

## **PGR Management and Use – COMPONENT I**

### **Annual Progress Report for the year 2015-16**

1. **Name of the Crop:** Chickpea (*Cicer arietinum* L.)
2. **Name of the Lead Centre:** Indian Institute of Pulses Research, Kanpur-208024(U.P.)  
**Nodal person: Dr. G. P. Dixit, Project Co-ordinator (Chickpea)**
3. **Name of the collaborating centres:**  
IIPR, Regional Research Station, Phanda, Bhopal – 462030, (M.P.)  
Pulses Improvement Project, MPKV Rahuri-413 722 (M.S)  
Punjab Agricultural University, Ludhiana, Punjab
4. **Name of Nodal person with designation:**  
Dr. D. N. Gawande, Scientist (Plant breeding and Genetics)  
Dr. M.R. Bedis, Principal Scientist,  
Dr. Sarvjeet Singh, Sr. Plant Breeder-cum-Incharge (Pulses)
5. **Number of accessions received from ICAR-NBPGR:**  
**IIPR, Bhopal:** 962  
**MPKV, Rahuri:** 800  
**PAU, Ludhiana:** 250
6. **Number of accessions sown for characterization/multiplication:**  
**IIPR, Bhopal:** 962 but 19 accession did not germinate.  
**MPKV, Rahuri:** 800 ( For multiplication)  
**PAU, Ludhiana:** 250
7. **Number of accessions germinated as data were recorded:**  
**IIPR, Bhopal:** 943  
**MPKV, Rahuri:** All Accessions were germinated, however, 39 accessions were severely affected by F. Wilt. Hence 761 accessions seeds harvested and seed is being submitted.  
**PAU, Ludhiana:** 247 (AB) and 249 (BGM)
8. **Experimental design:** Augmented
9. **Checks used:**  
**IIPR, Bhopal:** Three (JG 16, JG 11 and Ujjawala)  
**MPKV, Rahuri:** Vijay, Digvijay, Vishal  
**PAU, Ludhiana:** HC 5/L 550

#### 10. Details of the characterization:

Sl. No.	Name of the Centre	No. of accessions characterized/ multiplied	Date of sowing (From – to)	No. of descriptors*	Date of harvesting (From – to)	Date of dispatch of data and seed material to NBPGR	
						Seed	Data
1	Indian Institute of Pulses Research, Regional Research, Station, Phanda, Bhopal- 462030, (M.P.)	943	5/11/2015	14 descriptors	12-15 march	Yet to be despatched as data analysis is under process	Yet to be despatched as data analysis is under process
2	Pulses Improvement Project, MPKV Rahuri	800 (Multiplied)	3.12.2015	-	17-21 April 2016	Seed is yet to be dispatched	
3	PAU, Ludhiana	250	13/11/15 (AB) 09/02/16 (BGM)	Two (AB and BGM)	05/04/16 (AB)	Yet to dispatch	-

\*Please attach the list of descriptors/descriptor status

11. Same descriptors were used at all the locations: NA

12. Detailed report on salient achievements of characterization with details of promising lines identified for important characters:

**IIPR, Kanpur:** Data is being analysed.

**MPKV, Rahuri:** Nil

**PAU, Ludhiana:** In Ascochyta blight nursery, entry IC 275447 (639) having disease score of 3.0 was found resistant to AB. Entry IC 209641 (431) showed disease score of 4.0 whereas IC 209317 (401), IC 209355 (407), IC 209375 (408) and IC 244185 (437) gave disease score of 5.0 with moderate resistant reaction under epiphytotic conditions created in the field. When these 250 lines were evaluated against Botrytis gray mold (BGM) under artificial epiphytotic conditions, entry IC 350842 (790) gave disease score of 2.5 with resistant reaction. Entry IC 350838 (788) showed disease score of 3.5 whereas entries IC 350846 (794), IC 327527 (718), IC 327534 (720), IC 487033(941) and IC 350844 (792) showed disease score of 4.0-5.0 with moderate resistant reaction.

#### 13 Details of monitoring:

Sl. No.	Name of the Centre	Date of monitoring	Crop stage at the time of monitoring	Monitoring team members
1	ARS, Gulbarga	1-1-2016	Flowering to pod stage	Dr GP Dixit, PC, AICRP on Chickpea

2	MPKV Rahuri	3-1-2016	Flowering stage	Dr GP Dixit, PC, AICRP on Chickpea
		12.2.2016	Flowering to pod development stage	Dr.Jagmeet Kaur Principal Scientist Dr.Sarvajeet Singh Principal Scientist Dr.Ravindra Singh Principal Scientist PAU, Ludhiana
2	RARI, Durgapura	5-3-2016	Pod maturity stage	Dr GP Dixit, PC, AICRP on Chickpea

**14. Papers Published: NIL**

- (i) Papers published in peer reviewed journal (NAAS rating may be given)
- (ii) Papers presented at scientific meetings:
- (iii) Manuscripts under preparation:

**15. Patents/varieties and products developed or in pipeline: NIL**

Signature:

Name:

Designation:

Principal Investigator:

Date:

**Director/Project Director/Project Coordinator**