
11	PUSA-35	NDT	112	261	152	3.26	16.20	7.42	3008	105
10	PUSA-76 (DL-78-2)	NDT	103	254	141	3.24	14.74	6.91	2938	96
5	ICPL 81	NDT	102	257	138	3.26	16.59	6.27	2931	108
13	TAT-10	NDT	105	249	149	3.07	15.51	8.39	2904	101
8	ICPL 142	NDT	112	236	151	3.34	16.15	7.96	2886	105
14	UPAS-129 (C)	NDT	107	249	147	3.20	15.95	6.77	2841	103
4	ICPL 1	NDT	118	266	156	3.44	14.74	8.02	2770	96
2	H77-208	NDT	106	251	148	3.15	14.93	5.84	2701	97
1	H76-55	NDT	108	246	144	3.45	15.43	6.73	2689	100
12	VL-25	NDT	107	251	152	3.41	15.05	7.12	2613	98
̄ (Grand Mean)			107.65	246.18	147.48	3.34	15.44	7.89	2918.03	100.05
SEm			1.16	8.19	1.21	0.09	-	0.18	52.2	4.2
CV %			2.14	6.65	1.62	5.36	-	4.44	3.57	8.51

Table 1.12. : Performance of phytophagous arthropod insects in the EC2-1 during 1982 throughout a year.

Entry Pedigree No.	Growth Stage	Days to Plant	Insect		Plant		Plant		Plant	
			Number	Weight (g)	Number	Weight (g)	Number	Weight (g)	Number	Weight (g)
3	ICPL 6	107	118	279	139	3.34	0.32	0.71	2007	36
5	ICPL 109	107	110	205	160	3.10	7.79	9.42	2000	52
8	T-21(C)	107	118	260	160	3.16	0.60	7.66	2664	28
4	ICPL 150	107	125	271	163	3.01	6.09	10.97	2572	30
1	TT-5	107	110	272	164	3.10	7.75	11.75	2070	34
2	TT-6	107	125	209	164	3.29	0.39	12.70	2400	36
7	WV-8	107	102	230	170	2.94	7.12	13.40	2062	31
6	WV-6	107	120	277	176	2.05	0.22	12.70	2013	36
i (Grand Mean)			119.34	271.16	164.44	3.17	7.02	10.93	2490.03	33.70
SEd *			0.09	6.33	1.14	0.08	-	0.15	00.9	1.90
CV %			1.35	4.67	1.40	3.20	-	2.79	6.40	11.24

Table 1.13. : Performance of promising advanced sibgenos lines to BPH at 8 rows spacing during 1982 kharif at Meerut.

Int Pedigree No.	Row Growth Days to Plant	Days to Seed/Plant	100 Yield	Bank Plant								
	Spec. Height (cm)	Flower Maturity (cm)	Pod Stand Seed (kg/ha)	Stand/Plot								
	(cm)	(cm)	(t/ha)	(t/ha)								
1	ICPL 105	30	107	105	244	147	3.20	14.09	7.94	2092	2	97
2	ICPL 106	60	107	108	243	144	3.54	9.49	7.91	3016	2	41
3	PRASANT	30	87	90	214	137	3.22	14.35	6.07	2023	16	93
4	PRASANT	60	87	89	195	136	3.38	8.60	6.51	2181	15	38
5	ICPL 148	30	87	104	212	148	3.92	15.12	9.04	2454	13	98
6	ICPL 148	60	87	103	196	144	3.89	9.14	9.74	2667	7	40
7	ICPL 155	30	87	102	239	151	4.00	14.51	9.07	2792	6.5	94
8	ICPL 155	60	87	100	205	150	3.78	7.75	6.72	4123	1	34
9	ICPL 154	30	87	100	221	147	3.09	14.51	9.97	2883	3	107
10	ICPL 154	60	87	100	215	142	3.72	8.10	10.47	2735	5	32
11	ICPL 146	30	87	97	217	144	3.65	15.28	9.91	2914	1	99
12	ICPL 146	60	87	99	189	142	3.63	9.03	9.61	2796	4	39
13	ICPL 165	30	87	101	206	143	3.96	13.90	9.02	2049	17	88
14	ICPL 165	60	87	100	190	146	3.70	7.29	8.87	1848	19	32
15	ICPL 169	30	87	107	237	148	4.12	15.20	10.01	2640	8	99
16	ICPL 169	60	87	108	217	146	3.48	8.45	10.16	2562	8	37
17	ICPL 175	30	87	99	219	142	3.59	14.97	8.67	2852	5	97
18	ICPL 175	60	87	98	202	142	3.68	7.64	9.42	2359	9	33
19	ICPL 94	30	87	97	202	140	3.47	15.74	9.67	2768	7	102
20	ICPL 94	60	87	97	194	141	3.48	7.87	9.47	2308	14	34
21	ICPL 141	30	87	103	220	149	3.64	16.44	10.57	2077	15	107
22	ICPL 141	60	87	105	196	146	3.48	9.02	10.20	2117	17	39
23	ICPL 189	30	87	118	279	154	3.48	14.43	8.87	2792	6.5	94
24	ICPL 189	60	87	120	274	158	3.45	9.26	8.96	2804	3	40
25	ICPL 177	30	87	99	225	136	3.94	14.12	7.96	2141	14	92
26	ICPL 177	60	87	100	209	136	3.70	8.86	8.10	2106	18	38
27	ICPL 169	30	87	97	222	146	3.63	13.90	7.82	2502	10	88
28	ICPL 169	60	87	101	234	154	3.40	8.91	7.01	2323	13	39

Ent Pedigree No.	Row Spac. (cm)	Branch Habit	Days to Flower	Plant Height (cm)	Days to Seed/ Mature	Plant Fed Stand (m <sup>2</sup> )	100 Seed Yield (kg)	Plant Stand (kg/ha)	Plant Stand/ Plot		
15 ICPL 104	30	NDT	101	222	109	3.08	14.20	11.12	2053	16	92
15 ICPL 104	60	NDT	104	215	107	3.06	10.30	11.17	2126	16	45
16 ICPL 314	30	NDT	113	243	107	3.70	15.99	8.97	2800	4	101
16 ICPL 314	60	NDT	113	218	102	3.99	8.91	8.67	2700	6	39
17 ICPL 315	30	DT	93	233	100	3.01	15.66	7.06	2627	9	102
17 ICPL 315	60	DT	95	190	101	3.34	8.33	7.01	2408	10	36
18 ICPL 316	30	DT	94	156	101	3.20	14.97	8.07	2073	12	97
18 ICPL 316	60	DT	92	152	130	3.00	8.68	8.67	2447	11	38
19 ICPL 317	30	DT	95	209	102	3.06	15.33	8.02	2092	11	100
19 ICPL 317	60	DT	94	191	130	4.27	7.06	8.07	2377	12	31
20 PPE-45-2	30	NDT	112	265	102	3.90	14.27	10.92	1105	19	93
20 PPE-45-2	60	NDT	113	270	102	3.12	8.00	10.75	1467	20	38
Grand Mean											
	30		101.15	223.95	105.53	3.61	14.93	9.00	2472.44	-	96.75
	60		101.68	209.68	100.73	3.55	8.50	8.92	2496.69	-	37.05
Row spacing SE*			0.63	6.33	0.55	0.04	-	0.27	56.42	-	4.95
CV %			2.76	13.05	1.69	5.49	-	13.28	10.16	-	33.09
Entries SE*			1.42	8.78	2.34	0.17	-	0.42	115.76	-	6.30
CV %			1.99	5.73	3.28	6.67	-	6.71	6.59	-	13.48

\* Ranked separately for 30 and 60 cm spacing

Table 1.14. : Performance of entries in EPW at different locations during 1982 kharif at Hisar.

Entries	Grain Yield (Kg/ha) Uniform Trials							Grain Yield (Kg/ha) Non-Uniform Trials					
	ICRISAT-Hisar 36ca 68ca		RAU-Hisar	Delhi	Junagarh	Mansar- garh	Bikaner Nean	Berhan- pore	Baaliar	Koon- jhar	Norona	Thailand	
ICPL 155	2792	4120	2930	1630	1089	1944	1944	2351	200	243	1333	243	1240
ICPL 1	2892	3017	3330	1963	1196	2214	1817	2347	668	382	1378	382	1760
ICPL 154	2884	2735	2800	1889	1024	2262	2262	2265	259	382	1533	382	1990
ICPL 175	2850	2569	2667	2148	940	2037	2036	2178	316	505	411	504	790
ICPL 146	2915	2796	3000	2037	1089	1643	1643	2160	486	208	1200	208	1290
ICPL 315	2628	2448	2930	1704	917	2222	2222	2153	528	243	-	243	-
ICPL 189	2792	2804	3167	1674	1661	1671	1671	2148	32	-	1011	-	-
ICPL 94	2767	2508	3330	1407	1113	1989	1988	2129	230	160	1300	261	1770
ICPL 314	2881	2704	3330	1322	881	1632	1631	2112	396	278	-	278	1050
ICPL 269	2641	2562	2967	1148	607	1913	1913	2107	71	-	1100	-	-
ICPL 317	2492	2377	3167	1667	887	2021	2020	2090	493	382	-	382	1610
ICPL 148	2454	2667	2600	1741	1357	1230	1230	2040	138	174	900	174	2540
ICPL 146	2117	2177	2467	1593	1244	2060	2060	1945	232	365	1222	365	1670
ICPL 149	2562	2320	1900	1037	878	2346	2345	1904	399	266	1600	261	1270
ICPL 177	2141	2166	2600	1185	1149	1175	1174	1818	239	313	1200	313	970
ICPL 165	2050	1866	2430	1481	1071	1822	1821	1792	220	365	789	365	1710
FRAGHAT	2070	2180	-	1296	619	2251	2250	1778	468	278	1589	278	1310
ICPL 164	2053	2126	2467	967	1190	1790	1790	1768	120	469	-	469	1050
$\bar{x}$	2472	2497	2976	1510	1051	1901	1878	-	305	313	1183	313	1495
SEe	116	116	-	107	115	-	109	-	42	64	220	-	-
CV %	7	-	-	13	22	-	12	-	28	39	32	-	-

Table 1.15 : Details about early maturing pigeonpea advanced lines tri-  
conducted during 1982 kharif at Hisar.

Test No.	Name of the test*	Entries	Reps.	Rows/ plot	Row Spacing (cms)	Sown	Harvest
10	ADLT - 1	24	2 2	8 4	30 60	9 June	20 Oct
11	ADLT - 2	24	2 2	8 4	30 60	9 June	23 Oct
12	ADLT - 3	24	2 2	8 4	30 60	9 June 9 June	26 Oct 26 Oct
13	ADLT - 4	49	3	8	30	1 June	8 Nov
15	ADLT - 5	36	3	4	60	9 June	12 Nov
16	ADLT - 6	24	2 2	8 4	30 60	1 June	10 Nov
17	ADLT - 7	24	2 2	8 4	30 60	9 June	10 Nov
18	ANDLT - 1	24	2 2	8 4	30 60	9 June	17 Nov
19	ANDLT - 2	24	2 2	8 4	30 60	1 June	14 Nov
20	ANDLT - 3	24	2 2	8 4	30 60	1 June	13 Nov
21	ANDLT - 4	24	2 2	8 4	30 60	1 June	20 Nov

\* ADLT : Advanced Determinate Lines Test

ANDLT : Advanced Indeterminate Lines Test

Table 1.16. : Performance of early maturing pigeonpea entries in ABL7-1 during 1982 kharif at Hissar.

Ent No.	Pedigree	Row Spec. (cm)	Breath Habit	Days to Flower	Days to Maturity	Days to Seed/Plant	Pod Stand (a2)	100 Seed wt (g)	Yield (kg/ha)	Rank	Plant Stand/Plot	
1	UPAS 120	30	MDT	98	239	134	3.32	17.82	7.52	2747	13	116
1	UPAS 120	60	MDT	98	239	129	3.18	8.22	7.57	2720	8	36
2	PRADHAT	30	MDT	72	203	126	3.26	13.97	6.11	2149	23	91
2	PRADHAT	60	MDT	72	202	125	2.94	8.10	6.52	2187	16	35
3	ICPL 313	30	DT	72	173	127	3.02	15.82	7.75	2878	11	103
3	ICPL 313	60	DT	68	164	126	3.24	7.75	7.81	2951	2	34
4	CONF. 1 00T-47-48-HB	30	DT	73	141	127	2.55	16.90	7.47	3152	2	110
4	"	60	DT	68	159	124	3.08	8.80	7.96	3137	1	38
5	CONF. 1 00T-M21-HB-HB	30	DT	73	153	126	2.76	15.20	7.62	2948	9	99
5	"	60	DT	71	145	127	3.12	9.38	7.61	2870	6	41
6	CONF. 1 00T-H9-HB-HB	30	DT	72	175	126	2.76	17.98	7.57	3129	3	117
6	"	60	DT	70	168	124	3.34	9.72	7.51	2905	4	42
7	CONF. 1 00T-M17-HB-HB	30	DT	72	172	127	2.91	13.27	9.11	2735	14	86
7	"	60	DT	69	166	121	2.80	6.71	9.12	2512	12	29
8	74066-MDT1-2-24-9-MDT1 -B0-M1-HB-M7-HB	30	DT	64	160	130	2.88	16.28	9.11	2319	19	106
8	"	60	DT	65	147	118	3.06	7.75	8.76	1898	23	34
9	74065-7-6-9-MDT2-HB0 -HB-M90-M6	30	DT	65	141	123	2.76	17.98	8.36	3106	4	117
9	"	60	DT	67	155	121	2.80	7.06	7.70	2448	14	31
10	74065-7-6-9-MDT1-B0 -HB-MB-M1-HB	30	DT	66	142	119	2.80	19.60	7.62	2647	16	127
10	"	60	DT	65	141	116	2.75	8.68	6.82	2141	18	38
11	CONF. 1 00T-M25-M1-HB	30	DT	73	155	128	2.58	15.51	7.87	3044	7	101
11	"	60	DT	68	150	125	2.98	8.22	7.87	2674	9	36
12	CONF. 1 00T-1-9-M1-HB	30	DT	73	162	136	2.50	15.82	7.71	3079	6	103
12	"	60	DT	71	155	129	2.72	10.67	7.71	2523	11	44
13	74068-MDT1-9-24-9-MDT1 -B0-M1-HB-M13-M1-HB	30	DT	66	151	123	2.76	16.44	8.32	2554	17	107
13	"	60	DT	66	146	122	3.06	6.25	9.01	2164	17	27



Ent No.	Pedigree	Row Spac.	Grain Height (cm)	Seeds to Plant	Seeds to Seed/Plant	100 Yields Seed (kg/ha)	Plant Stand (m <sup>2</sup> )	Plant Stand	Plant Plot			
14	74068-NBT-9-34-9-NBT1											
	-B0-M1-MB0-M23-M2-MB	30	BT	73	199	126	3.14	14.30	8.00	2030	12	92
14	"	60	BT	74	189	128	2.82	6.71	8.02	2130	19	79
15	COMP.1 DBT-9-MB0-M2											
	- M2-MB	30	NBT	72	151	127	2.84	18.21	7.96	2897	10	118
15	"	60	NBT	69	140	129	2.60	9.26	7.91	2500	12	66
16	74065-7-6-9-N(BT1)-MB0											
	-MB-M70-M1-MB	30	BT	66	148	117	3.10	19.44	7.82	2167	1	126
16	"	60	BT	64	140	118	3.25	7.75	7.52	2735	7	34
17	COMP.1 DBT-M2-M6-M1-MB											
	"	30	BT	64	146	121	2.84	18.97	7.76	2184	22	101
17	"	60	BT	65	140	118	2.80	6.25	7.96	2825	22	27
18	COMP.1 DBT-M3-M4-M1											
	"	30	BT	72	163	123	2.56	15.66	8.01	2840	8	102
18	"	60	BT	70	151	127	2.92	8.91	8.35	2811	3	39
19	COMP.1 DBT-M12-M2											
	"	30	BT	71	162	128	2.74	16.96	8.01	2654	15	110
19	"	60	BT	68	148	125	2.72	9.14	8.36	2644	10	40
20	74068-NBT1-9-34-9-											
	NIGBT-B0-M1-MB0-											
	M12-M2-MB	30	BT	69	155	128	3.08	18.96	7.97	2296	20	103
20	"	60	BT	68	147	122	3.30	7.64	8.86	2854	21	33
21	74068-NBT1-9-34-9-NBT1											
	-B0-M1-MB0-M24-M2-MB	30	BT	64	121	113	3.15	18.67	8.11	1983	24	121
21	"	60	BT	64	116	112	2.90	7.29	8.11	1852	24	32
22	"	30	BT	71	164	129	3.20	18.75	10.27	2345	21	122
22	"	60	BT	70	150	122	3.30	7.99	10.12	2093	20	35
23	74065-7-6-9-N(BT1)-B0-											
	MB0-M1-M2-MB	30	BT	66	150	122	3.33	17.21	6.86	2500	18	112
23	"	60	BT	64	135	116	2.75	8.91	6.81	2361	15	39
24	COMP.1 BULK1-M2-MB											
	"	30	BT	72	160	128	3.04	16.67	7.91	3094	5	108
24	"	60	BT	68	150	124	2.76	9.83	7.35	2882	5	39
	GRAND MEAN	30	-	70.72	162.52	125.17	2.91	16.66	7.94	2725	-	108
		60	-	69.10	153.73	122.60	2.96	8.15	7.97	2470	-	35
	ROW SPACING SE0 :			0.04	1.17	0.02	0.05	-	0.08	72	-	1
	CV %			0.29	3.59	0.08	7.51	-	5.12	13	-	8
	ENTRIES SE0 :			0.89	5.80	1.75	0.20	-	0.29	97	-	6
	CV %			1.79	5.24	1.20	9.45	-	5.09	5	-	11

Table 1.17. : Performance of early maturing pigeonpea entries in ABLT-2 during 1982 kharif at Meerut.

Entry No.	Pedigree	Row Spacing (cm)	Growth Habit	Days to Flower	Plant Height (cm)	Boys to Maturity	Seeds/ Pod	Plant Stand (m <sup>2</sup> )	100 Seed wt (g)	Yield (kg/ha)	Rank	Plant Stand Plot
1	Prabhat	30	DT	73	198	128	3.20	12.42	5.92	1975	20	81
2	Prabhat	60	DT	72	185	127	3.22	7.18	6.32	2245	14.5	31
3	UP45-120	30	NBT	96	241	135	3.04	15.66	7.20	2782	4	102
4	"	60	NBT	96	242	131	3.06	6.82	7.21	2726	4	30
5	ICPL 212	30	DT	93	205	131	3.76	16.67	11.16	2894	1	100
6	"	60	DT	91	193	128	4.05	6.48	11.62	2778	2	28
7	ICPL 127	30	DT	75	191	130	2.82	17.52	6.51	2681	7	114
8	"	60	DT	73	199	127	2.88	8.80	6.90	2442	8	28
9	ICPL 131	30	DT	73	208	127	2.20	14.58	10.92	2832	2	95
10	"	60	DT	73	208	122	3.38	7.99	11.01	2928	1	35
11	ICPL 136	30	DT	93	216	136	2.16	15.82	8.46	2546	14	103
12	"	60	DT	91	213	134	2.92	7.18	8.57	2662	5.5	31
13	ICPL 141	30	DT	93	217	131	2.28	12.73	8.07	2820	3	83
14	"	60	DT	92	211	122	2.46	6.71	8.16	2731	2	29
15	ICPL 141	30	DT	72	192	134	2.05	15.66	9.35	2616	10	102
16	"	60	DT	72	198	122	2.32	7.52	9.66	2662	5.5	32
17	ICPL 141	30	DT	68	172	126	2.64	17.73	8.62	2569	12	115
18	"	60	DT	70	179	121	2.67	6.32	7.91	2199	16	26
19	ICPL 27-50-50-HB	30	DT	93	221	138	2.76	11.42	10.00	2446	15	74
20	"	60	DT	92	221	136	2.91	6.71	9.87	2927	18	29
21	CP 241-HB-HB	30	DT	73	199	136	2.60	16.82	10.65	1917	22	104
22	"	60	DT	73	187	136	2.72	7.87	10.66	2222	15	34
23	4092-6-101-HB-HB	30	DT	72	200	134	3.19	15.82	9.91	2743	6.5	103
24	-50-HB-HB-HB	60	DT	72	210	134	2.77	7.41	10.67	2569	7	32
25	ICPL 157	30	DT	71	159	126	2.64	15.28	7.75	2604	11	106
26	"	60	DT	71	167	126	3.04	7.64	7.72	2315	12	33
27	ICPL 268	30	DT	73	161	132	2.66	15.20	7.71	2191	18	99
28	"	60	DT	71	157	132	2.58	7.06	7.56	1782	21	31
29	ICPL 179	30	DT	72	158	131	2.54	20.06	7.62	2743	6.5	130
30	"	60	DT	70	161	131	2.52	7.87	10.66	2344	11	34

Entry No.	Pedigree	Row Spacing (cal)	Growth Habit	Boys to Flour	Plant Height (cal)	Boys to Ntare	Seeds/ Pod	Plant Stand (cal)	100 Seed Weight (g)	Wald	Bank	Plant Stand/ Plot
16	ICPL 287	30	BT	72	164	133	1.94	17.28	7.79	2885	5	112
16	"	60	BT	71	162	130	2.58	7.06	7.77	2892	13	31
17	ICPL 214	30	NBT	99	221	137	3.40	14.27	8.31	2884	8.5	93
17	"	60	NBT	98	234	138	3.82	6.60	8.12	2908	14.5	29
18	Coop. I DDT-13-MB	30	BT	77	198	133	2.78	15.28	7.77	2338	13	99
18	"	60	BT	73	174	132	2.86	8.86	7.66	2381	6	37
19	Coop. I DDT-110-30-MB-ME	30	BT	72	167	138	2.79	13.98	8.37	2899	19	103
19	"	60	BT	71	159	132	2.66	9.83	8.86	1890	20	39
20	Coop. I DDT-114-ME	30	BT	72	156	136	2.68	16.36	7.56	2346	16	106
20	"	60	BT	71	156	128	2.76	8.86	7.82	2335	16	37
21	Coop. I DDT-112-MB	30	BT	71	153	129	2.98	13.98	7.50	2234	17	103
21	"	60	BT	72	137	123	2.84	7.87	7.30	2072	17	34
22	Coop. I DDT-115-MB	30	BT	72	168	127	2.76	16.36	7.71	2654	8.5	106
22	"	60	BT	72	152	123	2.90	6.60	7.30	1973	19	29
23	74065-7-e-3-MGT1-MB-MB-M1-M2-MB	30	BT	66	143	117	2.70	13.59	6.41	2647	9	101
23	"	60	BT	66	150	118	3.15	7.87	6.37	2361	9	34
24	(7-21 x EC-100467) PS-MB-MB-M1-M2-MB	30	BT	66	137	130	2.94	13.56	7.37	1960	21	88
24	"	60	BT	66	137	129	3.21	7.99	7.85	1728	22	33
Grand Mean		30		77.10	186.10	131.52	2.91	13.62	8.26	2311	-	101
		60		66.98	183.33	130.08	3.03	7.87	8.36	2335	-	32
Row Spacing SEa *				0.19	2.81	0.81	0.06	-	0.11	45	-	0.33
CV %				1.20	7.46	3.04	10.36	-	6.29	9	-	2
Entries SEa *				0.77	7.09	1.36	0.19	-	0.22	87	-	6
CV %				1.42	5.43	1.69	0.05	-	3.73	3	-	14

Table 1.18. : Performance of early maturing pigeonpea entries in NGLT-3 during 1982 kharif at Hisar.

Entry No.	Pedigree	Row Spac. (cm)	Growth Habit	Days to Fl.	Plant Height (cm)	Days Seed to Pod Mat.	Seed/Plant (g)	Plant Stand (m <sup>2</sup> )	100 Seed Yield (kg/ha)	Yield Rank	Plant Stand/Plot	
1	Frabhat	30	DT	72	211	132	3.16	16.59	6.35	2133	21	108
2	"	30	DT	73	208	125	3.36	16.71	6.07	2095	21	29
3	U488-12	30	NDT	96	279	133	3.32	15.74	7.25	2467	15	102
4	"	60	NDT	96	244	134	3.19	7.52	7.15	2552	6	33
5	Coop-1 207-H9-H21-H3-H5	30	DT	70	174	129	2.98	16.29	7.77	2569	6	119
6	"	60	DT	66	167	127	2.32	7.29	7.56	2413	12	32
7	Coop-1 207-H9-H21-H3-H5	30	DT	66	177	127	2.96	14.35	8.36	2901	4	93
8	"	60	DT	66	171	122	2.76	7.06	8.66	2772	13	31
9	78747-Coop-1 207-H9-H21-H3-H5	30	DT	67	166	121	2.66	13.66	8.91	2652	13	89
10	"	60	DT	67	154	121	2.41	9.14	9.26	1806	22	40
11	"	30	DT	65	161	122	2.76	14.04	8.46	2411	14	91
12	"	60	DT	65	154	122	2.98	8.22	8.46	2465	10	36
13	78747-Coop-1 207-H9-H21-H3-H5	30	DT	66	167	123	2.76	14.43	7.45	2276	18	94
14	"	60	DT	67	167	121	2.70	7.96	7.82	2278	16	31
15	"	30	DT	66	157	123	2.88	14.04	7.31	2507	9	91
16	"	60	DT	67	157	124	2.88	6.94	7.62	2703	1	30
17	Coop-1 207-H9-H21-H3-H5	30	DT	71	206	127	3.01	15.43	7.26	3013	1	87
18	"	60	DT	71	197	129	2.73	6.90	7.41	2564	3	29
19	Coop-1 207-H9-H21-H3-H5	30	DT	66	171	124	2.94	15.52	7.37	2400	16	120
20	"	60	DT	66	167	127	2.84	6.37	7.51	2176	19	26
21	"	30	DT	69	191	126	2.78	16.90	7.36	2504	10	110
22	"	60	DT	67	177	121	3.06	7.77	7.31	2311	18	34
23	Coop-1 207-H9-H21-H3-H5	30	DT	66	186	129	3.14	14.81	7.06	2419	13	96
24	"	60	DT	66	177	127	2.90	6.48	7.31	2442	11	28

Entry No.	Pedigree	Row Spec. (ca)	Breath Habit Fl.	Days to Plant (ca)	Plant Height (ca)	Days Seed/ Pod Mat.	Seed/ Plant (oz)	Plant Stand (a2)	100 Seed Yield (kg/ha) at (g)	Row Plant	Plant Stand/ Plot
13	Comp. 1 OBT-M6-M2-M8	30	BT	68	152	123	3.08	15.05	7.66	2034	11 98
13	"	60	BT	66	134	118	3.30	6.94	8.04	2315	14 30
14	Comp. 1 OBT(LS1-M5-M8)	30	BT	73	190	131	2.94	17.13	8.17	2523	8 111
14	"	60	BT	69	197	129	3.30	8.68	7.81	2529	7 38
15	74065-7-6-9-M1BT1-M8-M8-M8-M1-M8	30	BT	68	147	118	3.05	17.28	6.32	2296	17 112
15	"	60	BT	66	147	119	2.85	9.03	6.42	2350	13 39
16	77007-M4-M4-M8-M8	30	BT	76	214	133	4.63	14.58	11.12	2994	2 95
16	"	60	BT	73	211	131	4.51	8.22	10.96	2575	6 34
17	Comp. 1 OBT(Bulk)-M4-M1-M8	30	BT	77	211	128	2.92	17.21	6.91	2442	12 112
17	"	60	BT	79	212	130	3.14	8.91	7.30	2477	9 39
18	74068-2-8-2-8-MOBT-M8-M8-M8-M2-M1-M8	30	BT	66	180	122	3.22	13.43	8.55	1929	20 87
18	"	60	BT	67	171	122	3.10	7.29	8.75	1696	24 32
19	74068-MBT1-8-34-8-MOBT1-8-M1-M8-M1-M1-M8	30	BT	70	190	127	2.94	13.50	9.26	2566	7 88
19	"	60	BT	71	191	122	2.86	8.68	9.21	2627	3 38
20	Comp. 1 OBT-M-8-M1C-M2-M8	30	BT	66	181	128	3.22	13.97	8.10	2261	19 91
20	"	60	BT	68	171	124	3.14	9.14	8.02	2234	17 40
21	74065-7-6-9-M1BT1-8-M8-M1C-M1-M8	30	BT	63	150	116	3.00	17.82	6.76	2600	5 116
21	"	60	BT	66	152	125	2.78	8.22	6.72	2679	2 36
22	74068-118-4-1-MOBT2-8-M8-M8-M1-M1-M8	30	BT	72	162	130	2.74	13.43	7.62	2126	22 87
22	"	60	BT	71	163	131	2.58	7.87	7.71	2060	22 34
23	74146-1MOT8-M81-111MOT2-8-M1-M4-M1-8-M8	30	BT	68	156	125	2.92	17.05	7.31	2843	3 111
23	"	60	BT	66	147	124	2.78	8.68	7.46	2494	8 38

Entry No.	Podipve	Age	Growth	Days	Plant	Days	Seed/	Plant	100	Yield	Plant
		Sec.	Habit	to	Height	to	Pod	Stand	Seed	(kg/ha)	Stand/
		(cm)		Fl.	(cm)	Ret.		(a2)	wt (g)		Plot
24	78338 (77907-5a05-4)										
	-00-0-00	30	BT	69	163	131	2.93	14.66	7.46	2195	20 93
26		60	BT	66	108	125	2.81	9.26	7.81	2110	20 40
	1 (Grand Mean)	30		69.03	100.94	127.90	3.03	15.01	7.76	2446	- 99.86
		60		69.00	173.52	126.33	3.00	7.83	7.85	2339	- 53.83
	Row spacing SEa			0.46	1.31	0.04	0.10	-	0.03	19	- 0.29
	C/2			3.23	3.63	0.16	15.55	-	1.61	4	- 2.14
	Entries SEa			1.05	6.54	2.16	0.21	-	0.20	123	- 6.23
	C/1			2.14	5.27	2.41	9.93	-	3.58	7	- 13.10

Table 1.19. : Performance of early maturing pigeonpea entries in MBL-4 during 1982 kharif at Anwar.

Entry No.	Pedigree	Growth Habit	Days to Flower	Plant Height (cm)	Days to Maturity	Seed/ Pod	Plant Stand (m <sup>2</sup> )	100 Seed wt(g)	Yield (kg/ha)	Plant Stand/ Plot
10	74092-MBT110-102-2-M-110T1-0a-M1-M4-M0-M0	DT	95	206	142	3.46	15.00	11.51	2117	98
46	74092-MBT110-102-2-M110T4-0a-M1-M4-M1-M0	DT	93	210	140	4.11	17.46	10.41	2058	113
26	77007-M4-M4-M0(8504xPrabhat)xICPL-10-M0	DT	96	219	141	4.00	18.05	10.73	2050	117
42	Comp.1 10T1-M1-M0	DT	78	206	139	3.40	16.46	7.51	2026	107
24	78352(Comp.1 00T-5x74092-F6)-M12-M0	DT	94	196	139	3.58	17.09	8.00	2076	111
43	Comp.1 00T-1-M0-M24-M2-M0	DT	93	199	136	3.07	16.15	6.77	2041	105
29	74146-0T0-15-2-M10T2-0a-M0-M1-M0-M0	DT	76	160	140	3.5a	15.72	9.0a	2071	102
25	78352(Comp.1 00T-5x74092-F6)-M3-M0	DT	96	215	144	3.11	14.93	6.41	2084	97
5	74092-0-29-1-M4-0a-M0-M0	DT	96	217	141	3.31	16.17	11.00	2067	105
05	77001(76115xPrabhat)-M21-M3-M1-M0	DT	93	220	136	3.41	16.19	6.93	204a	105
01	74068-7-0-9-M10T1-0a-M0-M3-M1-M0	DT	96	212	138	3.40	16.72	6.83	2027	106
11	74065-7-0-9-M10T1-0a-M0-M0-M0-M0	DT	92	222	138	3.72	14.47	6.29	2150	94
3	Comp.1 00T-M3-M6-M0	DT	93	205	137	3.09	15.08	7.76	2119	97
21	78377(74092-F7xComp.1 00T)-M10-M0	DT	93	200	138	3.20	15.69	9.03	2109	89
38	Comp.1 00T(86)-M20-M0	DT	93	212	137	3.26	13.08	3.24	2700	90
40	74146-0T0-13-2-M10T2-0a-0-110-M1-M0	DT	78	174	141	3.46	15.17	9.02	2094	96
14	(Parent A-2x A.albicans)-M6-M0	DT	84	183	140	3.59	15.92	6.20	2085	90
2	UP46-120	NDT	16a	202	144	3.37	15.04	7.50	2071	103
44	76115 (Prabhat:8504 -M100-M10-M2-M0	DT	85	206	137	4.30	14.70	8.07	2012	95
22	78352(Comp.1 00T-5x74092-F6)-M2-M0	DT	94	203	142	3.94	14.03	9.00	2030	91
31	78300-P4-P4-M0	DT	87	203	139	4.27	14.09	8.90	2086	91
49	78344(77007-14x8504 -M1-M4-M0-M0	DT	93	214	136	3.12	16.90	9.04	2049	110
23	78354(Comp.1 00T-7x74092-F6)-M1-M0	DT	91	197	140	3.30	16.02	6.79	2492	104
36	Comp.1 00T(55)-M1-M0	DT	92	213	138	3.90	15.70	6.75	2481	102
8	74146-0T(0)-15-2-(00T10-M0-M3-M0-M0	DT	85	198	137	3.77	14.72	6.98	2414	95
30	74092-MBT110-102-2-M110T4-M0-M1-M2-M0-M0	DT	97	194	142	3.29	15.26	9.94	2070	92
15	Comp.1 00T-M0-M20-M0-M0	DT	101	227	142	3.74	16.01	10.12	2222	104
35	74068-2-0-0-0-M0T1-0a-M0-M3-M1-M0	DT	75	202	139	3.35	14.00	8.50	2330	93
13	78348(Comp.1 00T-1x74068-F0)-M15-M0	DT	94	188	142	3.22	16.77	8.57	2325	109
41	78000-71-0-M10T1-0a-M1-M3-M3-M0	DT	95	187	143	3.62	15.32	10.75	2315	99
6	74436-31-0-1-1-M2-M0-0a-M0-M0-M0	DT	94	205	142	3.05	15.29	8.56	2284	99
20	78376(74070-F8xICPL-3)-M6-M0	DT	93	204	140	3.61	14.66	8.99	2277	95
16	78348(Comp.1 00T-2x74092-F0)-M15-M0	DT	94	197	141	3.30	16.20	8.04	2264	105
37	Comp.1 00T(55)-M9-M0	DT	93	229	138	3.10	15.33	8.38	2257	99
39	74068-11-0-4-1-M0T1-0a-0-M0-M1-M1-M0	DT	93	166	140	3.06	16.03	8.61	2242	109
0	74076-6-0-1-0-0-M110T1-M0-M0-M0-M0	DT	97	220	142	3.03	14.46	10.09	2220	94
27	Comp.1 00T(55)-M7-M0	DT	93	170	140	3.62	14.25	7.35	2167	92
12	76115-M0-M100-M0-M0-M0	DT	102	210	140	3.53	15.40	10.63	2145	100
28	74146-0T0-15-2-M10T2-0a-M0-M0-M0-M0	DT	82	174	137	3.31	14.07	9.30	2129	96

Entry No.	Pedigree	Growth Habit	Days to Flower	Plant Height (cm)	Days to Maturity	Seed Pod wt (g)	Plant Stand (t/ha)	100 Seed wt (g)	Yield (kg/ha)	Plant Stand/Plot
17	78349(Coop.) 001-2x74048-FB1-M1-MB	BT	94	179	141	2.97	16.87	8.32	2099	107
32	Comp. I Pant-20-MB	BT	77	157	138	3.21	16.71	7.79	2072	95
37	77001-M27-M1-MB(76:15aPrabhat)-MB	BT	93	210	140	3.75	10.90	11.06	2031	71
38	78347(Coop.) 001-2x74048-FB1-M9-MB	BT	80	197	167	3.49	16.49	9.87	1997	96
47	74092-MD11:1-102-1-1107-0e-MB-MB-M2-MB	BT	94	212	140	3.40	14.82	8.63	1971	96
1	Prabhat	BT	89	217	133	3.01	15.49	6.52	1965	100
6	SP-281-MB	BT	98	225	144	3.10	15.10	12.49	1935	98
7	74075-5-8-3-1-M3GT2e-MB-MB-MB-MB	BT	95	194	140	3.73	13.14	9.73	1929	85
24	Comp. I 001(LS)-M17-MB	BT	77	162	140	3.84	14.87	7.47	1799	96
16	78347(Coop.) 001-2x74048-FB1-M9-MB	BT	95	179	144	3.05	16.46	9.36	1792	107
	I (Grand Mean)		91.00	202.37	140.13	3.47	15.29	8.87	2457	99
	SEa *		1.33	6.85	1.40	0.15	-	0.18	119	7
	CV %		2.53	3.86	1.73	7.39	-	3.45	6	12



Table 1.20 : Performance of early maturing pigeonpea entries in ABLT-5 during 1982 kharif at Hisar.

Entry No.	Pedigree	Growth Habit	Days to Flower	Plant Height (cm)	Days to Maturity	Seed/ Pod	Plant Stand (m <sup>2</sup> )	100 Seed wt (g)	Yield (kg/ha)	Plant Stand/Plot
28	76115(PrabhatxBS04)-M3-M2-M2-M0	DT	88	192	141	4.44	7.65	10.68	2922	32
14	78013-1-0-N10T-0-0-M2-M6-0-M1-M0	DT	72	176	139	3.34	7.03	11.32	2993	30
32	74092-M0T0-1-1-N10T2-0-0-0-M3-M1-M0	DT	72	202	137	3.31	7.88	8.77	2814	34
4	78333(Comp.) 00T-7x74068-F0)-M1-M0	DT	69	161	141	3.15	9.09	11.09	2566	43
5	UPAS 120	MDT	98	225	141	3.26	8.45	7.11	2530	37
29	(73001-00-012-3xPrabhatxPrabhat)-M1-M3-M1-M0	DT	86	198	138	3.44	7.99	8.04	2520	33
6	78377(74092-F7xComp.) 00T)-M3-M0	DT	69	171	137	3.12	9.11	9.01	2510	39
39	76115(PrabhatxBS04)-M151-M7-M3-0-M0	DT	93	195	142	4.64	8.30	10.05	2453	36
19	76115(PrabhatxBS04)-M174-M4-M1-M0	DT	71	201	137	2.78	8.49	7.97	2448	37
22	Comp.1 00T-M5-M7-0-M2-M0	DT	68	155	135	3.10	8.61	8.12	2431	37
27	74092-M0T0-1-1-N10T2-0-0-0-M1-M3-M0	DT	69	184	138	3.24	8.31	8.28	2424	35
20	76115(PrabhatxBS04)-M151-M2-M1-M0	DT	79	197	137	2.72	8.23	7.64	2421	36
13	74092-M0T0-S2-1-M10T2-0-0-M1-M4-M1-M0	DT	72	190	137	3.22	6.28	10.72	2384	27
5	78334(Comp.) 00T-7x74092-F0)-M2-M0	DT	72	192	139	3.41	7.77	9.35	2325	34
18	75000-71-0-N10T1-0-0-M3-M5-0-M3-M0	DT	73	196	136	3.25	7.07	8.25	2212	31
23	Comp.1 00T(F3)-M00T-0-0-0-M1-M1-M0	DT	82	152	131	3.32	7.25	8.15	2200	31
11	74068-M0T1-1-1-1-M00T1-0-0-0-M0-0-M2-M5-M2-M0	DT	61	202	132	3.06	7.96	8.16	2259	30
21	Comp.1 10T-M0-M0	DT	95	226	140	3.54	7.78	8.14	2244	34
23	74146-0T(0)-0-2-M00T1-1-0-M0-0-M2-M2-M2-M0	DT	70	161	138	3.48	7.47	9.65	2222	32
9	Comp.1 00T(LS)-M12-M0	DT	93	205	139	3.33	7.57	10.61	2178	33
20	77007[(BS04xPrabhat)xICPL-10]-M6-M9-M1-M0	DT	89	197	139	4.14	7.14	10.22	2172	31
3	78331(Comp.) 00T-5x74068-F0)-M3-M0	DT	71	148	135	3.21	7.85	8.80	2167	34
7	78334(Comp.) 00T-7x74092-F0)-M5-M0	DT	72	202	137	2.49	8.34	8.48	2155	36
16	77007[(BS04xPrabhat)xICPL-10]-M4-M2-M2-M0	DT	74	198	136	4.41	6.44	9.91	2065	28
34	76115(PrabhatxBS04)-M114-M7-M1-0-M0	DT	80	185	135	4.31	7.80	9.31	1976	34
1	Prabhat	DT	72	186	132	3.21	6.92	5.96	1951	30
8	Comp.1 00T(LS)-M14-M0	DT	86	199	139	3.48	7.03	8.49	1934	30
30	76115(PrabhatxBS04)-M3-M3-M3-M0	DT	86	208	136	4.10	7.69	10.62	1933	33
31	Comp.1 10T-M19-M1-M0	DT	76	206	140	2.87	7.56	9.27	1925	33
24	74076-1-0-M52-1M0T1-0-0-M2-M6-0-M2-M0	DT	72	158	131	3.21	7.13	7.62	1922	31
17	76115(PrabhatxBS04)-M100-M3-M1-M0	DT	73	203	137	2.66	7.70	9.25	1914	33
12	74075-1-0-M02-1M0T1-0-0-M2-M3-M1-M0	DT	79	170	130	3.19	8.11	7.85	1898	35
16	75000-39-0-N10T6-0-0-M1-M2-M2-M0	DT	72	187	136	3.37	6.37	7.54	1865	28
10	74068-M0T1-0-34-0-M00T1-0-0-0-M0-0-M2-M1-M1-M0	DT	76	194	137	2.82	10.86	8.15	1767	38
36	78319(74092-F7xICPL-4)-M1-0-M0	DT	69	219	140	3.44	6.25	9.01	1667	27
26	74068-M0T1-0-11-2-M00T1-0-0-M1-0-0-M2-M0	DT	95	195	138	3.49	6.21	9.05	1526	35
Σ (Grand Mean)			78.72	191.04	137.04	3.47	7.69	8.73	2219	33.23
SEs			0.90	5.87	1.48	0.13	-	0.22	140	2.49
CV %			1.98	5.32	1.88	4.55	-	4.30	10	12.95

Table 1.21 : Performance of early maturing pigeonpea entries in ABLI-6 during 1982 kharif at Meer.

Entry No.	Fedigree	Row Spac. (cm)	Growth Habit	Days to Flower	Plant Height (cm)	Days to Maturity	Seed/ Pod	Plant Stand (m <sup>2</sup> )	100 Yield Seed (Kg/ha) at (g)	Rank	Plant Stand/ Plot	
1	UP45-120	30	NDT	104	214	143	2.86	19.75	6.35	2168	14	128
1	"	60	NDT	103	224	142	3.24	7.75	7.05	2263	6	34
2	Prachar	30	DT	91	198	188	3.06	18.83	6.32	1767	23	122
2	"	60	DT	91	190	137	3.21	8.22	6.30	1736	21.5	36
3	ICPL-117	30	DT	76	170	140	2.70	16.74	8.91	2616	3	109
3	"	60	DT	75	183	142	3.10	9.05	9.11	2546	2	39
4	ICPL-118	30	DT	97	197	141	3.02	24.69	9.81	2269	5	161
4	"	60	DT	92	171	137	2.70	6.71	10.71	2581	1	29
5	ICPL-145	30	DT	95	200	147	2.88	14.27	9.96	1906	19	93
5	"	60	DT	94	186	150	3.04	8.80	10.26	1991	16	38
6	ICPL-117	30	DT	114	216	145	3.32	14.58	10.02	1902	20	95
6	"	60	DT	112	212	149	2.98	7.75	10.11	1777	20	34
7	UP-117-46	30	DT	77	179	179	3.46	11.34	8.97	1794	21	74
7	"	60	DT	77	178	177	3.02	8.56	11.12	2147	9	37
8	78-122-1-8-11-2-6-11-42-46-48	30	DT	97	214	140	3.04	15.51	8.66	2126	15	101
8	"	60	DT	96	202	147	2.97	8.73	6.82	2130	10	36
9	7508-425-3-Prachar-Prachar-21-5-46	30	DT	96	212	149	3.28	21.99	8.16	2608	4	143
9	"	60	DT	97	206	146	3.42	8.80	6.41	2164	8	38
10	GP-135-48	30	DT	94	184	146	3.23	18.56	10.26	1964	18	117
10	"	60	DT	94	189	145	4.06	6.94	11.56	2054	14	30
11	76-115-4-112-11-48-48	30	DT	89	176	143	3.06	17.28	9.12	2400	9	112
11	"	60	DT	96	166	146	3.01	8.56	9.37	1944	18	37
12	76-115-4-112-11-48-48	30	DT	97	214	156	3.51	17.59	9.60	2211	12	114
12	"	60	DT	92	204	151	3.28	9.49	9.21	2049	15	41
13	76-115-4-112-11-48-48	30	DT	98	179	148	2.62	15.35	9.06	2195	13	100
13	"	60	DT	99	173	152	2.64	8.43	9.27	2186	12	37
14	74-115-4-112-11-48-48	30	DT	98	196	149	3.38	16.90	8.76	2465	8	110
14	"	60	DT	96	164	146	3.22	9.61	9.21	2164	6	42

Entry No.	Package	Row Growth	Plant Height to Top	Plant Height to Base	Plant Height	100 Voids	Plant Height	Plant			
15	79025-1-111071-40-42-43-40-40	30	07 102	209	156	3.19	11.00	10.75	2202	11	77
15	"	60	07 105	205	156	3.26	10.65	11.32	1726	21.5	46
16	0P-184-40-40	30	07 99	176	146	3.22	21.32	12.32	1771	22	130
16	"	60	07 94	180	149	3.42	8.54	15.22	2006	17	37
17	70347(Camp.1 007-2-74048-01-411-40	30	07 94	104	142	3.46	10.79	9.91	2037	17	119
17	"	60	07 90	167	140	2.75	9.03	10.11	1905	17.5	39
18	70348(Camp.1 007-2-74052-01-411-40	30	07 02	105	139	3.40	20.45	8.72	2070	2	123
18	"	60	07 01	174	141	3.70	10.65	8.01	2164	8	44
19	70350(Camp.1 007-2-74052-01-414-40	30	07 04	102	141	3.34	13.66	8.22	2206	16	84
19	"	60	07 04	177	142	3.14	9.14	8.67	2003	12	49
20	70351(Camp.1 007-2-74052-01-414-40	30	07 101	199	145	3.72	15.90	10.57	1705	24	103
20	"	60	07 97	152	144	3.82	7.18	10.22	1605	17.5	31
21	74092-07-01-27-0-111071-40-41-40-40-40	30	07 95	187	144	3.90	10.02	9.91	2053	16	65
21	"	60	07 92	185	144	4.00	7.41	9.91	2118	11	32
22	74110-07-01-27-0-111071-40-41-40-40-40	30	07 98	194	141	3.16	17.15	7.56	2021	6	111
22	"	60	07 93	209	137	3.44	9.14	7.62	2322	5	40
23	70357-07-01-27-0-111071-40-41-40-40-40	30	07 101	176	151	3.02	17.13	12.16	2009	1	111
23	"	60	07 102	187	151	3.74	8.51	12.07	2004	3	35
24	74092-07-01-27-0-111071-40-41-40-40-40	30	07 00	191	152	3.26	21.76	10.01	2169	7	141
24	"	60	07 94	206	149	3.40	9.26	10.01	2019	4	40
Average Mean		30	94.06	195.25	144.67	3.25	17.09	9.32	2233	-	110.77
Low Standard Dev.		30	93.42	190.30	145.17	3.60	8.62	9.60	2115	-	37.25
High Standard Dev.		30	0.75	2.63	0.29	0.00	-	0.10	76	-	9.02
CV %			3.90	6.67	0.99	1.00	-	4.32	47	-	53.09
Entries SD			1.14	7.08	1.94	6.20	-	0.23	107	-	11.75
CV %			1.72	5.70	1.09	0.56	-	3.40	7.00	-	22.42

Table 1.22 : Performance of early maturing pigeonpea entries in ABLI-7 during 1982 kharif at Hissar.

Entry No.	Pedigree	Row Spac. (cm)	Growth Habit	Days to Flower (ca)	Plant Height (cm)	Seed/ Pod (g)	Plant Stand (a2)	100 Seed wt (g)	Yield (Kg/ha)	Root Stand/ Plot	Plant Stand/ Plot	
1	Prabhat	30	BT	75	197	130	3.18	14.43	6.52	1917	23	94
1	"	60	BT	74	187	131	3.25	9.72	6.46	2025	19	42
2	UP48-12	30	MBT	96	245	145	3.16	13.43	7.60	2153	17	87
2	"	60	MBT	98	233	139	3.38	6.25	7.01	2326	12	27
3	ICPL 109	30	BT	99	205	147	3.40	12.42	10.15	2782	5	81
3	"	60	BT	97	209	147	3.32	6.48	10.55	2792	13	28
4	ICPL 87	30	BT	99	198	147	3.68	16.20	11.21	3048	1	105
4	"	60	BT	98	197	142	3.72	8.22	11.15	2645	2	36
5	ICPL 154	30	BT	98	214	144	3.00	13.50	9.72	2647	9	88
5	"	60	BT	95	214	142	3.26	8.10	9.71	2743	1	35
6	ICPL 155	30	BT	95	230	147	3.28	13.27	8.47	2770	6	86
6	"	60	BT	97	195	144	3.40	5.09	8.16	2402	10	27
7	ICPL 312	30	BT	94	206	139	3.06	13.66	11.31	2870	3	89
7	"	60	BT	97	190	136	3.94	7.18	11.26	2326	12	31
8	ICPL 146	30	BT	97	204	146	3.64	14.74	9.72	2716	7	96
8	"	60	BT	94	191	144	3.72	9.38	9.85	2593	5	41
9	74092-8-1a-1-M1-5a-M5-M5-M5	30	BT	76	214	141	3.74	13.66	8.60	2886	2	89
9	"	60	BT	77	192	136	3.77	7.41	8.21	2517	6	32
10	74092-8-1a-1-M2-5a-M5-M5-M5	30	BT	76	205	138	4.12	13.43	8.87	2674	8	87
10	"	60	BT	72	191	141	3.76	7.06	9.52	2627	3	31
11	75013-1-8-M1-5a-M2-5a-M5-M5-M5	30	BT	68	185	144	3.68	17.26	11.17	2562	10	112
11	"	60	BT	70	172	139	3.52	6.13	11.31	2604	4	27
12	74092-8-52-1-M2-5a-M2-M1-M5-M5	30	BT	75	190	141	3.58	14.12	9.70	2454	12	92
12	"	60	BT	73	175	139	3.76	6.48	9.55	1921	21	28
13	77001-M27-1-M5-M5	30	BT	75	230	144	3.48	17.13	7.76	2558	11	111
13	"	60	BT	70	260	138	3.56	8.45	7.82	2037	18	37
14	74076-6-5-1-5-M5-M5-M5-M5	30	BT	96	212	145	2.79	15.05	9.62	2307	15	98
14	"	60	BT	93	194	141	3.02	6.60	9.11	2280	14	29

Entry No.	Pedigree	Row Spc. (cm)	Growth Habit	Days to Flower	Plant Height (cm)	Days to Maturity	Seed/Pod (g)	Plant Stand (m <sup>2</sup> )	100 Y. Yield Seed (kg/ha)	100 Y. Yield Stalk (kg)	Rank Plant Stand/Plot
15	OP-262-MB	30	DT	97	211	145	3.62	15.66	9.95	1925	22 162
15	"	60	DT	94	190	140	3.46	6.94	10.57	1829	22 30
16	OP-106-MB	30	DT	99	234	147	3.18	13.12	12.91	1894	24 85
16	"	60	DT	93	205	139	3.68	7.41	12.30	2251	16 32
17	OP-232-MB	30	DT	98	196	144	3.16	15.51	11.37	2037	21 101
17	"	60	DT	93	203	142	3.12	5.44	11.22	1644	23 24
18	78376 (74078-FBxICPL-5)-M1-MB	30	DT	70	194	139	3.48	14.51	7.45	2122	18 94
18	"	60	DT	73	189	138	3.44	8.45	7.77	2454	8 27
19	ICPL 151	30	DT	97	200	142	3.68	12.96	10.72	2801	4 84
19	"	60	DT	95	208	138	3.38	7.53	11.06	2366	11 32
20	74205-MBT-16-174-1871-20-M1-M3-M5-M6	30	DT	99	202	149	3.50	16.90	11.46	2350	14 110
20	"	60	DT	95	212	147	3.28	6.82	10.91	1968	20 26
21	Comp. 1 110T-M1-M2-M3	30	DT	99	198	144	3.13	14.20	9.30	2660	20 92
21	"	60	DT	96	213	141	3.26	8.22	9.56	2257	15 36
22	Comp. 1 110T-M1-M2-M3-M5	30	DT	98	237	143	3.58	15.43	7.21	2261	16 100
22	"	60	DT	97	225	142	3.62	7.29	8.77	2415	9 32
23	76115 (Prabhata 504)-M2-M3-M1-M2-M5	30	DT	99	244	147	3.22	15.43	10.26	2114	19 106
23	"	60	DT	99	235	147	3.86	6.83	10.02	2141	17 30
24	73081-MDD72-3xPrabhataxPrabhata-M2-M1-M5	30	DT	98	219	140	3.50	15.20	7.66	2436	15 99
24	"	60	DT	97	205	141	3.18	8.53	7.96	2477	7 36
		30		91.19	210.60	143.00	3.46	14.63	9.53	2431	- 94.83
		60		89.91	200.90	140.41	3.49	7.29	9.49	2298	- 31.50
	Row spacing SEa *			0.40	4.06	0.67	0.06	-	0.01	9	- 3.96
	CV %			2.14	5.72	2.30	9.00	-	0.62	2	- 30.70
	Entries SEa *			1.00	6.43	2.02	0.22	-	0.28	130	- 6.49
	CV %			1.57	4.41	2.02	8.92	-	4.12	8	- 14.53

Table 1.23: Performance of early maturing pigeonpea entries in AMBT-1 during 1982 kharif at Nisar

Entry No.	Pedigree	Row Spac. (cm)	Growth Habit	Days to Flower	Plant Height (cm)	Days to Maturity	Seed/ Pod	Plant Stand (m <sup>2</sup> )	100 Yield Seed (Kg/ha) wt(g)	Rank	Plant Stand/ Plot
1	ICPL 1	30	NDT	100	225	142	3.28	15.29	8.11	3094	1 101
1	'	60	NDT	100	218	133	3.36	7.87	8.15	3056	1 34
2	ICPL 3	30	NDT	111	228	150	3.22	15.97	8.51	2562	5 104
2	'	60	NDT	111	256	149	3.26	4.63	8.32	2552	6 30
3	ICPL 269	30	NDT	100	217	143	3.52	18.21	10.36	2211	17 118
3	'	60	NDT	100	220	143	3.97	5.44	10.56	2002	19 24
4	ICPL 142	30	NDT	98	227	137	3.20	13.97	8.27	2546	7 91
4	'	60	NDT	95	216	140	3.08	6.37	8.20	2390	8 28
5	ICPL 163	30	NDT	97	239	140	3.48	18.21	9.05	2137	19,5 118
5	'	60	NDT	99	217	138	3.73	4.98	8.41	1644	21 22
6	ICPL 161	30	NDT	104	227	149	3.58	15.82	9.75	2851	2 103
6	'	60	NDT	101	223	145	3.33	8.45	10.36	2841	2 37
7	ICPL 142	30	NDT	111	254	151	3.62	12.66	8.47	2631	4 89
7	'	60	NDT	111	227	149	3.50	8.94	8.66	2448	7 30
8	74078-1-2-15-2-H1-H2-H3-H4-H5	30	NDT	100	232	143	3.88	16.74	8.90	2384	11 109
8	'	60	NDT	99	219	142	3.65	6.60	8.52	2338	9,5 29
9	74068-11-2-H1-H2-H3-H4-H5-H6	30	DT	68	175	130	3.33	15.51	7.77	2045	21 101
9	'	60	DT	69	166	122	3.21	7.29	7.91	2141	15 32
10	74068-2-2-2-2-H1-H2-H3-H4-H5	30	DT	66	170	129	3.87	17.44	7.11	2276	15 113
10	'	60	DT	69	169	130	3.15	6.71	7.36	2176	13 29
11	74078-12-2-1-2-H3-H4-H5-H6	30	NDT	96	224	134	3.46	17.13	7.96	2762	3 111
11	'	60	NDT	96	214	125	3.34	7.29	8.37	2581	5 32
12	74209-8-H1-H2-H3-H4-H5-H6	30	NDT	103	226	142	3.76	16.51	9.52	2354	13 107
12	'	60	NDT	104	230	141	3.40	7.99	9.46	2130	16 35
13	60-159-H3-H6	30	NDT	99	218	142	3.15	15.28	7.51	2369	12 99
13	'	60	NDT	97	212	137	3.22	7.06	7.81	2685	3 31
14	SPS Selections from Farmers Field-9	30	NDT	100	232	136	3.22	18.29	6.80	2315	14 119
14	'	60	NDT	98	216	130	3.46	8.80	6.62	2228	10 38

Entry No.	Pedigree	Row Spec. (cal)	Growth to Flower	Days to Plant Height (cal)	Days to Maturity	Seed/ Pod Stand (a2)	Plant Stand (a2)	100 Seed Yield (g)	Yield (g/ha)	Seed Plant Stand Plot		
15	SPB Selection from Farmers Field-22	30	NDT	96	216	136	3.14	16.44	6.92	2254	6	107
15	"	60	NDT	95	217	131	3.52	8.91	6.47	2192	12	29
16	75000-71-8-111-112-113-114-115-116	30	NDT	92	195	135	2.92	15.66	6.27	2160	18	2
16	"	60	NDT	92	224	136	3.66	6.71	7.86	2072	15.5	29
17	75000-29-8-111-112-113-114-115-116	30	NDT	99	231	155	3.56	15.97	11.62	2114	20	106
17	"	60	NDT	95	215	146	3.63	8.90	16.92	2072	15.5	26
18	75000-29-8-111-112-113-114-115-116	30	NDT	97	247	134	3.04	16.05	7.27	2292	10	104
18	"	60	NDT	96	225	137	3.28	6.25	7.60	2205	11	27
19	75000-29-8-111-112-113-114-115-116	30	NDT	73	257	145	3.75	16.44	7.22	245	7	107
19	"	60	NDT	72	250	145	3.52	8.90	7.21	2228	9.5	26
20	75000-155-111-112-113-114-115-116	30	NDT	110	260	150	3.63	14.66	7.56	1613	23	95
20	"	60	NDT	109	270	148	3.92	5.32	7.55	1632	22	23
21	Comp. 1 (NDT-111-112-113-114-115-116)	30	NDT	95	251	133	3.80	15.90	6.47	2542	6	102
21	"	60	NDT	95	238	133	3.61	6.83	8.57	2622	4	30
22	Comp. 1 (NDT-111-112-113-114-115-116)	30	NDT	97	245	136	3.52	16.36	6.21	2214	16	106
22	"	60	NDT	96	246	139	3.52	7.18	6.37	2112	17	31
23	Comp. 1 (NDT-111-112-113-114-115-116)	30	NDT	97	219	136	3.92	15.20	6.46	1975	22	99
23	"	60	NDT	96	236	134	3.76	6.60	6.21	1933	20	29
24	Comp. 1 (NDT-111-112-113-114-115-116)	30	NDT	98	238	133	3.40	14.43	7.92	2137	19.5	94
24	"	60	NDT	97	220	135	3.26	7.95	7.56	2147	14	35
	Grand Mean	30		96.11	225.67	139.71	3.41	16.06	8.21	2261	-	104.62
		60		95.44	222.31	138.15	3.46	6.93	8.27	2272	-	29.94
	Row spacing 30cm			6.13	6.19	0.56	0.07	-	0.27	99	-	5.25
	CV %			1.64	13.52	1.98	10.45	-	4.26	21	-	38.29
	Entries SE			1.27	13.72	2.06	0.27	-	0.17	1.77	-	6.25
	CV %			1.47	6.66	2.10	6.75	-	2.19	10	-	13.22

Table 1.24: Performance of early entering pigeonpea entries in ANSALT-2 during 1982 Short II at Hider

Entry No.	Pedigree	Days to Flower (cal)	Plant Height to Flower (cal)	Days to Pod Maturity (cal)	Seed Yield (kg/ha)	Plant Stand (kg/ha)	100 Seed Weight (g)	Root Yield (kg/ha)				
1	ICPL 0	50	107	113	245	151	3.62	15.66	6.92	2721	2	102
2	"	60	107	115	240	153	3.32	6.80	8.11	2651	2.5	30
3	ICPL 0	50	107	118	272	156	3.20	18.21	8.05	2304	0	110
4	"	60	107	118	285	152	3.26	9.03	8.66	2506	4	30
5	ICPL 0	50	107	118	265	149	3.46	14.51	9.82	2383	5	94
6	"	60	107	122	307	153	3.26	6.68	16.32	2228	6	38
7	ICPL 0	50	107	114	263	145	3.34	15.51	8.52	2079	14	101
8	"	60	107	124	272	148	3.24	9.14	7.01	2057	10	40
9	ICPL 0	50	107	106	183	148	3.24	16.90	9.86	1498	20	110
10	"	60	107	120	225	151	3.66	5.22	10.57	1227	19	36
11	ICPL 0	50	107	116	261	156	3.71	14.66	6.61	1910	17	95
12	"	60	107	117	264	152	3.46	6.34	7.91	1800	12	30
13	ICPL 0	50	107	113	267	152	3.26	14.58	6.92	2253	9	92
14	"	60	107	115	293	154	3.20	6.68	7.27	2118	8	28
15	ICPL 0	50	107	116	250	152	3.81	17.59	5.22	2091	13	114
16	"	60	107	116	270	154	3.26	6.22	10.61	1794	12	36
17	ICPL 0	50	107	115	267	151	4.24	15.51	6.42	2119	12	101
18	"	60	107	115	282	158	3.64	7.64	8.40	2093	9	23
19	ICPL 0	50	107	114	250	139	4.04	14.38	6.85	2465	7	95
20	"	60	107	115	267	146	3.46	6.54	6.60	2187	7	40
21	ICPL 0	50	107	104	253	146	3.46	16.59	7.96	2020	2	100
22	"	60	107	106	224	142	3.72	15.65	7.62	2004	1	46
23	ICPL 0	50	107	112	275	152	3.62	18.06	9.76	2631	4	117
24	"	60	107	117	264	157	3.18	5.61	9.56	2639	3	42
25	ICPL 0	50	107	114	248	153	4.46	14.89	9.81	2527	6	97
26	"	60	107	116	264	155	3.92	6.33	9.72	2269	5	36
27	ICPL 0	50	107	117	304	152	3.86	12.96	9.77	1943	18	94
28	"	60	107	118	306	153	3.62	6.91	10.22	1667	17	39



Entry No.	Pedigree	Row Spac. (cm)	Growth Habit	Boys Plant Height (cm)	Plant Height (cm)	Boys Seed/ Pod Nature	Seed/ Plant Stand (kg/ha)	100 Yield Seed (kg/ha)	Rank	Plant Stand/ Plot		
15	78221 *4075-F9-ICPL-11-N1-B-40	30	NBT	116	259	152	3.48	15.12	8.86	2077	1	98
15		60	NBT	115	269	151	3.54	9.84	8.96	2630	2.2	43
16		30	NBT	115	270	157	3.14	13.90	9.16	2292	11	80
16		60	NBT	117	265	160	3.30	8.91	9.16	1904	11	39
17	ICP 7170	30	NBT	119	266	158	3.04	13.97	9.76	1420	21	91
17		60	NBT	119	305	160	3.44	9.38	9.62	1545	20	41
18	ICP 7427	30	NBT	118	297	162	2.93	12.89	10.37	1208	24	84
18		60	NBT	118	291	159	3.10	7.75	10.96	1146	22	34
19	ICP 7619	30	NBT	118	279	156	3.44	13.19	8.01	1779	23	66
19		60	NBT	119	291	156	3.60	8.45	7.93	1644	18	37
20	ICP 7019	30	NBT	118	279	158	3.24	14.20	7.21	2346	10	92
20		60	NBT	118	282	156	3.16	9.38	7.91	1875	15	41
21	ICP 7626	30	NBT	121	281	154	3.14	14.91	8.12	1917	16	94
21		60	NBT	118	291	162	3.46	7.96	8.17	1956	14	35
22	ICP 7640	30	NBT	123	280	164	3.30	13.35	8.26	1366	22	87
22		60	NBT	125	281	161	3.42	8.16	9.11	1192	21	35
23	ICP 7599	30	NBT	117	282	153	3.68	18.13	8.61	1956	15	118
23		60	NBT	116	294	155	3.80	10.07	8.61	1667	17	44
24	ICP 7176	30	NBT	118	283	159	3.02	15.89	9.72	1466	19	101
24		60	NBT	118	289	161	3.08	8.56	9.75	1701	16	37
Grand Mean		30		116.64	266.46	152.63	3.48	15.19	8.56	2079	-	98.46
		60		114.67	278.77	154.04	3.36	8.68	8.77	1996	-	37.53
Row Spacing SE				0.54	9.10	1.04	0.12	-	0.00	73	-	1.00
CV %				2.22	16.36	3.33	17.74	-	0.38	17	-	7.21
Entries SE				1.14	9.93	1.82	0.27	-	0.24	117	-	4.43
CV %				1.29	5.15	1.68	11.27	-	3.87	8	-	9.21

Table 1.25. : Performance of early maturing pigeonpea entries in AMBL-3 during 1982 kharif at Meer.

Entry No.	Pedigree	Row Spac. (cm)	Growth Habit	Plant Height (cm)	Days to Flower	Days to Maturity	Seed/Pod	Plant Stand (m <sup>2</sup> )	100 Seed wt (g)	Yield (kg/ha)	Rank	Plant Stand/Plot
1	ICPL 4	30	NDT	109	238	149	3.44	16.28	8.01	2708	1	106
2	"	60	NDT	110	239	147	3.18	9.14	8.11	2685	1	40
3	ICPL 4	30	NDT	117	268	151	3.26	15.82	8.01	2954	10	103
4	"	60	NDT	117	253	154	3.27	9.14	8.16	2130	15	40
5	ICPL 201	30	NDT	107	233	147	3.04	14.27	8.70	2022	18	93
6	"	60	NDT	111	232	149	3.50	8.45	8.65	1315	14	37
7	76075-10-1-1-1-2-45-8-48-48-48	30	NDT	110	234	151	3.26	15.90	7.76	2650	3	103
8	"	60	NDT	108	249	148	3.52	9.49	7.91	2338	9	41
9	76075-1-2-1-17-1-1-2-2-2-2-2-2	30	NDT	111	230	151	3.64	16.44	9.56	2168	15	107
10	"	60	NDT	106	252	149	3.31	9.49	9.80	1975	19	41
11	76209-5-478-46-48	30	NDT	117	260	145	3.22	16.44	8.16	2711	11	107
12	"	60	NDT	117	239	151	3.26	8.60	7.56	2616	3	38
13	75035-1-2-1-1-1-1-1-1-1-1-1	30	NDT	112	234	151	3.01	16.20	8.80	2218	14	105
14	"	60	NDT	113	261	151	3.30	8.60	9.61	2176	14	38
15	76219-2-477-42-1-45-49	30	NDT	106	264	151	3.38	18.17	7.61	2515	9	118
16	"	60	NDT	102	271	151	3.22	8.80	8.01	2517	6	38
17	76115 Frabhat 25 4-1-1-1-1-1-1-1-1-1-1	30	NDT	111	231	146	3.26	17.28	9.72	2249	13	112
18	"	60	NDT	111	231	151	3.52	7.97	8.86	2332	16	34
19	76115 Frabhat 25 4-1-1-1-1-1-1-1-1-1-1	30	NDT	107	274	150	3.50	17.28	9.97	1713	22	112
20	"	60	NDT	111	256	162	4.14	8.80	10.42	1620	24	38
21	76178-5-485-86-1-485-48	30	NDT	115	187	157	2.88	16.90	9.56	2261	12	110
22	"	60	NDT	112	208	151	3.24	9.03	8.81	2216	13	39
23	76115-48-416-1-4-4-4 Frabhat 2504-1-1	30	DT	119	276	157	4.28	15.16	9.70	1852	21	102
24	"	60	DT	123	239	163	3.60	7.87	10.25	2025	18	34
25	76115-478-44-1-1-1-1	30	NDT	117	243	159	3.55	13.89	9.05	2670	2	40
26	"	60	NDT	115	227	147	4.16	8.10	8.56	2627	2	35
27	ICPL 25	30	NDT	114	245	149	3.48	17.21	7.62	2952	16	112
28	"	60	NDT	116	231	152	3.86	8.45	7.57	1600	20	37
29	76350-2-1-48	30	NDT	118	263	156	2.90	15.74	10.47	1699	23	102
30	"	60	NDT	119	264	160	3.00	8.56	10.45	1667	22	37

Entr. No.	Pedigree	Row Spacing (cm)	Growth Habit	Plant Height (cm)	Boys to Flower	Boys to Mature	Seed/ Pod	Plant Stand (m <sup>2</sup> )	100 Seed wt (g)	Yield (kg/ha)	Root	Plant Stand/ Plot	
16	Coop. 1 1127-M2-H -D	30	NDT	107	233	153	2.78	17.52	8.37	1995	19	114	
16	"	60	NDT	109	263	158	3.16	8.80	8.95	1794	21	38	
17	76115/Prabhakar 41-M227-M8-M2-M8	30	NDT	118	264	156	3.46	14.35	10.32	2585	5	93	
17	"	60	NDT	118	268	151	4.28	8.45	10.62	2535	2	37	
18	770071 2534 Prabhakar ICPL-101-M8-M2-M3-ME	30	NDT	106	233	156	3.54	15.66	10.22	1902	20	102	
18	"	60	NDT	104	236	151	3.90	7.99	10.41	2254	17	35	
19	76075-24-B-M11NDT-16-M2-16-M2-ME	30	NDT	108	232	149	3.28	16.96	9.66	2572	7	106	
19	"	60	NDT	109	235	152	3.52	9.49	8.67	2604	6	41	
21	76115 Prabhakar 41-M227-M8-M2-M8	30	NDT	111	264	152	3.36	17.67	9.50	1526	24	115	
21	"	60	NDT	111	271	162	3.54	8.52	9.66	1644	27	36	
21	Coop. 1 11NDT-4-4-4	30	NDT	111	264	151	3.20	16.44	8.81	2562	5	107	
21	"	60	NDT	109	266	152	3.36	8.78	9.66	2425	7	38	
22	Coop. 1 11NDT-3-3-3	30	NDT	114	265	156	3.64	16.98	9.66	2645	17	116	
22	"	60	NDT	117	269	152	3.74	6.52	9.37	2172	16	36	
23	74146-ND7118-16-16-11-NDT -B-M8-M2-M2-ME	30	NDT	116	269	154	3.22	16.44	7.81	2612	4	107	
23	"	60	NDT	113	254	152	3.81	7.56	7.66	2344	6	40	
24	74075-16-B-M11NDT-16-M2-16-M2-ME	30	NDT	111	252	146	3.62	17.82	8.22	2581	6	116	
24	"	60	NDT	114	258	146	3.74	9.34	8.11	2269	12	43	
I (Grand Mean)		30		111.21	255.65	151.96	3.34	16.36	8.61	2246	-	106.17	
		60		112.17	252.71	152.48	3.51	8.74	8.96	2199	-	37.75	
Row spacing SE ±					1.27	1.81	0.31	0.05	-	0.12	21	-	0.38
CV 2					1.19	3.49	1.90	7.22	-	6.74	5	-	2.55
Entries SE ±					1.50	11.17	2.18	0.20	-	0.12	176	-	4.16
CV 2					1.90	8.21	2.07	6.11	-	2.45	8	-	8.21

Table 1.24. Performance of early maturing pigeonpea entries in AMBT-4 during 1982 kharif at Udaipur.

Entr. No.	Pedigree	Pod Spc./M <sup>2</sup>	Growth Habit (cm)	Plant Height (cm)	Days to Flower	Days to Maturity	Seed/ Pod	Plant Stand (m <sup>2</sup> )	100 Seed wt(g)	Yield (kg/ha)	Rank	Plant Stand/ Plot
1	ICPL 1	30	NDT	112	254	154	3.32	16.36	8.02	2793	2	106
		60	NDT	112	257	151	3.22	9.03	7.77	2512	4	39
2	ICPL 6	30	NDT	118	285	154	3.35	16.05	7.72	2431	7	104
		60	NDT	117	292	154	2.98	8.33	8.51	2286	12	36
3	ICPL 161	30	NDT	121	285	160	3.50	14.97	10.32	2512	4	97
		60	NDT	117	257	159	3.50	8.91	10.01	2500	8	39
4	ICPL 142	30	NDT	113	265	156	3.45	14.04	8.71	2261	14.5	91
		60	NDT	112	261	153	3.14	9.26	8.57	2176	14	40
5	ICPL 162	30	NDT	118	259	155	3.66	15.12	9.16	1813	19	98
		60	NDT	112	284	157	3.14	10.30	9.11	2095	17	45
6	ICPL 292	30	NDT	115	269	156	3.18	16.05	9.65	2365	11	104
		60	NDT	116	273	157	2.87	9.14	9.67	2054	19	40
7	ICPL 294	30	NDT	117	265	157	2.94	15.90	9.42	2091	17	103
		60	NDT	120	270	162	2.86	8.56	9.66	2078	18	37
8	74073-1-2-10-5-M2-2-1-4B-42-M2	30	NDT	112	262	153	2.84	14.43	8.27	2261	14.5	94
		60	NDT	115	280	154	2.68	8.91	7.86	2130	16	39
9	74075-10-1-1-1-5-M2-5-M2-M2-M2	30	NDT	112	288	156	3.56	17.36	7.95	2454	6	113
		60	NDT	115	287	155	3.38	7.75	8.56	2396	8	34
10	74078-1-8-10-5-M2-5-4B-48-M2	30	NDT	110	280	153	3.58	15.51	7.82	2377	10.5	101
		60	NDT	116	264	156	2.68	7.52	8.11	2377	9	33
11	74077-24-8-M2-8-M2-M2-M2	30	NDT	116	282	156	3.34	15.28	8.51	2242	15	99
		60	NDT	117	276	156	3.04	9.84	7.97	2564	2	43
12	74079-11-8-M2-M2-M2-M2	30	NDT	116	280	157	3.28	15.28	7.25	2319	12	99
		60	NDT	116	260	157	3.46	8.10	7.12	2193	13	35
13	74080-11-8-M2-M2-M2	30	NDT	116	271	154	3.56	16.90	6.71	2951	1	110
		60	NDT	117	274	154	3.82	9.26	6.95	2708	1	40
14	74081-11-8-M2-M2-M2-M2	30	NDT	113	271	157	3.22	15.55	8.65	2311	13	101
		60	NDT	120	275	159	3.14	8.68	8.71	2361	10	38

Entry No.	Podiferous	Non Green Plant	Days	Green Plant	Days	Seed/Plant	Plant	100 Yield	Seed Plant			
		Spec. Root	Weight (g)	to	to	Pod	Seed	Seed (g/100)	Seed/Plant			
15	79000-94-8-W2-80-W1-W8-W8-W8	60	110	277	190	2.16	14.81	9.40	2001	5	96	
15	"	60	107	117	269	1.94	3.24	7.10	5.57	2332	11	31
16	79077-41-6-W2-8-W2-W8-W8-W8	30	107	110	205	1.61	3.16	13.73	10.27	1539	21	69
16	"	60	107	118	273	1.60	3.26	7.06	10.36	1609	23	31
	79111-77-001-40-6-5-5-0-1-A-21	30	107	123	261	1.65	2.64	16.13	9.91	1668	22	105
	-22-W8-W8-W8	60	107	129	311	1.86	2.96	8.56	10.21	1568	24	37
16	79092-8-15-W1-8-W1-W2-W8-W8	30	107	120	290	1.60	2.10	16.98	14.95	2157	16	110
16	"	60	107	122	267	1.62	2.14	9.38	10.76	2161	15	41
16	79209-8-8-W1-W1-W8-W8	30	107	116	285	1.55	2.27	15.97	8.46	2377	10.5	104
16	"	60	107	116	281	1.56	2.94	9.84	6.65	2031	7	43
17	79001-11-10-0-0-0-0-0-0-0-0-0	30	107	121	295	1.55	2.02	12.65	8.15	2662	2	98
17	"	60	107	121	258	1.61	2.78	9.98	7.65	2485	6	45
18	79078-1-8-1-0-0-0-0-0-0-0-0	30	107	116	274	1.60	2.04	14.50	8.25	1667	20	95
18	"	60	107	116	271	1.56	2.16	8.91	8.81	1877	21	39
19	79207-1-1-0-0-0-0-0-0-0-0-0	30	107	121	293	1.56	2.01	14.66	10.47	1821	15	95
19	"	60	107	121	284	1.61	2.23	8.33	10.11	1626	22	26
20	79001-28-6-W11-W2-2-3-W2-4-1-W1-80-W8	30	107	116	261	1.64	2.07	16.20	10.02	2384	9	105
20	"	60	107	112	260	1.62	2.84	8.08	9.66	2846	3	57
24	79077-74078-8-11-0-0-1-W1-5-W8	30	107	117	274	1.57	2.40	17.13	9.31	2611	8	111
24	"	60	107	112	261	1.54	2.36	8.23	8.66	2048	29	26
	From spacing see *	30	116.75	273.44	156.75	3.25	15.54	8.52	2253	-	101.0	
		60	117.51	272.42	155.82	3.17	8.73	8.59	2214	-	27.75	
	CV 1		0.12	0.44	0.31	0.02	-	0.14	1.6	-	1.40	
	Entries see *		0.78	0.79	0.90	3.50	-	7.56	6	-	9.06	
			1.78	1.66	2.00	0.22	-	0.26	132	-	4.00	
			2.15	5.34	2.72	9.47	-	4.16	8	-	8.16	

Table 1.27. Characteristics of the advanced early maturing pigeonpea lines selected during 1982 kharif at Hisar for multilocation testing.

No. ICP Nos.	Pedigree	Entry No. (B2HT)	Growth Habit	Days to Flower	Days to 100% Maturity	Seed Yield (kg/ha)	Seed Color	Yield (g)
82001	Comp. 1-M15-M8-M9	5-18	DT	72	141	7.7	B	2211
	ICPL 1 (C)	5-1	NDT	105	149	7.8	B	2935
82002	Comp. 1-M7-M8-M9-M8	10-4	DT	70	135	7.6	B	2152
82003	74:23-7-8-7-M2-M8-M7-M8-M8	10-9	DT	66	132	8.0	B	3106
82004	Comp. 1-M7-M8-M1-M8-M8	10-18	DT	71	125	8.1	B	3041
	Pragnat (C)	10-2	DT	72	125	6.3	B	2188
82005	73:45-M1-M8-M8-M8	12-2	DT	66	126	7.4	B	2703
82006	Comp. 1-M8-M7-M8-M8	12-5	DT	71	128	7.4	B	3014
82007	74:46-81-11-M1-M4-M1-M8-M8	12-22	DT	67	124	7.4	B	2844
	Pragnat (C)	12-1	DT	72	126	6.2	B	2134
82008	74:74-1-2-M2-8a-M4-M8-M8	3-11	DT	104	152	11.2	B	2956
	ICPL 1 (C)	3-1	NDT	108	150	8.1	B	2732
82009	74:92-16-1-M5-M8-5-M8-M8	4-17	DT	87	149	11.4	C	2959
82010	74:97-M4-M4-M8-M8-M8	4-24	DT	95	148	10.5	C	3272
	ICPL 1 (C)	4-1	NDT	106	149	8.0	B	2824
82011	74:92-29-1-M4-8-M8-M8	5-26	DT	94	146	11.0	C	3097
	ICPL 1 (C)	5-1	NDT	105	149	7.8	B	2935
82012	74:92-30-1-M4-8-M8-M8	12-4	DT	66	130	8.4	B	3498
82013	74:97-M4-M8-M8-M8-M8	12-16	DT	72	132	11.0	C	2994
	Pragnat (C)	12-1	DT	72	126	6.2	B	2134
	ICPL 1 (C)	12-2	NDT	95	135	7.2	B	2952
82014	74:97-M1-M8-M8-M8	13-21	DT	93	137	9.7	B	2693
82015	74:92-2-2-M2-8a-M8-M1-M8-M8	13-29	DT	76	140	9.8	B	2883
82016	76:97-M1-M8-M8-M8	13-21	DT	87	140	8.9	B	2593
82017	74:92-1-2-2-M4-8a-M1-M4-M1-M8	13-42	DT	93	140	10.4	C	3056

Nov ICPL Nos.	Pedigree	Entry No. (B2NT)	Growth Habit	Days to Flower	Days to 100 Mature Seed	Seed Color	Yield (kg/ha)
83018 CC	74146-10-2-HC-B0-M1-M1-M0	13-48	DT	77	140	9.8	B1. 2485
	Prabhat (C)	13-1	DT	89	133	6.5	B 2001
	UPAS 120 (C)	13-2	NDT	105	144	7.5	B 2426
83019	78353-M1-M0-M0-M0	15-4	DT	69	140	11.2	B 2569
83020	75013-1-3-B0-M2-M0-M1-M0	15-14	DT	71	139	11.4	B 2935
83021	76115-M0-M0-M0-M0-M0-M0	15-28	DT	86	141	10.7	C 2963
	Prabhat C	15-1	DT	72	132	5.9	B 1829
	UPAS 120 (C)	15-2	NDT	98	141	7.2	B 2304
83022	78348-M11-M0-M0-M0	16-18	DT	82	139	6.7	B 2679
83023	77007-M10-M1-M0-48-M0	16-23	DT	102	151	12.0	B 2755
	Prabhat (C)	16-2	DT	91	137	6.3	B 1767
83024	74166-20-1-M1-B0-M0-M0-M0-M0	3-12	DT	100	156	10.3	BB 2894
	ICPL 1 (C)	3-1	NDT	108	157	6.1	B 2732
83025	74436-71-5-1-1-1-1-M0-M0 -B0-M0-M0	5-24	NDT	103	145	7.8	B 3087
	ICPL (C)	5-1	NDT	105	146	7.8	B 2925
83026	74076-10-3-1-3-M7-6-M0-M0	18-11	NDT	96	135	6.2	B 2767
	ICPL (C)	18-1	NDT	100	138	6.2	B 3094
83027	Conc. 1-M 0-M0-M0	19-3	NDT	106	152	10.1	B 2585
83028	Conc. 1-M0-M2-M0-M0	19-11	NDT	105	141	7.4	B 3085
83029	78331-M1-5-M0-M0	19-17	NDT	116	154	9.8	B 2577
83030	78321-M1-5-M0-M0	19-15	NDT	116	151	9.0	B 2696
	ICPL (C)	19-1	NDT	117	151	6.1	B 2651
83031	76115-M7B-M4-M0-M0-M0-M0	20-10	NDT	116	148	8.7	B 2676
83032	74146-5-12-1-1-M0-M0-M0-M0	20-27	NDT	110	157	7.9	M 2612
	ICPL 1 (C)	20-1	NDT	109	147	8.1	B 2709

\* B = Brown ; C = Green ; BB = Dark Brown ; M = White and B1. = Black

Table 1.28. : Performance of crossing early maturing pigeonpea lines in summer during 1982 kharif at Hissar.

Entry No.	Pedigree	Plant Stand/Plot	Growth Habit	Days to Flower	Plant Height (cm)	Days to Maturity	Seeds/ Pod	Plant Stand (m <sup>2</sup> )	100 Seed wt (g)	Yield (kg/ha)	Moist Yield (kg/ha)	Dry Yield (kg/ha)
1	ICPL 1	26	NDT	56	245	205	3.20	6.02	8.05	2630	1140	8809
2	ICPL-189-1H-10	23	DT	53	244	203	3.33	5.32	7.44	2567	1261	9167
16	ICPL-161	25	NDT	52	248	212	3.50	5.83	10.07	2544	1329	7778
3	ICPL 87	26	DT	55	215	207	3.77	6.02	10.71	2514	1320	10336
8	ICPL 81	29	NDT	53	230	198	3.38	6.71	7.25	2509	1277	7917
12	ICPL 292	28	NDT	61	285	209	3.16	6.57	9.02	2377	1249	14630
17	7-21	28	NDT	59	276	212	3.26	6.48	7.82	2370	1242	10648
7	ICPL 148	25	DT	52	227	212	3.95	5.83	9.21	2340	1283	10833
11	ICPL 142	22	NDT	59	268	210	3.66	5.74	8.48	2322	1344	9954
5	ICPL 101	29	DT	55	179	203	3.79	6.62	10.99	2292	1144	8333
6	ICPL-164-1H-10	25	DT	51	179	206	3.27	5.79	9.12	2206	1289	7639
10	ICPL-288	29	NDT	67	316	212	3.29	6.76	9.06	2150	1222	12738
18	UPAS 100	28	NDT	62	279	209	3.29	6.39	7.21	2137	1112	6806
9	ICPL 155	28	NDT	53	244	211	3.64	6.39	10.15	2116	1260	8657
13	ICPL 166	24	NDT	55	239	212	3.61	5.51	9.63	2055	1224	9907
4	ICPL 237	21	DT	54	239	203	3.28	4.77	8.09	2088	1228	7778
14	ICPL 267	28	NDT	55	221	208	4.10	5.44	10.07	2060	1224	8148
15	ICPL 85	25	NDT	52	249	204	3.42	5.88	8.02	1926	1263	9069
7		28.13	-	55.22	244.7	207.44	3.49	-	8.97	2291	1252	9351
GEN		22.24	-	51.87	216.9	195	4.12	-	9.14	91	77	735
CV %		11.70	-	7.61	7.91	1.60	8.37	-	2.75	9	14	18



Table 1.29 : Performance of summer sown entries in June sowing during 1962 kharif at Hisar.

Entry No.	Pedigree	No. Growth Days to Plant		Flower Weight (ca)	Days to Seeds/Plant	100 Seed Stand (%)	Yield (kg/ha)	Plant Stand/Plot				
		Flowering	Height									
1	ICPL 151	50	97	95	231	151	3.45	15.46	11.41	2063	6	102
2	"	60	97	96	210	146	3.03	7.41	11.57	2008	5	32
3	ICPL 87	50	97	101	235	151	3.28	15.46	11.56	2090	3	102
4	"	60	97	102	197	161	3.57	8.68	11.61	2000	2	38
5	ICPL 148	50	97	102	221	154	3.60	15.46	9.96	2573	12	102
6	"	60	97	103	216	155	3.42	7.41	9.62	2351	15	32
7	ICPL 267	50	97	75	249	154	3.95	16.82	8.95	1609	16	102
8	"	60	97	75	177	152	3.20	8.85	7.57	1811	17	38
9	ICPL 185-14-16	50	97	105	269	153	3.56	14.81	8.26	2078	5	60
10	"	60	97	104	247	149	3.52	8.91	7.77	2511	1	35
11	ICPL 185-14-16	50	97	97	201	151	3.28	13.42	9.35	1964	16	87
12	"	60	97	95	156	145	3.62	7.15	9.47	2075	14	31
13	ICPL 1	50	97	105	253	150	2.96	15.82	8.21	3013	2	103
14	"	60	97	105	231	148	3.23	7.64	7.82	2928	3.5	33
15	ICPL 2	50	97	103	274	159	3.28	15.74	6.97	2866	4	102
16	"	60	97	103	251	156	3.15	6.02	6.86	2665	9	36
17	ICPL 185	50	97	115	255	157	3.44	15.20	10.57	2755	7	99
18	"	60	97	115	241	152	3.62	6.94	10.76	2575	10	36
19	ICPL 285	50	97	112	223	160	3.04	17.05	9.41	2697	11	111
20	"	60	97	116	249	161	3.62	8.22	9.56	1939	16	36
21	ICPL 142	50	97	110	277	158	3.30	14.81	8.62	2712	9	96
22	"	60	97	113	249	153	3.26	7.41	8.41	2795	6	32
23	ICPL 292	50	97	117	241	157	3.89	15.90	9.62	2315	13	103
24	ICPL 292	60	97	116	227	160	3.96	7.29	9.67	2613	11	32
25	ICPL 168	50	97	109	266	151	3.42	15.90	9.82	2701	10	103
26	"	60	97	104	265	155	3.05	7.41	9.81	4097	1	32
27	ICPL 265	50	97	107	227	150	3.87	16.44	10.15	1902	17	107
28	ICPL 265	60	97	106	258	151	3.92	7.99	9.91	1962	15	35

Entry No.	Pedigree	Row Spacing (cm)	Growth Habit	Days to Flower	Plant Height (cm)	Days to Maturity	Pods/Plant	Plant Stand (m <sup>2</sup> )	Seed Weight (g)	100 Yield (kg/ha)	Rank	Plant Stand/Plot
15	ICPL 80	30	NDT	109	270	152	3.64	16.90	9.06	2200	14	110
15	"	60	NDT	113	238	152	3.66	8.68	8.37	2330	12	38
16	ICPL 101	30	NDT	112	228	156	3.42	13.81	10.06	3171	1	90
16	"	60	NDT	115	240	155	3.40	6.63	10.42	2928	3.5	30
17	Y-21	30	NDT	116	286	161	3.14	16.13	7.81	2110	15	105
17	"	60	NDT	118	263	157	3.16	7.27	7.55	2703	8	32
18	UPAS 120	30	NDT	104	262	144	3.42	16.13	6.92	2735	8	105
18	"	60	NDT	106	257	149	3.21	7.41	7.47	2743	7	32
Grand Mean		30		105.47	256.25	151.5	3.34	-	9.21	2575	-	101
		60		106.56	227.14	151.0	3.41	-	9.11	2606	-	33
Row spacing SEM				0.35	1.67	1.33	0.04	-	0.00	17.1	-	0
D.F.				1.56	2.87	3.74	3.07	-	0.26	3	-	3
Entries SEM				1.34	12.56	2.15	0.19	-	0.20	102	-	5
D.V.				1.79	7.21	2.01	7.90	-	3.02	5	-	10

Table 1.20. : Comparative performance of early pigeonpea lines in summer and early June sowings during 1981 at Hisar.

Lines	DAYS TO FLOWER			DAYS TO MATURE			PLANT HEIGHT (cm)			YIELD (kg/ha)		
	March	June	Sum	March	June	Sum	March	June	Sum	March	June	Sum
	Sown	Sown	Sown	Sown	Sown	Sown	Sown	Sown	Sown	Sown	Sown	Sown
	30ca	60ca		30ca	60ca		30ca	60ca		30ca	60ca	
ICPL 181	55	95	96	207	151	146	199	231	210	2292	2863	2818
ICPL 97	55	101	102	207	151	161	215	235	197	2514	2990	2980
ICPL 148	55	102	103	212	154	155	227	221	216	2340	2572	2251
ICPL 267	54	75	75	203	134	133	239	246	173	2088	1809	1811
ICPL 189-H1-HB	55	105	104	203	153	149	244	269	247	2567	2878	2911
ICPL 184-H1-HB	52	97	99	206	151	145	179	201	196	2206	1964	2072
ICPL 1	56	108	105	205	157	148	245	250	231	2630	3015	2928
ICPL 81	55	102	102	198	159	156	230	274	251	2509	2886	2885
ICPL 185	57	115	117	211	157	157	244	255	241	2116	2755	2575
ICPL 166	67	118	118	213	160	161	318	320	249	2188	2697	1939
ICPL 142	59	112	112	210	156	153	268	273	249	2322	2712	2735
ICPL 222	51	117	118	219	157	160	285	301	322	2577	2515	2413
ICPL 136	52	106	104	213	151	155	259	268	265	2098	2731	4097
ICPL 269	55	107	108	208	157	151	238	227	228	2660	1932	1962
ICPL 58	57	109	117	204	152	152	249	270	238	1926	2280	2336
ICPL 161	52	110	112	212	156	155	248	228	240	2540	3171	2928
ICPL 1	55	115	115	212	161	157	276	286	263	2378	2110	2763
UPAS 12	57	114	108	205	144	149	239	262	257	2139	2735	2743
$\bar{x}$	55	105	106	207	151	151	245	256	237	2291	2575	2666
SEm	1.9	1.2	1.2	1.2	2.1	2.1	8	12	12	91	102	102
CV %	4	2	2	2	2	2	7	7	7	9	6	6

Table 1.31. Performance of promising early maturing pigeonpea lines in late sowings during 1982 kharif at Hissar

Entry No.	Pedigree	Growth Habit	Days to Flower	Plant Height (cm)	Days to Maturity	Seeds/ Pod	Plant Stand (m <sup>2</sup> )	Seed wt (g)	Yield (kg/ha)	Plant Stand/ Plot
6	ICPL 125	BT	69	120	119	3.47	57.72	8.11	3086	125
8	ICPL 121	BT	66	106	105	3.44	57.87	10.94	3048	125
7	ICPL 81	NDT	68	114	111	3.43	73.30	7.41	3017	158
8	ICPL 101	BT	79	104	123	3.43	51.24	9.05	2924	111
1	ICPL 1	NDT	69	110	112	3.37	57.25	7.98	2870	124
9	ICPL 312	BT	66	88	104	3.66	51.54	11.38	2809	111
12	Gene: C27-N1-N2-N3 S-75	BT	58	75	98	3.39	59.41	8.07	2708	128
4	ICPL 127	BT	58	104	99	3.23	61.88	7.68	2276	134
5	ICPL 129	NDT	79	110	123	3.45	52.86	9.57	2062	116
13	Gene: C27-2-N2-N3	BT	59	82	98	3.40	61.73	6.67	2060	133
2	ICPL 4	BT	60	102	104	3.22	61.73	5.76	2060	133
11	74068-1-2-3-N1- 490-N1-N2-N3-N4	BT	58	95	99	3.35	65.74	8.38	1898	142
Grand Mean			66.56	101.69	107.86	3.40	59.40	8.45	2568	128
SEs			0.24	7.32	1.25	0.14	4.7	0.15	99	10
D.F.			104	101.00	106.00	104.00	107.74	101.11	6	13

Table 1.32. : Performance of early maturing pigeonpea sterility mosaic tolerant lines during 1982 trials at Nisar.

Entry No.	Pedigree	Row Spacing (cm)	Growth Habit	Days to Flower	Days to Plant Height (cm)	Days to Maturity	Seeds/ Pod	Plant Stand (a2)	100 Seed wt (g)	Yield (kg/ha)	Rank	Plant Stand/Plot	Z DM (1981)
1	ICPL 1	30	NDT	100	242	150	3.06	15.66	8.16	2731	4	102	-
1	"	60	NDT	100	241	150	3.38	6.94	7.92	2431	9	39	-
2	ICPL 8*	30	DT	102	227	153	3.64	16.05	10.66	2971	1	104	-
2	"	60	DT	102	230	150	3.55	6.91	10.82	2731	4.5	39	-
3	ICPL 14b	30	DT	101	224	149	3.26	17.64	10.22	2616	6	115	5.4
3	"	60	DT	99	217	151	3.46	9.61	10.32	2384	10	42	-
4	ICPL 26F	30	NDT	111	246	149	3.46	17.82	10.11	2422	10	116	1.7+228
4	"	60	NDT	111	267	148	3.91	6.91	10.36	2238	11	39	-
5	ICPL 292	30	NDT	114	260	153	3.69	15.82	9.55	2724	5	107	15.85
5	"	60	NDT	116	275	153	3.46	6.91	10.07	2760	3	39	-
6	75001-6-8-M1VDT-H6+- M1-M1-H6	30	DT	102	225	164	3.46	16.36	14.21	1875	20	106	5.7
6	"	60	DT	102	228	165	4.14	6.45	14.02	1696	19	37	-
7	75001-7-8-M1VDT-H6+- M1-M1	30	DT	98	216	145	3.06	17.67	9.31	1925	19	115	9.7+270*
7	"	60	DT	99	222	151	3.94	9.61	9.87	2025	17	42	-
8	74001-8-M110-M1-8+- M1-M1-8+	30	NDT	102	254	165	3.44	15.82	9.77	2222	17	107	3.5
8	"	60	NDT	102	216	161	3.66	9.72	9.66	2465	7	42	-
9	74205-1-104-M1-8+- M1-M1-8+	30	DT	104	242	151	3.09	16.44	11.47	2276	14	107	0.0
9	"	60	DT	102	225	157	3.44	7.06	11.72	2234	14	31	-
10	74075-1-2-M10-M1-8+- M1-M1-8+	30	NDT	101	221	157	3.36	16.51	10.25	2254	15	107	7.5
10	"	60	NDT	101	221	156	3.41	9.38	9.32	2494	6	41	-
11	74174-8-1-10-M1-8+- M1-M1	30	DT	104	236	152	3.31	15.90	11.66	2955	2	105	0.0+88
11	"	60	DT	105	228	152	3.42	9.72	11.17	2525	5	42	-
12	74146-D7B-27-1-1-10071 -M1-M1-M1-M1	30	NDT	102	251	162	3.66	16.13	16.31	2894	3	105	0.0
12	"	60	NDT	102	224	155	3.74	9.72	18.22	2856	1	42	-



Table 1.23. : Performance of early maturing pigeonpea *Phytophthora* blight lines during 1982 harvest at Hisar.

Entry	Pedigree	Growth Habit	Days to Flower	Plant Height (cm)	Days to Maturity	Seeds/ Pod	Plant Stanc (a2)	100 Seed wt(g)	Yield (kg/ha)	Plant Stand/ Plot	% <i>Phytophthora</i> blight (1981)
24	77097-44-H4-H8	DT	95	227	148	3.99	8.87	10.61	3272	38	0.0
5	ICPL 87	DT	99	218	156	3.60	8.10	10.89	3017	33	-
6	ICPL 161	NDT	117	265	158	3.29	8.41	9.58	2998	36	5.5
17	74092-8-14-1-H5-H8-8+- -H8-H8	DT	87	215	149	3.11	7.64	11.40	2959	33	0.0 + 20%
1	ICPL 1	NDT	107	236	146	3.20	8.03	8.02	2826	35	-
27	74174-8-1-2-H2-8+-8 -H4-H8	DT	100	240	151	3.07	7.72	11.31	2751	37	0.0 + 58%
28	Coop. 1 IIINDT-HC-H8	NDT	124	300	162	3.99	6.94	8.29	2608	30	0.0 + 28%
9	ICPL 185	NDT	109	255	154	3.20	7.48	9.64	2523	32	5.9 + 28%
10	ICPL 287	DT	70	182	178	3.16	8.18	8.08	2508	35	5.0 + 21%
16	Coop. 1 ODT-H11-H8	DT	71	164	195	3.19	8.00	7.27	2498	37	4.3 + 17%
18	OP-165-H8	DT	86	226	147	3.00	8.64	11.71	2411	37	0.0 + 26%
4	ICPL 149	NDT	116	281	159	3.07	6.26	6.50	2411	36	4.2
26	75021-3-8-H1-8+-H1-H8-H8	DT	101	200	150	3.01	6.00	6.55	2360	27	0.0 + 16%
29	77047-7-14-1-8-1-8+- IIC78-H8-H8-H8	DT	116	190	162	3.10	7.05	11.00	2328	31	0.0
21	OP-200-H8	DT	89	214	150	2.60	8.64	11.68	2315	37	0.0 + 29%
8	ICPL 156	DT	89	200	149	3.14	8.00	11.00	2293	36	5.0
15	Coop. 1 ODT-H11-H8	DT	70	160	195	3.01	6.06	7.87	2290	36	0.0 + 16%
23	75080-29-8-H8-8+-H1- H8-H8	DT	97	217	145	3.05	6.56	9.65	2272	37	20 + 37% + 10 SN
14	Coop. 1 ODT-H40-H8	DT	74	170	140	2.97	8.49	8.83	2230	37	0.0 + 17%
19	OP-186-H8	DT	97	205	151	2.60	8.56	13.18	2164	37	0.0 + 47%
13	Coop. 1 ODT-H1-H8	DT	77	161	140	2.97	7.33	9.32	2137	32	0.0 + 31%
20	75080-3-8-H1IIC78-8+- H1-H4-H2	DT	95	210	151	2.92	7.48	9.23	2122	32	4.2
7	ICPL 107	DT	107	236	162	3.14	7.64	13.62	2106	32	0.0
25	OP-200-H8	DT	97	206	160	3.11	8.67	11.41	2014	38	0.0 + 25%
11	ICPL 294	NDT	125	266	164	3.19	7.79	7.87	2002	34	6.3 + 45%
3	ICPL 170	DT	99	245	151	3.43	6.56	10.55	1968	28	0.0
20	OP-225-H8	DT	68	219	152	3.00	9.34	11.01	1960	40	5.6 + 55%

0 • 0 • 2 Miles : • 57 • 2 Sterility Models

Entry	Plot	No.	Seed/Plant	100 Yield	Plant Weight (g)	Pod Weight (g)	Seed/Plant	100 Yield	Plant Weight (g)	Pod Weight (g)	Seed/Plant	100 Yield	Plant Weight (g)	Pod Weight (g)
22	88-203-48	81	96	186	150	3.61	6.56	11.61	1867	28	0.0	44	11	0.0
8	CPZ 171	87	103	209	181	3.03	7.72	10.15	1840	33	0.0			
23	888-1-001-48-0-48-0-8	87	75	183	109	2.99	8.49	9.16	1590	37	4.8	25	11	0.0
1 (Grand Mean)			96.47	220.29	150.90	3.15	7.95	9.99	2353	34.33				
580			1.08	9.33	1.67	0.13		0.22	128	3.14				
581			1.94	7.51	1.91	1.54		4.12	8	15.85				

Entry Plot No. 100 Yield Plant Weight (g) Pod Weight (g) Seed/Plant 100 Yield Plant Weight (g) Pod Weight (g) Seed/Plant 100 Yield Plant Weight (g) Pod Weight (g) Seed/Plant



Table 1.34. : Performance of early maturing pigeonpea with tolerant lines during 1982 kharif at H. var

Entry No.	Pedigree	Growth		Days to Plant Height (cm)	Days to Maturity	Seeds/ Plant Pod	Plant Stand (%)	100 Seed wt(g)	Yield (kg/ha)	Plant Stand/ Plot	2 Mill (1981)
		Habit	Flower								
25	74092-B-12-M1-M2-B0-ME-ME	DT	92	222	144	3.83	7.98	9.12	2199	24	4.1
26	74092-B-25-M1-M4-F0-ME-ME	DT	94	236	146	3.68	8.22	11.32	2186	40	10.6
24	74430-11-B-1-1-M1-ME-F0-ME-ME	NDT	103	284	145	3.45	8.96	7.91	2121	39	8.3+308
29	77007-M4-M4-ME	DT	92	224	146	4.05	7.43	10.74	2068	32	+08
1	ICPL 27	DT	101	220	151	4.01	7.46	11.07	2072	32	3.7
10	ICPL 269	DT	95	217	146	3.75	8.39	10.64	2040	26	6.5
28	74209-B-M77-M15-ME	NDT	105	294	148	3.26	8.80	6.99	2022	28	0.
6	ICPL 155	DT	100	228	155	3.78	7.59	8.65	1884	37	0.1
43	74092-B-10-1-M1-B0-ME-ME-ME	DT	95	224	144	3.81	7.42	9.85	2070	32	3.8
1	ICPL 141	NDT	106	276	150	3.22	8.28	7.84	1861	26	-
7	ICPL 141	NDT	104	245	149	3.67	7.53	8.27	1752	22	10.3
2	74078-M-8-10-B-M1-ME-ME-ME	NDT	105	256	151	3.27	6.74	12.61	2007	29	6.3+218
48	74209-B-B-M1-M1-ME	NDT	101	272	153	3.82	7.47	8.64	2091	22	3.7
27	74092-B-15-M1-M1-B0-ME-ME-ME	DT	87	225	145	3.94	6.45	10.41	1886	28	6.7
37	74211-M12-M0-M0-ME	NDT	116	270	156	3.21	8.24	7.28	1855	26	4.1
11	ICPL 201	NDT	105	240	147	3.22	7.50	9.22	1851	21	10.3+178
2	74209-B-M12-M1-ME	NDT	103	251	147	3.27	7.19	10.28	1844	21	9.8
34	74175-M-8-M50-M2-B0-M1-ME	NDT	106	294	149	3.22	9.41	8.91	1834	41	7.4
4	74075-M-8-M50-M1-ME-ME-ME-ME	NDT	107	291	151	3.68	7.42	7.22	1819	21	0.0+218
1	ICPL 141	DT	95	228	140	3.45	9.14	8.25	1797	40	12.0+08
47	74197-B-12-M1-M1-ME-ME-ME	NDT	107	297	161	3.61	8.37	11.04	1777	26	9.7+06
28	75025-B-M1-ME-ME-ME-ME	DT	83	184	148	3.42	8.27	9.45	1773	26	+08
78	Comp. 1 101-ME-ME-ME	DT	88	208	148	3.68	8.59	9.26	1771	27	10.1
47	76117-M12-M1-ME	DT	91	221	146	3.64	7.22	8.98	1765	21	6.9
48	76117-M15-ME	DT	97	272	147	3.55	8.28	9.52	1745	26	0.0
49	74209-B-B-M1-M1-ME	NDT	105	281	152	3.26	8.82	8.55	1731	27	10.8
27	741248-M-ME-ME-ME-ME-ME	NDT	116	277	162	3.69	7.85	9.27	1726	24	0.1
45	76141-M12-M1-M1-M1-ME-ME-ME	NDT	105	292	167	3.19	8.05	10.26	1726	25	15.4+08
17	Comp. 1 101-ME-ME	DT	82	181	147	3.99	8.25	7.74	1725	26	3.0+100
14	Comp. 1 101-ME-ME	DT	84	158	144	3.25	7.56	7.92	1705	22	6.7+58
10	ICPL 266	DT	87	175	145	3.11	8.34	8.67	1701	26	15.0+68
29	74078-M-8-10-B-M1-ME-ME-ME	NDT	107	254	151	3.61	7.82	8.15	1690	23	4.7+08
44	75080-M-8-M2-B0-ME-ME-ME	DT	96	247	151	3.62	8.50	9.02	1685	22	15.4+08
16	Comp. 1 101-ME-ME	DT	86	202	147	3.22	9.0	8.45	1673	28	14.3+08
4	ICPL 141	NDT	112	265	151	3.61	7.64	8.08	1654	23	0.0

Str. No.	Pedigree	Growth		Days to Plant		Days to Seeds/Plant		100 Yield Seed (kg/ha) ut (g)	Plant Stand (1981)*	Z Value	
		Habit	Flower	Height (cm)	Maturity	Pod	Stand (m <sup>2</sup> )				
1	Comp. 1: IST-49-48-48	DT	102	266	140	2.98	9.15	9.24	2241	40	0.0
2	Comp. 1: IST-48-48	DT	82	161	141	3.60	6.81	7.61	2531	38	6.8+08
3	*4668-11-5-5-1-43-43-43-43-43-43	DT	95	208	143	3.19	8.18	8.28	2202	35	7.7
4	OP-262-48	DT	103	231	151	3.33	6.85	10.63	2169	38	13.4+08
5	Comp. 1: IST-48-48	DT	73	196	141	3.90	6.33	7.74	2162	36	0.0
6	IST-162	DT	77	222	147	3.70	6.82	8.79	2042	29	0.0+08
7	Comp. 1: IST-48-48	DT	78	173	141	3.39	7.64	7.76	2037	33	0.0+378
8	76181-9-27-48-48-48-48-48	DT	89	270	161	2.50	7.91	11.09	1984	34	0.0+08
9	IST-162	NDT	103	270	147	3.54	6.82	8.77	1979	29	9.1
10	Comp. 1: IST-48-48 (IST-162)	DT	75	167	147	3.17	9.12	9.18	1841	29	1.0+128
11	IST-95	NDT	124	292	166	3.16	7.04	9.81	1800	30	3.6
12	Comp. 1: IST-48-48	DT	77	176	149	2.69	9.12	9.12	1759	29	12.5+08
13	OP-262-48	DT	90	200	150	3.24	6.16	11.61	1719	25	9.8+258
14	76181-28-8-48-48-48-48-48	DT	96	229	150	2.45	8.69	11.92	1632	28	4.9
Grand Mean			89.07	241.63	149.46	3.45	6.67	9.12	2417	34.86	-
SEs			1.73	8.37	1.68	1.70	-	0.20	169	2.64	-
CV %			2.32	5.90	1.93	6.53	-	2.77	12	13.09	-

\* SM = Sterility Mosaic ; B = Phytosterin Deficient

Table 1.35 : Characteristics of early maturing pigeonpea lines showing less than 20% infection to sterility mosaic disease in the sterility mosaic nursery during 1982 at Patancheru (1982 Nisar data).

Sl. Entry No.	Entry No.	Pedigree	Path rows/ Plot Nos.	% infection	Growth Habit	Days to Flower	Days to Maturity	Seeds/100 Pods	Seeds/Plant	Seeds/Plant Color
1		ICPL-82	1	3.7	DT	-	-	-	-	-
2		ICPL 81	2	0.0	DT	-	-	-	-	-
3	82M03-3	ICPL 14+	22	2.9	DT	100	150	3.4	11.0	2616
4	-6	75001-6-B-MP+HI-MI-MB	25	0.0	DT	100	154	3.7	11.7	2775
5	-7	75000-7-B-MC-B+MI-MP-MB	26	7.7	DT	98	147	3.9	11.2	2626
6	-8	74092-8-M110-HI-B+MI-MB-MB	27	14.8	DT	121	162	3.6	9.6	2465
7	-9	74205-9-1-1-4-MI-B+MI-M3-MB	28	0.0	DT	102	156	3.4	11.7	2576
8	-10	74075-10-B-MC1-4-B+MI-MC-MB	29	0.0	DT	117	157	3.4	10.2	2495
9	-110	74174-9-1-2-MI-B+B-M4-MB (ICPL 83008)	30	0.0	DT	104	152	3.3	11.2	2956
10	-120	74146-97E-23-1-1-1-MB-M5-MB (ICPL 83024)	31	0.0	NDT	100	156	3.6	10.5	2894
11	-13	74126-NDT1-4-21-2-MB+MI-MB-MB	32	0.0	DT	117	156	3.4	11.2	2249
12	-14	74146-1NDT0-MB1-MB+MI-1-B-M5-MB	33	10.6	DT	110	156	3.9	10.7	2795
13	-15	75149-17B-27-2-B+1-5-B	34	0.0	DT	116	160	3.6	10.9	2561
14	-17	74149-97E-16-H-B+MB-M4	36	3.7	DT	96	151	3.0	8.6	2354
15	-18	74146-NDT2-18-1-6+1-1-M5-ME	37	0.0	NDT	116	160	3.6	11.5	2820
	-1	ICPL 1	4	100.0	NDT	108	150	3.1	8	2700
16	82M08-270	74174-9-1-2-MC-B+B-M4-MB	64	0.0	DT	107	151	3.0	11.6	2751
17	-29	75047-7-14-1-2-1-6-MB+MB-ME	66	10.0	DT	116	162	3.12	11.24	2327
18	-30	75080-3-8-MC-B+MI-M4-MC	67	0.0	DT	99	151	3.84	9.0	2122
	-1	ICPL 1	6	100.0	NDT	107	146	3.2	8.0	2524
19	82M08-27	74093-8-16-1-1-2-MB+MB-MB	92	17.6	DT	87	144	3.5	16.4	2581
20	-20	74178-1-6-11-2-2-M5-B-MC-M5-MB	94	20.1	SDT	111	150	3.6	8.2	2260
21	-41	74075-1-2-4-52-MI-B+MI-MP+MB	106	17.6	SDT	117	152	3.6	6.9	2561
22	-42	74092-8-27-2-MC-B+MI-M4-MB	107	0.0	SDT	98	160	3.4	11.0	1975
23	-46	76115-M151-MB	111	16.7	DT	97	148	4.0	9.6	2240
	-1	ICPL 1	9	100.0	NDT	105	149	3.2	7.5	2935
24	82M09-60	ICPL 14b	116	0.0	DT	98	142	3.64	9.8	2915
25	-170	ICPL 315	129	10.6	DT	94	141	3.38	7.4	2628
26	-180	ICPL 316	130	10.5	DT	95	140	3.34	9.5	2472

Sl. No.	Entry No.	Pedigree	Path rows/ Plot Nos.	% infection	Days to Maturity	Days to Flower	Seeds/ 100 Pod	Yield Seed (kg/ha) wt(g)	Color		
	-1	ICPL 1	9	100.0	NDT	106	146	3.30	7.9	3017	B
	-2	Prabhat	-	-	DT	90	137	3.30	6.35	2191	B
27	B2N10-22	74040-1-6-24-0-1-0-0-N1-NB-0-N1-NB	151	10.0	DT	71	126	3.25	10.4	2246	B
	-1	UPAS 120	20	96.4	NDT	98	132	3.25	7.5	2747	B
	-2	Prabhat	-	-	DT	72	125	3.15	6.3	2100	B
28	B2N11-0	ICPL 170	157	5.0	DT	92	135	3.0	8.5	2662	B
29	-70	ICPL 140	158	15.4	DT	92	131	3.4	6.1	2620	B
	-1	Prabhat	-	-	DT	72	127	3.26	6.2	2246	B
	-2	UPAS 120	20	96.4	NDT	96	133	3.05	7.0	2782	B
30	B2N12-10	Coop. 1 007-NB-000-NB-0-NB	208	16.7	DT	101	142	3.76	10.0	2569	B
31	-04	70115-N110-N110-N2-NB	209	9.8	DT	85	127	4.36	8.4	2616	C
	-1	Prabhat	-	-	DT	89	123	3.01	6.5	2091	B
	-2	UPAS 120	20	96.4	NDT	105	144	3.33	7.5	2626	B
32	B2N13-5	75054-N2-NB	247	1.0	DT	72	126	3.4	9.0	2308	B
33	-0	75077-N2-NB	248	10.0	DT	69	127	3.0	9.0	2370	B
34	-2	77002-N0-N0-N1-NB	262	13.5	DT	85	125	4.0	10.2	2191	B
	-0	UPAS 120	20	96.4	NDT	96	141	3.26	7.1	2384	B
	-1	Prabhat	-	-	DT	72	122	3.20	5.95	1829	B
35	B2N10-14	74092-0-002-N2-0-0-0-N2-NB-0-NB	290	16.1	DT	96	146	3.5	9.0	2465	B
36	-24	74092-N070-09-1-0-1071-0-0-N1-60-N1-NB	300	9.0	DT	96	150	3.4	10.4	2470	C
	-1	UPAS 120	20	96.4	NDT	104	142	3.7	6.8	2563	B
	-2	Prabhat	-	-	DT	91	137	3.2	6.3	1767	B
37	B2N17-20	74205-N0710-104-1071-0-0-N1-N2-NB-NB	316	3.3	DT	96	147	3.3	11.3	2350	C
	-2	UPAS 120	20	96.4	NDT	97	141	3.2	7.2	2327	B
	-1	Prabhat	-	-	DT	74	121	3.2	6.4	2026	B
38	B2N18-10	75000-0-0-N11072-NB-0-N1-0-4-N2-NB	339	12.2	NDT	96	134	3.1	7.1	2392	B

SI. Entry No. No.	Pedigree	Path rows/ Plot Nos.	% infection	Growth Habit	Boys to Flower	Boys to Maturity	Seeds/ 100 Pod	Yield Seed (lb/ba) wt (g)	Color	
-1	ICPL 1	9	100.0	NDT	100	138	3.32	8.2	3094	B
-2	ICPL 6	323	100.0	NDT	111	150	3.24	8.5	2562	B
39 82M19-3	Comp. 1-H12-H6-H8 (ICPL 830027)	346	9.7	NDT	106	152	3.5	10.1	2585	B
-1	ICPL 1	9	100.0	NDT	112	151	3.2	8.0	2722	B
-2	ICPL 6	323	100.0	NDT	118	156	3.3	8.1	2726	B
40 82M20-23*	74146-18-1-H1-B*-H8-H5-H2-H6 (ICPL 830032)	388	3.0	NDT	116	153	3.3	7.9	2612	B
-1	ICPL 1	9	100.0	NDT	110	147	3.4	8.0	2706	B
-2	ICPL 6	323	100.0	NDT	117	152	3.2	8.1	2454	B
41 82M21-23	75001-28-8-H11(NDT)-8*-H2-H1 -H2-B*-H8	411	16.7	NDT	112	163	3.0	9.7	2546	B
-1	ICPL 1	9	100.0	NDT	112	152	3.2	7.9	2794	B
-2	ICPL 6	323	100.0	NDT	118	154	3.3	8.1	2431	B

\* Proposed for inclusion in 1983 EPAY tests.

Table 1.7c : Effect of dates of sowing on bud initiation and flowering time in four early maturing pigeonpea lines during 1982 at Mysore.

Lines	Sown on 12 March			Sown on 30 March			Sown on 1 May		
	MBI	VBI	DF	MBI	VBI	DF	MBI	VBI	DF
ICPL 267		44	52	34	37	49	32	37	44
Comu. 1-1-HB-HB-HB		47	51	32	34	45	29	32	36
ICPL 184-H1-H1		44	54	40	41	53	32	38	47
DP 240-HB-HB		47	54	34	40	50	34	42	49

MBI = Mean date of bud initiation

VBI = Mean date of bud initiation

DF = Days to flower

Table 1.37 : Mean temperatures in 1982 at Hisar \*

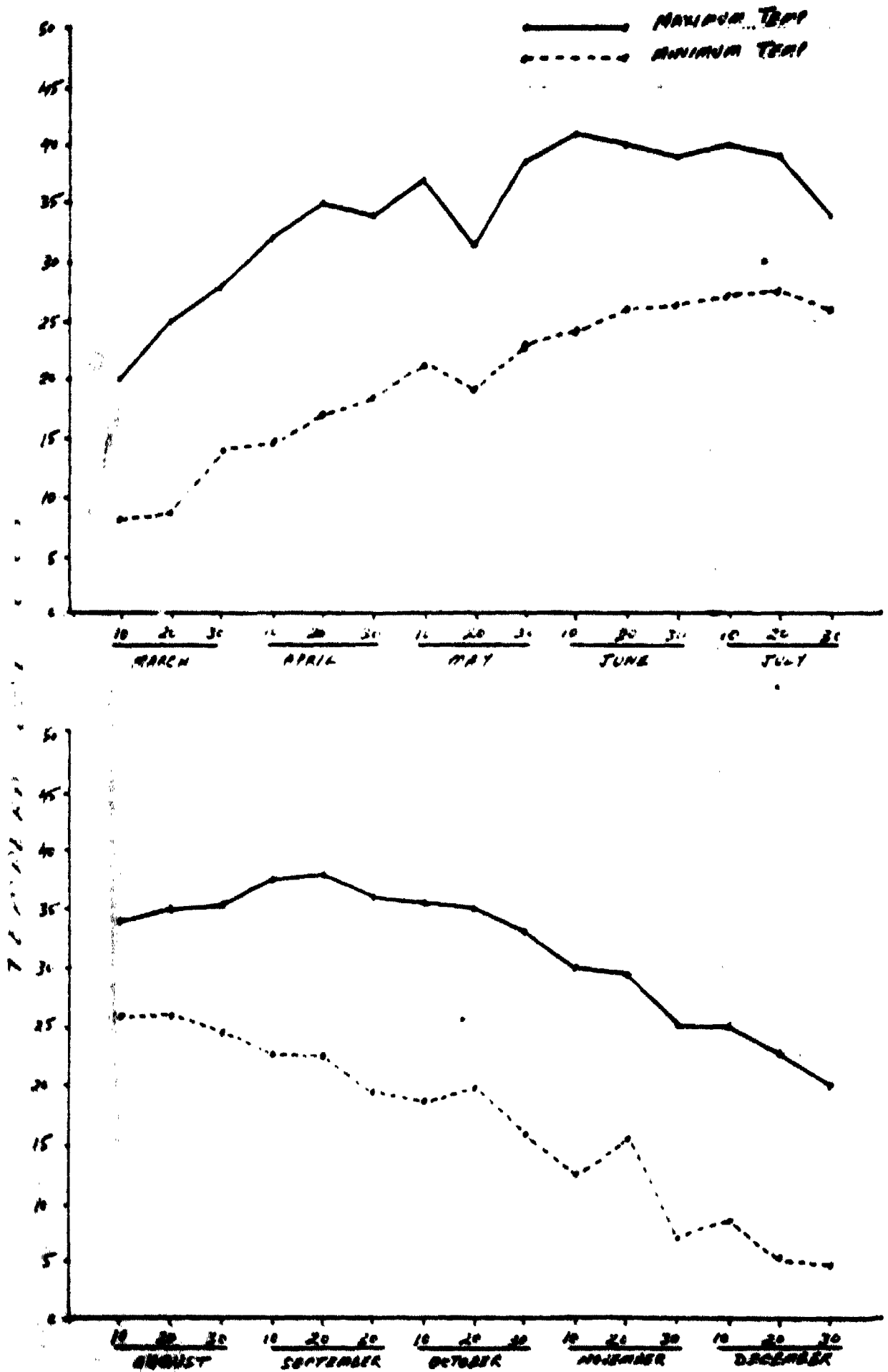
Duration	Mean Temperature (oC)		Rainfall (mm)
	Maximum	Minimum	
1-10 March	19.8	8.2	27.3
11-20 March	24.9	8.7	2.7
21-31 March	27.6	13.9	11.6
1-10 April	31.9	14.3	25.2
11-20 April	35.2	17.3	4.3
21-30 April	33.6	18.5	24.6
1-10 May	37.0	21.3	3.6
11-20 May	37.3	19.1	74.0
21-31 May	38.3	22.7	0.5
1-10 June	41.7	25.9	-
11-20 June	39.8	25.9	42.0
21-30 June	36.8	26.3	3.6
1-10 July	40.3	27.1	1.7
11-20 July	39.0	27.4	5.6
21-31 July	34.1	25.7	98.7
1-10 August	34.7	25.9	75.5
11-20 August	30.7	26.2	8.0
21-31 August	35.4	24.7	17.7
1-10 September	37.5	23.3	-
11-20 September	37.6	23.0	-
21-30 September	35.8	18.6	-
1-10 October	35.6	18.9	-
11-20 October	30.3	19.8	-
21-31 October	25.3	15.8	-
1-10 November	30.1	12.8	-
11-20 November	29.4	15.5	0.4
21-30 November	25.1	6.9	-
1-10 December	25.2	6.3	-
11-20 December	20.7	5.2	-
21-31 December	19.8	4.6	8.5

Table 1.28 : Mean characteristics of 20 early maturing pigeonpea lines at different dates of sowing during 1982 kharif at Misar.

Sates Sown	Days to Bud Initiation	Days to Flower	Days to Mature Plant		Plant Height (cm)	Seeds/ Pod	100 Seed Weight(g)	Seed Grain Yield (kg/ha)
			(I Flush)	(II Flush)				
01 10 March	45	61	94	212	167	2.91	8.2	1904
02 20 March	41	56	92	201	147	2.96	8.4	1931
03 25 March	42	52	90	192	140	2.64	8.7	1602
04 8 April	41	57	92	184	156	2.96	8.5	1800
05 21 April	42	55	95	175	164	2.05	8.6	1492
06 30 April	52	61	-	167	198	2.08	8.2	2007
07 11 May	56	61	-	161	190	3.20	8.6	2239
08 27 May	55	61	-	157	217	2.77	8.6	2456
09 10 June	50	67	-	145	179	3.42	8.4	2172
10 17 June	52	61	-	136	169	3.56	8.4	1936
11 27 June	61	72	-	124	155	3.40	8.1	1650
12 7 June	61	71	-	118	158	2.52	8.5	1605
13 21 July	56	65	-	105	111	2.49	8.5	1474
14 7 July	47	62	-	101	69	2.20	8.5	1245
15 11 August	51	62	-	111	64	2.83	8.0	425
16 23 August	50	61	-	116	66	2.79	8.4	181



FIG 1.1: MEAN MAX. AND MIN. TEMPERATURE (°C) DURING 1982 AT H.



1.2: MEAN DAYS TAKEN TO BUD INITIATION (BI), FLOWER (DF), MATURITY (DM) AND PLANT HEIGHT (PH) AT DIFFERENT DATES OF SOWING.

