PROJECT COORDINATOR'S REPORT 2024-25

भाकृअनुप
ICAR

All India Coordinated Research Project on Rabi Pulses

ICAR-Indian Institute of Pulses Research
Kanpur – 208 024

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ICAR-All India Coordinated Research Project on Rabi Pulses

(Indian Council of Agricultural Research)

Project Coordinator's Report
(2024-25)
by
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ANNUAL GROUP MEET ON RABI PULSES
19 – 21st August, 2025

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Correct Citation
Project Coordinator's Report 2024-25
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INTRODUCTION

Global food and nutritional security is threatened by over dependence on a limited number of low nutritional value crops resulting in unbalanced diets. According to World Health Organization (WHO), about 9.9% of the world population is undernourished and this number may further increase by 2030. Pulses are rich in proteins, complex carbohydrates, micronutrients, B-vitamins and minerals like folate, iron, calcium, magnesium, zinc and potassium. Being rich in fibre and low in fat, pulses are good for managing cholesterol, digestive health and regulating energy levels and thus contribute to human health. They are considered as 'protein for the poor' in the world.

Pulses are an integral part of Indian diet, especially vegetarians. ICMR-National Institute of Nutrition "*My Plate for the Day*" recommends 17% calorie from pulses/flesh food, 10% from milk and milk products, 45% from cereals/millets for a 2000 calories diet a day (Dietary Guidelines for Indians, 2024). However, cereals contribute to >50% of total energy intake while pulses, meat, poultry, and fish together contribute to 6% to 9% of the total energy per day as against the recommended intake level of 14-15% of total energy from these foods.

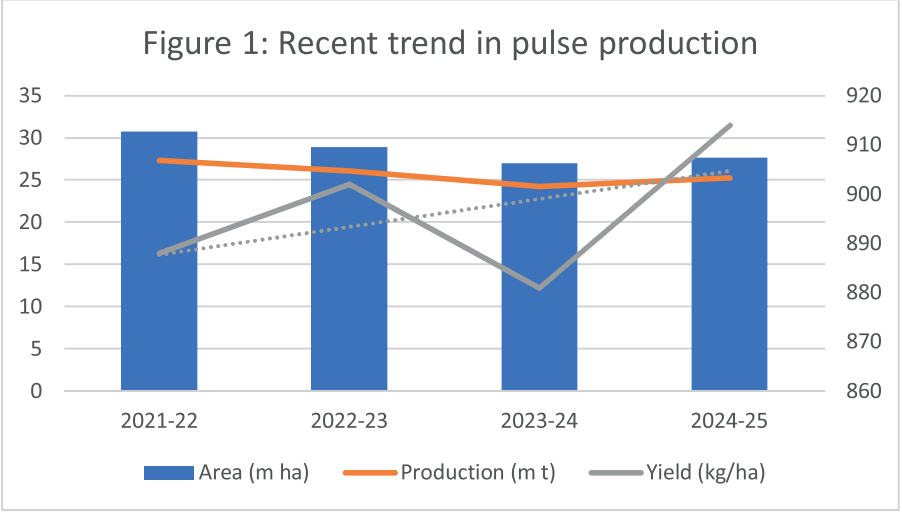
Pulses are important component of various cropping sequences followed across the country with region specific variations in preferences and suitability to agro-ecologies. Pulses have immense potential in improving soil fertility and resource-use efficiency, reducing greenhouse gas emissions, and augmenting system diversity. These crops not only fix the atmospheric nitrogen for their growth and thereby reducing the dependence on external nitrogen source, but also contribute towards increasing the availability of nitrogen for subsequent crop. The symbiotic relationship between pulses and soil can be leveraged to improve soil structure and can support soil's microbial biodiversity, which in turn improves soil health and improves crop yields.

In India, pulses research started with the establishment of the All India Coordinated Pulses Improvement Project (AICPIP) in 1967. Research activities systematically carried out in the disciplines of Plant Breeding, Agronomy, Plant Pathology, Entomology and Microbiology. The AICRP on Rabi Pulses has been constituted by merger of AICRP on Chickpea and Rabi-MULLaRP crops viz., Lentil, Fieldpea and Lathyrus. The AICRP on Rabi Pulses has a mandate of working on chickpea, lentil, field pea and lathyrus with different collaborating centres spread across different agro-climatic zones. Major activities of various centres include the development of improved varieties suitable for respective regions, development of location-specific technologies on crop production and crop protection, besides, production

of breeder seeds of high yielding varieties. Frontline demonstrations on improved technologies are successfully organized for effective and speedy dissemination of newer technologies to the rabi pulses growers for enhanced productivity and optimal input usage.

This is the 30th Annual Group Meet of Rabi Pulses and the journey of three decades (1995 – 2025) has been rewarding. It has helped in development of high yielding pulse varieties and matching production and protection technologies for different agro-ecological zones. During this period more than 370 varieties of rabi pulses - chickpea (225), lentil (74), field pea (70) and lathyrus (5) have been released for commercial cultivation in the country.

The spectacular growth of India's pulses production between 2015-16 and 2021-22 was mainly driven by three factors: technology support, remunerative prices and conducive trade policy. However, pulses production has stagnated in recent years. This is mainly due to decline in area and cheaper import of pulses particularly yellow peas (Figure 1). In order to achieve *aatmanirbharata* in pulses, concerted efforts are needed to develop high-yielding climate resilient varieties of pulses insulated against the prevalent biotic stresses and ensuring the availability of quality seed of these varieties to farmers in shortest span of time.



Modernization of pulses breeding programs to increase genetic gains is the major thrust. Restructuring plant type of pulses for higher photosynthetic efficiency, synchronous maturity, facilitating mechanization / machine harvesting and adaptation to emerging cropping patterns are important aspects to be addressed

under changing climate scenario. Incorporating photo-thermal insensitivity and reducing the crop durationin pulses will help in increasing cropping intensity and will bring additional acreage in new niches.

Intensifying search for new genes in wild relatives and land races for disease and pest resistance, tolerance to abiotic stresses and yield attributes like seed size, podding length and duration is another priority area to utilize the rare alleles from the germplasm. Considering the increase in demand for plant-based proteins and other nutrients, mainstreaming nutritional quality traits in pulses breeding is the need of the hour. The biofortified varieties of lentil IPL 220 (Fe content 73 ppm and Zinc 51ppm) and L 4717 (Fe content 65 ppm) have already been released for commercial cultivation in the country. More such varieties are needed in other pulses crops also.

In order to reduce the dependence on fertilizer import and to minimize the use of fertilizers, enhancing nutrient use and acquisition efficiency, especially Phosphorus, is important to sustain pulses production in future and shifting towards natural farming. Integrated nutrient management and need-based application of macro- and micronutrients reduces the cost of cultivation and enhances the return of the farmers. Use of efficient and competitive strains of *Rhizobium* and Phosphatesolubilizing microbes to enhance the input use efficiency has been reported. Since the pulses are mostly grown under rainfed and rice fallow ecologies, improving water productivity of pulses and making availablelifesaving irrigation is desired for enhancing pulses production.

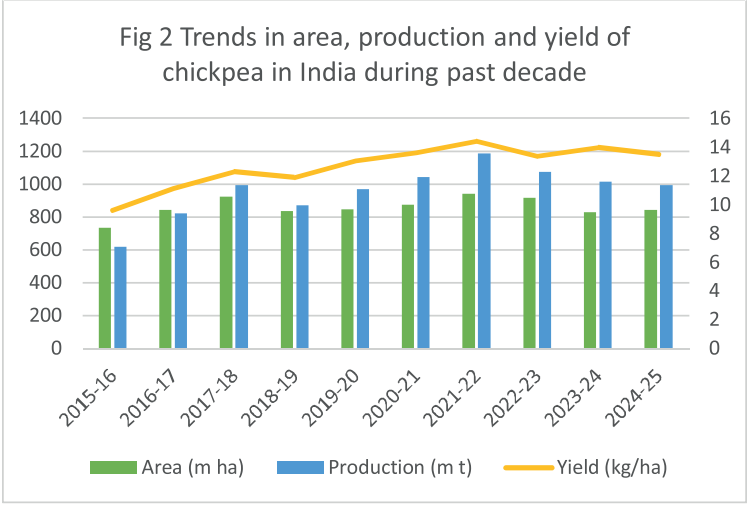
Globally pulses are being cultivated in 170 countries and covering about 96 m ha area which produces about 96 m tones pulses with 1000 kg/ha productivity (FAOSTAT 2023). In India during 2024-25, pulses were grown in 27.6 m ha area with an estimated production of 25.2 m tonnes(Third advance estimates 2024-25). Rabi pulses occupy 50% of the total area under pulses (13.9 m ha) and contribute about 61% in production (15.5 m tonnes). Chickpea is the major rabi pulse with a share of about 45 % to the total pulse basket of the country. Lentil, lathyrus, peas and some other minor rabi pulses, considered as secondary winter legumes contribute >15 % to the total pulses production.

According to a recent Working Group report on Crop Husbandry, Agriculture Inputs, Demand and Supply (NITI Aayog, Oct 2023) the demand for pulses is projected at 35 to 38 million tonnes in 2030-31 and 49-57 million tonnes in 2047-48. The present production is insufficient to meet this demand and the gap may widen in future in the absence of yield improvements and acreage allocation to them. The average per capita consumption of pulses was 27 grams/day in 2011-12, which was far less

than their normative requirement of 80-97 grams/day. The consumption of pulses, however, has increased over time. Arhar comprises 30% of their total consumption, followed by gram and masoor (15% each), and moong & urd (11% each). Between 1993-94 and 2011-12, the consumption of gram increased the most. The rich and urban households consume more pulses compared to their poor and urban counterparts.

The main reasons for the pulses deficit in India are low productivity, erratic rainfall, pest and disease outbreaks, lack of quality seeds, inadequate market infrastructure, and low minimum support prices. The Ministry of Agriculture and Farmers Welfare, Government of India and Indian Council of Agriculture Research (ICAR) initiated various measures to boost the pulses production in the country, such as increasing the area under cultivation, enhancing the yield through improved varieties and technologies, providing incentives and subsidies to farmers, procuring pulses at remunerative prices, and promoting intercropping and mixed cropping systems. However, there is still a need to bridge the gap between the demand and supply of pulses in India and achieve self-sufficiency in pulses by the end of year 2027 and nutritional secure 'Viksit Bharat' by 2047.

Chickpea is currently grown world over in an area of 14.1 m ha with annual production of 16.5 m tones (FAOSTAT 2024). India is the largest producer of chickpea with more than 2/3rd share in area and production of chickpea in the world. Chickpea has played a major role in realization of 'Pulse Revolution' in India making the country nearly self-sufficient in pulses. During 2024-25 the crop was grown in an area of 9.6 m ha with a production of 11.34 m tonnes (Third advance estimates 2024-25) (Figure 2).



The success story in chickpea can be attributed to technological advancements, increased availability of quality seed, better inter-institutional and international collaboration and dedicated policy support. Maharashtra, Madhya Pradesh, Rajasthan, Gujarat, Uttar Pradesh, Karnataka, Jharkhand, Andhra Pradesh, Chhattisgarh, and Telangana contribute more than 95% to the total chickpea production in the country (Figure 3, Table 1).

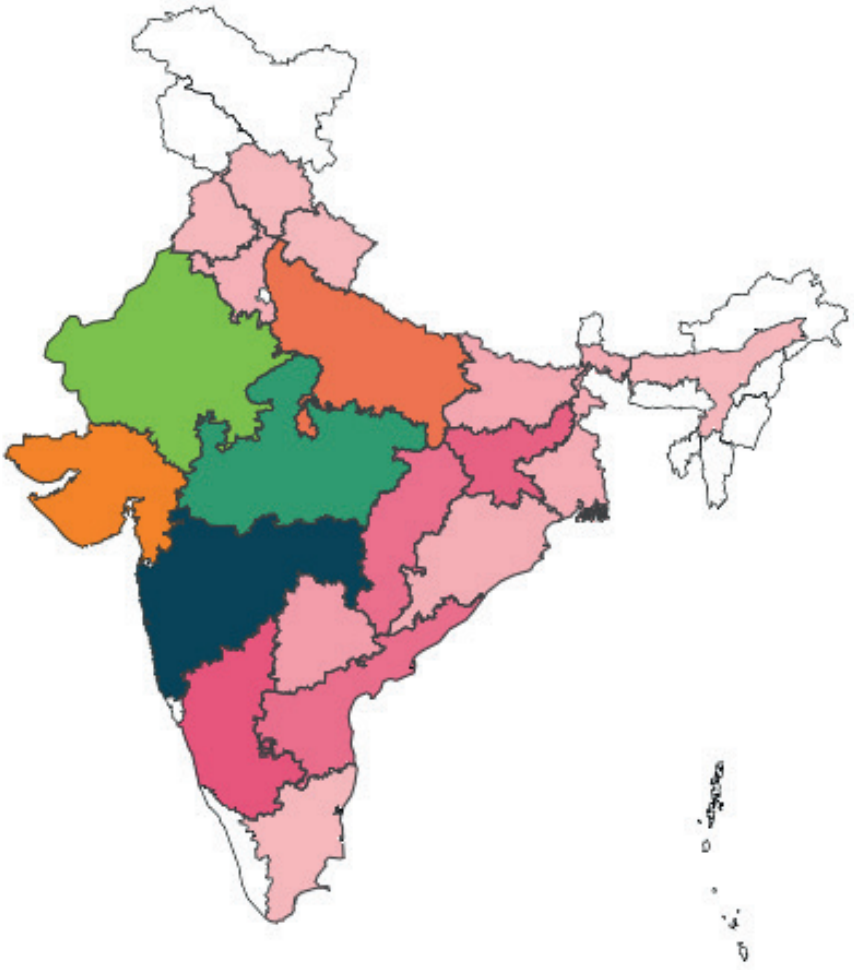


Figure 3: Chickpea producing states in India (Sources : UPAg, DAFW)

Table 1: Top ten chickpea producing states in India

S. No.	State	Production (lakhs tonnes)
1	Maharashtra	30.60
2	Madhya Pradesh	24.58
3	Rajasthan	19.75
4	Gujarat	14.79
5	Uttar Pradesh	6.88
6	Karnataka	4.05
7	Jharkhand	3.57
8	Andhra Pradesh	3.07
9	Chhattisgarh	3.03
10	Telangana	1.11

In India, both *desi* and *kabuli* type chickpea varieties are grown. India continued to remain a major importer of desi chickpea, but has emerged as a major exporter of *kabuli* chickpea during the past decade. India has made remarkable progress in expanding chickpea area and production. The area in central and southern states has increased by about 4 million ha in the past 20 years. This helped India in largely compensating the loss in chickpea area that earlier occurred in northern India due to expansion of irrigated wheat cultivation. More than 250 chickpea varieties have been developed in India till date with higher yield potential, reduced crop duration, large seeded *kabuli* (>50g/100 seeds), incorporation of biotic and abiotic stress resistance, amenability to machine harvesting etc. Besides, molecular marker based advanced technologies have been integrated for fast-tracking release of climate resilient chickpea varieties. Marker assisted backcrossing (MABC) has been successfully used to develop improved versions of the mega varieties possessing tolerance to abiotic stresses like drought and biotic stresses like Fusarium wilt. Recently released, Saatvik (NC 9) is MABC derived drought tolerant introgression line of JAKI 9218 possessing transcription factor gene (*CabHLH10*) of a major *CaqDYI (P/H)1.1* QTL which enhances yield under drought stress.

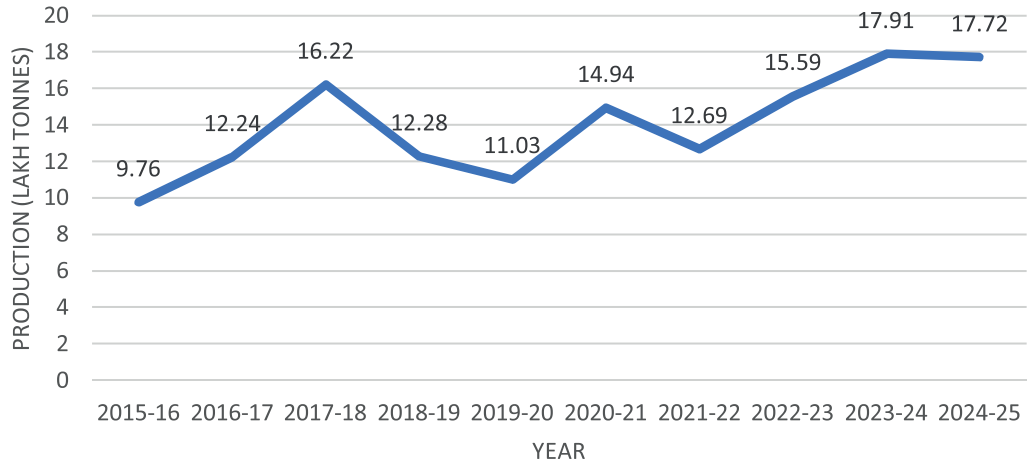
In the recent past, extra-large seeded (>50 g per 100 seed weight) kabuli chickpea varieties such as JGK 5, MNK 1, PKV Kabuli 4-1 and Phule G 0517, machine harvestable desi chickpea varieties such as Pusa Chickpea Aswini, Pusa Parvati, Phule Vikram, JG 2016-24, RVG 204, Kota Desi Chana 2 (RKGM 20-1), Kota Desi Chana 3 (RKGM 20-2), Kundan

(IPCB 2015-132) and Gujarat Gram 8 have been developed. As a result, there has been an impressive growth in area, production and productivity of chickpea in India.

Seed is the most critical input in order to realize the yield potential of improved chickpea varieties. Intensive efforts have been made to ensure quality seed availability in the country. This has led to increase in seed replacement rate in chickpea from less than 10% in 2005 to nearly 30% in recent years. Besides, the share of new varieties (<10 years old) has increased to more than 81%.

Lentil is currently grown world over in an area of 5.7 m ha with annual production of 7.1 m tonnes (FAOSTAT 2024). It is an important rabi pulse crop of India. The production of lentil has nearly doubled during the past decade mainly due to productivity enhancement from 765 kg/ha in 2015-16 to 1038 kg/ha in 2024-25 (Figure 4). According to the third advance estimates, the lentil production in 2024-25 is expected to be around 1.77 m tonnes. It is generally grown as rain fed crop during rabi season after rice, maize, pearl millet or kharif fallow. In North-eastern parts of the country, lentil is also cultivated as *paira* crop with rice. Its cultivation is mainly concentrated in MP, UP, West Bengal, Bihar and Jharkhand which together contribute more than 95% production of this crop (Figure 5, Table 2).

Figure 4: Trend in lentil production during past decade (2015-2025)



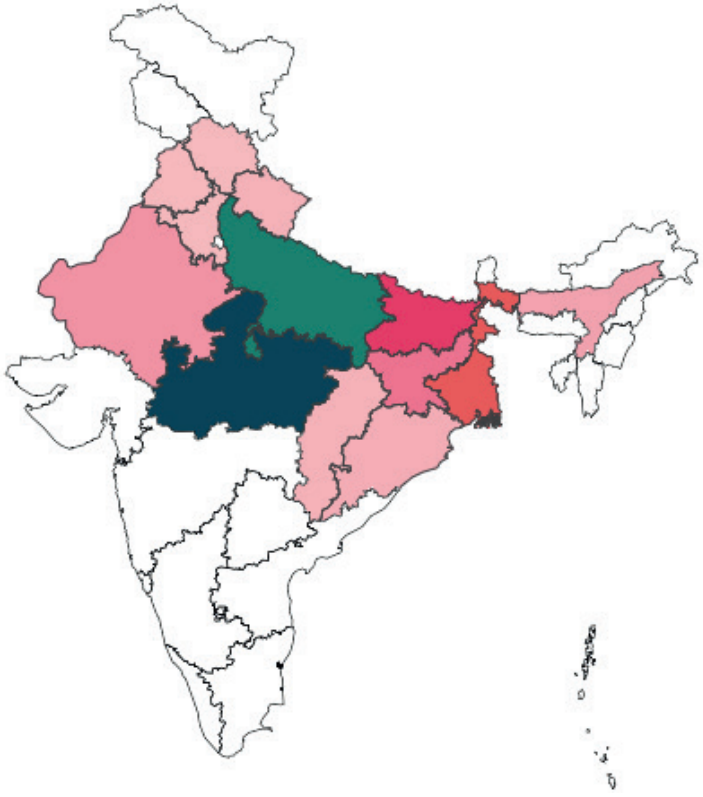


Figure 5: Lentil producing states in India (Source: UPAg, DAFW)

Table 2: Top 5 lentil producing states in India

S. No.	State	Production (lakhs tonnes)
1	Madhya Pradesh	7.28
2	Uttar Pradesh	6.28
3	West Bengal	1.45
4	Bihar	1.24
5	Jharkhand	0.67

This crop has a great promise in rice fallows of Assam, West Bengal, Bihar, Chhattisgarh, Eastern UP and Jharkhand. Traditionally north-eastern region of the country has been the area of small seeded lentil. Several small seeded and high

yielding varieties resistant to rust have been released for northern region. L-4729, Kota Masoor 3, LL-1373, IPL 329, IPL 225, PL 164, IPL 220, LL-1373, Kota Masoor 3, IPL 534, Kota Masoor 4, RL 305, IPL 329, PL-11, BL-16, Pant lentil 14, Pant Lentil 15, Kota Masoor 6 are new released varieties of lentil.

Field pea is another important rabi pulse crop of India grown in 0.84m hawith a production of 1.13 m tonnes during 2022-23 (FAOSTAT 2024). The average productivity of this crop has increased considerably over the years which is now to the tune of 1352 kg/ha. UP, MP, Bihar, Assam and Jharkhand are the major field pea growing states. During sixties, the cultivation of field pea in northern regions was seriously affected by powdery mildew disease and the need for development of resistant varieties was felt. Subsequently, several powdery mildew resistant varieties were developed like Rachna, HFP 4, HFP 715, IPFD 10-12 (Green seeded), HUDP 15, KPMR 400, IPF 99-25, IPFD 1-10, Pant P 42, Aman. IPFD 9-2, IPF 16-13 (Green seeded), IPFD 12-8, IPFD 13-2, HFP 1428, Pant P 347, VL 61, Pant P 195, Pant P 250, IPFD 11-5, IPFD 12-2, Pant P 243, IPFD 2014-2, RFP 4, Kota Matar 1, RFP 2009-1 (Rice Fallow), TRCP 9, HFP 1428, Pant Pea- 347, IPFD 16-3, Pant Pea 497, Shikhar,Arpan, Pant Pea 498 and Pant Pea 501 are new releases of field pea.

Lathyrus is a very hardy pulse crop capable of growing in extreme moisture stress condition. During 2023-24, it was grown in 0.35 m ha in the country. Presence of a neurotoxin Beta N-oxalyl-L- alpha-beta diaminopropionic acid (ODAP) has been the major constraint for promotion of this crop. However, this crop is still being grown in traditional areas with local cultivars having relatively high level of ODAP. Efforts have been made in developing varieties with low ODAP content. Ratan, Prateek and Mahateora are candidate varieties with low ODAP level. These varieties are suitably introduced in traditional areas with an objective to replace local varieties. Lathyrus holds great promise in the rice fallows regions of the country including Tal areas of Bihar, Chhattisgarh and West Bengal. Bidhan Khesari-1 and Hazariare recently developed variety of lathyrus with earliness and and low neurotoxin recommended for cultivation in state of West Bengal.

WEATHER AND CROP

In the Northern Hill Zone (NHZ), Srinagar recorded 348 mm of rainfall over 28 rainy days. In the North-Western Plain Zone (NWPZ), seasonal rainfall ranged from 12.1 mm at Sriganganagar to 46.99 mm at Samba, with the number of rainy days varying from 3 to 30. In the North-Eastern Plain Zone (NEPZ), rainfall during the crop season ranged from 39 mm at Kalyani (4 rainy days) to 516.5 mm at Ranchi (20 rainy days). Notably, Dholi did not receive any rainfall during the season. In

the Central Zone (CZ), the highest rainfall was recorded at Badnapur (128.7 mm in 6 rainy days), followed by Junagarh (88.5 mm in 7 rainy days), whereas S.K. Nagar received no rainfall. In the Southern Zone, Kalaburagi received 293 mm of rainfall in 17 rainy days, while Nandyal recorded 127.6 mm in 9 rainy days. Overall, the Central Zone experienced the least rainfall, while the North-Eastern Plain Zone recorded the highest seasonal rainfall.

Physical and chemical characteristics of soil at different AICRP network locations revealed that in NHZ at Srinagar, soil is sandy clay loam with pH of 6.9 and SOC of 1.1%. In the case of NWPZ, the soil texture varied from sandy loam (Sriganaganagar and Hisar) to loamy sand (Ludhiana, Durgapura and Samba) and silt clay loam (Pantanagar) with the pH range of 7.1 to 8.01. Soil organic carbon (SOC) status was in general low; and P and K status were medium to high. In NEPZ, the soil was sandy loam to clay loam (Dholi, Imphal, Shillongani and Kalyani) with a *p*H range of 5.20-8.25. Here, SOC was observed to be as low as 0.36 (Dholi in Bihar) to 0.75% (Shillongani); and the soil P and K content were mostly of medium category. In Central Zone, the experimental sites have heavy soils (clay loam to clay) with a *p*H range of 7.26 (Raipur) to 8.05 (SK Nagar); and SOC was generally low to medium. The soil P and K content varied from medium to high. In Southern Zone at Kalaburagi and Nandyal, soils are deep black (Clay loam) with medium fertility was evident.

RESEARCH THRUST IN RABI PULSES

Although there has been overall growth in pulses production in the country in recent years, there are different challenges posed by changing climate, emerging diseases and pest pressure, new demands in western countries for vegetarian protein and competition with other rabi crops especially irrigated wheat, sorghum, few commercial crops etc. Accordingly, researchers have to remain prepared with a array of genotypes which may adapt themselves across changing climates. For developing such genotypes, wild relatives which are rich reservoir of useful alien genes can play an important role. Further improvement in the productivity is needed through conservation and diversification of agriculture so as to increase the productivity of the system and improve soil health. Climate change associated with temperature rise and water scarcity adversely affecting the productivity, particularly under rainfed pulse growing regions, is a major challenge which need to be addressed on priority.

To tackle all these problems research strategies that need immediate focus are as follows:

a. ***High input responsive & lodging resistant varieties***: Northern India requires chickpea varieties which respond favourably to high fertility and irrigated conditions and resist excessive vegetative growth and lodging. The plant type for such growing conditions of northern India should include semi-erect and compact growth habit and high harvest index. It should respond to irrigation and high plant density conditions and should not lodge. Efforts are being made to develop genotypes with short internodes and erect growth habit as such plant type may resist excessive vegetative growth in high input conditions.

b. ***Broadening the genetic base*:** The genetic variability available in the germplasm, particularly in wild species, should be exploited for broadening the genetic base of varieties and introgressing useful traits, such as resistance to insect-pests and diseases. Genetic enhancement through pre-breeding is proposed for increasing the extent of useful diversity available to breeders through introgression of desirable characteristics from exotic material and wild species.

c. ***Short duration varieties*:** The most important traits required are early growth vigor, rapid biomass accumulation (tolerance to cold temperature at vegetative stage), early to extra-early maturity, and tolerance to terminal heat stress.

d. ***Machine harvestable and herbicide tolerant varieties*:** Reduced cost of cultivation and minimize losses due to weeds is one of the major objectives. The farmers of India are gradually enhancing mechanization of farm operations for improving efficiency and reducing cost of cultivation. The farmers are demanding pulses cultivars which can be directly harvested by combine harvesters. Development of post emergence herbicide tolerant varieties of rabi pulses is the need of the day as it can economically facilitate pulses cultivation under resource conservation agriculture.

e. ***Extra-large seeded kabuli varieties***: *Kabuli* chickpea with large seeds provide premium price to farmers, therefore developing extra-large seeded types for north India will be a profitable venture for farmers. Extra-large seeded *kabuli* chickpea are highly susceptible to frost injury in north India. Efforts are further required on development of high yielding, frost/cold tolerant with enhanced level of resistance to fusarium wilt and dry root rot.

f. ***Tapping Rice Fallows*:** The rice fallows provide an opportunity for increasing area under rabi pulses but at the same time it poses unique challenges like acidic soil, excess moisture during sowing, poor germination, relatively higher temperature during growing period, abundance of biotic and abiotic stress. For this purpose, development of early maturing varieties and refinement of technologies for *utera* cultivation.

g. ***Climate resilient varieties***: Drought and heat are the most important abiotic stresses faced by rabi pulses under rainfed and late sown conditions, respectively, due to increasing cropping intensity, and high fluctuations in temperatures due to climate change. With deep root system, pulses are endowed with the virtues of efficient utilization of available limited soil moisture and nutrients.

h. ***Utilizing genomic resources for biotic stress management***: Identification of resistant source against economically important diseases (*Fusarium* wilt, dry root rot, collar rot, *Ascochytablight*,*Botrytis* grey mould, rust, powdery mildew and stunt) to sustain the production of rabi pulses. Marker-assisted selection (MAS) for multiple race resistance need to be incorporated in routine pulses breeding activities in the country to accelerate genetic gain.

i. ***Insect pest management***: Pod borer (*Helicoverpa armigera*) continued to remain a major and challenging insect-pest of chickpea. The multi-location trials have demonstrated reduced loss through biorationals, botanicals, bioagents, use of dust formulations, spray formulation in pest control demonstration trails. The refinement and the use of these components will further economize the cost of production and reduce the environmental pollution.

j. ***Nutritionally enhanced varieties*:** Genetic variations for seed protein content, Fe and Zn has opened an avenue to enhance quality in rabi pulses. Development of high yielding varieties of lathyrus with safer level (<0.1%) of ODAP.

Major achievements of crop improvement programme for 2024-25

Varieties released and notified

Chickpea

Karan Chana 20 (RSGD 1155): It is a desi chickpea variety derived from the cross RSG 807 x CSJD 884. It has moderate resistant toFusarium wilt, dry root rot and stunt diseases with average yield 1638 kg/ha and maturity 116 days. Hence, the variety RSGD 1155 was **released and notified** for late sown condition in North East Plain Zone comprising states of eastern Uttar Pradesh, Bihar, Jharkhand, West Bengal and Assam.

Pusa Chickpea Aswini (BG 4037): It is desi chickpea variety derived from the cross ICCV 07110 x JG 11. The average yield is 2673 kg/ha and maturity 145 days. It is the first machine harvestable chickpea variety **released and notified** for the North West Plain Zone (NWPZ) comprising states of western Uttar Pradesh, northern Rajasthan, Delhi, plains of Uttarakhand, Punjab, Haryana and part of Jammu and Kashmir. It has resistance to *Fusarium* wilt and stunt disease.

Raj Vijay Gram 2023 (RVG 2023): It is desi chickpea variety derived from the cross Kripa x ICC 5912. It is suitable for machine harvesting with average yield 1589 kg/ha and matures in 125 days. It is moderately resistant to wilt and dry root rot. The variety Raj Vijay Gram 2023 was **released and notified**for timely sown conditions of North East Plain Zone comprising of eastern Uttar Pradesh, Bihar, Jharkhand, West Bengal and Assam.

Raj Vijay Kabuli Gram (RVKG 2024): It is a kabuli chickpea variety developed from the cross BGD 1085 x PKV 4. The average yield is 1439 kg/ha and matures in 100 days. It is extra-large seeded with 100-seed weight 44.2g and moderately resistant to Fusarium wilt. The variety Raj Vijay Kabuli Gram was **released and notified**for irrigated, timely sown conditions of South Zone comprising of Andhra Pradesh, Telangana and Karnataka.

Nandyal Gram 924 (NBeG 924): It is a desi chickpea variety derived from the cross JAKI 9218 x ICC 12478. The average yield is 1722 kg/ha and matures in 105-115 days. It is bold seeded with 100-seed weight 23.5g. It hasmoderate resistance to *Fusarium* wilt. The variety NBeG 924 was **released and notified**forEast Central Zone comprising of eastern Madhya Pradesh, Chhattisgarh and parts of Odisha.

Nandyal Gram 1267 (NBeG 1267): It is desi chickpea variety developed from the cross JG 11 x ICCV 05106. It is suitable for machine harvesting with average yield 2095 kg/ha. It is early and matures in 90-95 days. Ithas moderate resistance to *Fusarium* wilt. The variety NBeG1267was **released and notified** for South Zone comprising of Andhra Pradesh, Telangana and Karnataka.

Pant Gram 10: It is desi chickpea variety derived from the cross PG 041 x PG 046. It has moderate resistance to *Fusarium* wilt and rust with average yield 1779 kg/ha, average maturity of 130 days. It is bold seeded with 100-seed weight 24.6g. The variety Pant Gram 10 (PG 265) was **released and notified**for North East Plain Zone comprising of easternUttar Pradesh, Bihar, Jharkhand, West Bengal and Assam.

Lentil

Pant Lentil 14 (PL 320): It is small seeded derived from the cross PL 5 x L 4145. The average yield is 1555 kg/ha and maturity is 128 days. It has moderate resistance to rust and resistant to *Ascochyta* blight. The protein content is 25.72 %. The variety Pant Lentil 14 (Pl 32) was **released and notified** for the North West Plain Zone comprising states of western Uttar Pradesh, northern Rajasthan, Delhi, plains of Uttarakhand, Punjab, Haryana and part of Jammu and Kashmir.

Pant Lentil 15 (PL 342): It is small seeded derived from the cross PL 8 x DPL 58. The average yield is 1559 kg/ha and maturity is 127 days. It hasresistance to *Ascochyta* blight and moderate resistance to rust. The protein content is 26.24%. The variety Pant Lentil 15 (PL 342) was **released and notified** for the North West Plain Zone comprising states of western Uttar Pradesh, northern Rajasthan, Delhi, plains of Uttarakhand, Punjab, Haryana and part of Jammu and Kashmir.

Pant Lentil 16 (PL 366): It is large seeded lentil variety developed from the cross L 4188 x L 4147. It is moderately resistant to rust and wilt. The average yield is 1491 kg/ha and maturity 154 days. Hence, the variety Pant Lentil 16 (PL 366) was **released and notified** for the North Hill Zone comprising states of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and hills of West Bengal and North eastern states.

Kota Masoor 6 (RKL 20-26): It is large seeded lentil variety derived from the cross RKL 11 x PL 5. It is tolerant to drought. The average yield is 1600 kg/ha and matures in 125 days in North West Plain Zone. In Central zone the average yield is 1737 kg/ha and matures in 111 days. It is moderately resistant to rust and wilt. Hence, the variety Kota Masoor 6 (RKL 20-26) was **released and notified** for both North West Plain Zone and Central Zone comprising states of western Uttar Pradesh, Rajasthan, Delhi, plains of Uttarakhand, Punjab, Haryana, part of Himachal Pradesh, Madhya Pradesh, Chhattisgarh, Gujarat, Maharashtra, Bundelkhand region of Uttar Pradesh.

Fieldpea

Pant Pea 484: It is dwarf fieldpea variety derived from the cross Pant Pea 200 x VL 201. It has an average yield of 2333 kg/ha and matures in 120 days. It is resistant to Ascochyta blight and moderately resistant to rust and powdery mildew. The seed protein content is 26.17%. The variety Pant Pea 484 was **released and notified** for the North West Plain Zone comprising states of western Uttar Pradesh, northern Rajasthan, Delhi, plains of Uttarakhand, Punjab, Haryana and part of Jammu and Kashmir.

Pant Pea 497: It is tall type fieldpea variety derived from the cross IPFD 5-19 x HFP 530. It has an average yield of 1966 kg/ha and matures in 123 days. It is resistant to Ascochyta blight and moderately resistant to rust and powdery mildew. The seed protein content is 25.05%. The variety Pant Pea 497was **released and notified** for the North West Plain Zone comprising states of western Uttar Pradesh, northern Rajasthan, Delhi, plains of Uttarakhand, Punjab, Haryana and part of Jammu and Kashmir.

Pant Pea 498: It is tall type fieldpea variety derived from the cross IPFD 5-19 x HFP 530. It has an average yield of 2050 kg/ha and matures in 123 days. It is resistant to Ascochyta blight and moderately resistant to rust and powdery mildew. The variety Pant Pea 498 was **released and notified** for the North West Plain Zone comprising states of western Uttar Pradesh, northern Rajasthan, Delhi, plains of Uttarakhand, Punjab, Haryana and part of Jammu and Kashmir.

Pant Pea 501: It is tall type fieldpea variety derived from the cross IPFD 5-19 x HFP 530. It has an average yield of 2140 kg/ha and matures in 123 days. It is resistant to powdery mildew and Ascochyta blight and moderately resistant to rust. The variety Pant Pea 501was **released and notified** for the North West Plain Zone comprising states of western Uttar Pradesh, northern Rajasthan, Delhi, plains of Uttarakhand, Punjab, Haryana and part of Jammu and Kashmir.

Pant P 509: It is dwarf fieldpea variety derived from the cross Pant P 26 x FC 1. The average yield is 1809 kg/ha and maturity is 114 days. It has resistance to Powdery mildew & Ascochyta blight. Hence, the variety Pant Pea 509 was **released and notified** for North East Plain Zone of India comprising states of eastern UP, Bihar, Jharkhand, West Bengal and Assam.

Pant P 517: It is tall type fieldpea variety developed from the cross IPFD 05-19 x HFP 530.The average yield is 2130 kg/ha, maturity duration is 125- 130 days and average plant height is 151 cm. It showed resistance to Powdery mildew and Ascochyta blight. The variety Pant P 517 was **released and notified** for North West Plain Zone comprising states of western Uttar Pradesh, northern Rajasthan, Delhi, plains of Uttarakhand, Punjab, Haryana and part of Jammu and Kashmir.

HFP 1709: It is dwarf fieldpea variety derived from the cross Pant P 25 x HFP 8909. The average yield is 1652kg/ha and maturity duration is 110-115 days. It has resistance to Powdery mildew and is moderately resistant to rust. Hence, the variety HFP 1709 was **released and notified** for North East Plain Zone comprising states of eastern Uttar Pradesh, Bihar, Jharkhand, West Bengal and Assam.

IPFD 18-3: It is dwarf and leafy type fieldpea variety derived from the cross HUDP 15 x P 1544-4. The average yield is l73l kg/haand duration is 117 days. It showed resistance to Powdery mildew and Ascochyta blight. The seed protein content is 25.7%. Hence, the variety IPFD 18-3 was **released and notified** for North East Plain Zone of India comprising states of eastern UP, Bihar, Jharkhand, West Bengal and Assam.

Germplasm Registered with NBPGR during 2024-25

Crop	National identity	Botanical Name	Year	Developing institute	Novel unique features
Lentil	INGR25013	*Lens culinaris*	2025	BCKV, Mohanpur	High grain Fe content (116 mg/kg)
Lentil	INGR25014	*Lens culinaris*	2025	ICAR-IIPR, Kanpur	Resistant to Fusarium wilt
Lentil	INGR25015	*Lens culinaris*	2025	ICAR-IIPR, Kanpur	Resistant to Fusarium wilt

Promising Entries

On the basis of 2024-25 yield data, the following entries out yielded the best check variety by more than 5% in IVT and 10% in AVT trials.

Chickpea

Trial	Zone	Promising Entries (Kg/ha)
AVT 2 (D)	ECZ	GJG 1907(1866), {JAKI 9218 (Ch) (1488)}
AVT 1 (D)	ECZ	IPC 2020-208 (1881), GJG 2101 (1872), BDNG 2020-61 (1718), {JAKI 9218 (Ch) (1488)}
IVT (D)	NWPZ	RSGD 959 (3300), {GNG 1958 (Ch) (3101)}
	NEPZ	IPCB 2019-93 (2040), {BG3043 (Ch) (1928)}
	ECZ	IG 2025-04 (4259), IPCB 2019-93 (3102), GNG 2642 (2837), CSG 21-2 (2689), RKG 24-1 (2625), Phule G 2016-5-6 (2573), H 20-03 (2536), RLBG 14 (2467), JG 2024-85 (2413), BG 4056 (2405), BG 4067 (2402), GNG 2661(2222), IG 2025-03 (2200), Phule G 171068 (2044), BDNG 2020-08 (2009), RG 2015-08 (Ch) (1911)}
	SZ	GJG 2202 (1592), RVSSG 135 (1577), RG 2023-24(1519), Phule G 171068 (1512), IPCB 2019-93 (1503), NDG 23-6 (1473) {NBeG 857 (Ch) (1390)}
IVT (Late sown)	NWPZ	NDG 23-5 (2483), RVSSG 140 (2337), BG 4068 (2301), {Pant G 5 (Ch) (2162)}
	NEPZ	BG 4057 (2103), RSGD 1249 (2030), RVSSG 139 (1953), RVSSG 140 (1941), H 21-03 (1923), JG 2024-88 (1918), {Pant G 186 (Ch) (1810)}
	ECZ	IPC 2019-58 (2306), BG 4057 (2099), Phule G 171028 (2069), RVSSG 140 (2060), JG 2024-87 (1983), RSGD 1249 (1938), RVSSG 139 (1871), GJG 2103 (1795), Jammu Chickpea 5 (1790), NDG 23-5 (1782), IPC 2019-230 (1780), {IPC 2006-77 (Ch) (1688)}

IVT Rainfed	WCZ	BG 2244 (1947), Phule G 1609-4-18 (1918), KCD 120175 (1896), BDNG 2021-53(1851), BG 4059 (1835), JG 2024-89 (1830), HBGV 1 (1805), VCD 23-3(1804), RVSSG 138 (1799), {NC 7 (Ch) (1681)}
	SZ	Phule G 1623-3-4 (1837), KCD 120175 (1745), HBGV 1 (1727), {RG 2016-134 (Ch) (1582)}
AVT 1(ELSK)	SZ	Phule G 211306 (1572), {NBeG 119 (Ch) (1457)}
IVT (K+ELSK)	WCZ	Phule G 211303 (1931), IGK 2025-07 (1885) (ELSK), RKG 24-7 (1805), RKGDK 21-7 (1799), BG 4060 (1783), Phule G 211302 (1778), {JGK 5 (Ch) (1654)}
	SZ	GLK 20313 (1681), NBeG 1539 (1614), RKG 24-7 (1579), RKGDK 21-7 (1513), Phule 211302 (1501), {RKGK 13-416 (Ch) (1418)}
IVT (MH)	NWPZ	H 20-58 (2855), PG 363 (3089), RVSSG 141 (2864), BRC 2024-16 (2987), GJG 2208 (3015), JG 2024-91 (2881), {HC 5 (Ch) (2695)}

Values in parenthesis are grain yield in kg/ha

Lentil

Trial	Zone	Entries	Yield (kg/ha)	% increase over best check	Best check	Yield (kg/ha)
IVT (Small Seed)	NHZ	IPL 251	1739	6.68	VL 126	1630
	NWPZ	IPL 251	2059	9.28	LL 1655	1884
		IPL 252	2046	8.59		
		PL 455	2019	7.16		
		LL 1831	1991	5.67		
IVT (Small Seed)	NEPZ	IPL 252	1421	7.57	HUL 57	1321
		IPL 251	1398	5.82		
IVT (Large Seed)	NHZ	LL 1859	1316	9.12	Shalimar Masoor 2	1206
	NWPZ	LL 1859	2193	10.53	LL 1613	1984
IVT (Rice Fallow)	CZ	RL 2021-2	1159	15.09	RVL 11-6	1007

Field pea

Trial	Zone	Entries	Yield (kg/ha)	% increase over best check	Best check	Yield (kg/ha)
AVT -1 (Tall)	NWPZ	Pant P 568	2094	11.03	Aman (IPF 5-19)	1886
		Pant P 574	2415	28.05		
	NHZ	NDP 22-4	1368	32.30	Pant P 42	1034
		IPF 23-23	1304	26.11		
		Pant P 568	1273	23.11		
		Pant P 574	1195	15.57		
		IPF 23-19	1154	11.60		
IVT (Tall)	NWPZ	IPF 24-13	2436	28.96	Aman (IPF 5-19)	1889
		Pant P 628	2359	24.90		
		Pant P 633	2103	11.33		
		IPF 24-15	2089	10.58		
	NEPZ	RFP 2020-4	1940	18.65	IPF 16-13	1635
IVT (Dwarf)	NHZ	Pant P 610	1478	33.75	Prakash	1105
		SPC 103	1474	33.39		
		IPFD 24-7	1354	22.53		
		Pant P 605	1246	12.76		
		IPFD 24-1	1229	11.22		
		RNCP 17-05	1217	10.13		
		Pant P 592	1167	5.61		
		IPFD 24-8	1165	5.42		
AVT-1 (Rice Fallow)	NEPZ	Pant P 568	1418	12.54	IPF 16-13	1260

Lathyrus

Trial	Zone	Entries	Yield (kg/ha)	% increase over best check	Best check	Yield (kg/ha)
IVT	CZ	RLS 3004-2 (ODAP 0.09)	1231	4.05	Mahateora	1183

Weighted mean of yield (kg/ha) of AVT 2 entries

Chickpea

Desi (Timely Sown): ECZ **Yield (Kg/ha)**

Entries	AVT 2 (2024-25)	AVT 1 (2023-24)	IVT (2022-23)	Weighted Mean
GJG 1907	1866 (2)	2227 (4)	2012 (2)	2083
JAKI 9218 (Ch)	1488 (2)	1855 (4)	1465 (2)	1666
Indira Chana 1 (Ch)	1455 (2)	1771 (4)	1324 (2)	1580
RG 2015-08 (Ch)	1295 (2)	1935 (4)	1179 (2)	1586
JG 16 (Ch)	-	1793 (4)	1822 (2)	1803

Desi (Rainfed): SZ **Yield (Kg/ha)**

Entries	AVT 2 (2024-25)	AVT 1 (2023-24)	IVT (2022-23)	Weighted Mean
NBeG 1710	1374 (5)	1596 (2)	1967 (4)	1630
JG 11 (Ch)	1617 (5)	1423 (3)	1732 (4)	1607
BGD 111-1 (Ch)	1406 (5)	1314 (3)	-	1372
JAKI 9218 (Ch)	1499 (5)	1330 (2)	1476 (4)	1460

ELSK: SZ **Yield (Kg/ha)**

Entries	AVT 2 (2024-25)	AVT 1 (2023-24)	IVT (2022-23)	Weighted Mean
Phule G 211406	1194 (3)	1679 (2)	1980 (2)	1557
NBeG 844	900 (3)	1657 (2)	1990 (3)	1498
CSJK 174 (Ch)	1659 (3)	1607 (2)	2014 (3)	1779
MNK 1 (Ch)	1197 (3)	1479 (2)	1653 (3)	1439
RLBGK 1 (Ch)	1209 (3)	1588 (2)	1993 (3)	1598
KAK 2 (Ch)	1434 (3)	1683 (2)	1780 (3)	1626
NBeG 119 (Ch)	1457 (3)	1765 (2)	2132 (3)	1787
Vihar (Ch)	1880 (3)	1888 (2)	2202 (3)	2003

ELSK: SZ **100 Seed Wt. (g)**

Entries	AVT 2 (2024-25)	AVT 1 (2023-24)	IVT (2022-23)	Weighted Mean
Phule G 211406	47.5	46.3	50.8	48.1
NBeG 844	47.3	44.5	43.2	45.1

CSJK 174 (Ch)	37.3	32.7	35.5	35.5
MNK 1 (Ch)	41.2	40.0	43.4	41.7
RLBGK 1 (Ch)	32.4	35.8	37.6	35.2
KAK 2 (Ch)	37.0	33.8	32.6	34.6
NBeG 119 (Ch)	40.3	36.0	36.6	37.8
Vihar (Ch)	35.2	31.4	33.9	33.8

Lentil (Large seed)

Zone: NHZ

S. N.	Entry	2022-23 (IVT)	2023-24 (AVT-1)	2024-25 (AVT-2)	W.M.	% increase best check	
						Pant L 11	Shalimar M-2
1	LL 1809	1740(5)	1814(4)	1393(4)	1656	19.5	26.2
2	LL 1798	1721(5)	1773(4)	1289(4)	1604	15.7	22.3
3	Pant L 11 (Ch)	1444(5)	1458(4)	1240(4)	1386		
4	Shalimar Masoor 2 (Ch)	1413(5)	1608(4)	890(4)	1312		
5	VL 514	1405 (5)	1371(4)	1069(4)	1291		
6.	VL 507	1145(5)	1384(4)	-	1251		

Field pea (Tall)

Zone: NWPZ

S. N.	Entry	2022-23 (IVT)	2023-24 (AVT-1)	2024-25 (AVT-2)	W.M.	% increase best check	
						Aman	Pant P 42 (Ch)
1	Pant P 550	1984(5)	2176(5)	1983(4)	2052	15.90	20.07
2	Pant P 554	2043(5)	2213(5)	2254(4)	2164	22.32	26.62
3	Aman (Ch)	1764(5)	1679(5)	1886(4)	1769		
4	HFP 9907B (Ch)	1684(5)	1661(5)	1718(4)	1686		
5.	Pant P 42 (Ch)	1806(5)	1485(5)	1869(4)	1709		

Pre breeding

At ICAR-IIPR, Kanpur, total 106 wild accessions received under CRP-AB program were sown for multiplication and utilization in breeding program. Besides, these accessions were screened against Ascochyta blight under artificial epiphytotic

conditions.Total 6 wild accessions namely C-2024-79, C-2024-98,C-2024-99, C-2024-104,C-2024-105 and C-2024-106 were resistant to Ascochyta blight. Sixty accessions included 14 *Cicer judaicum*, 2 *Cicer bijugum*, 5 *Cicer pinnatifidum*, 1 *Cicer yamashitae*, 1 *Cicer chorassanicum,* 6 *Cicer echinospermum*, 29 *Cicer reticulatum* and 2 other accessions have been acclimatized. In addition, 113 *Cicer* wild accessions, landraces (75), parental lines (115), trait specific donors (114), pre-breeding selection (40), and exotic kabuli lines (23) were maintained. Ten crosses were developed targeting traits like flowering under cold window and early maturity using donors: ILWC 104, ILWC 105 and ILWC 106. The developed segregating populations F1 (16), F2 (9), F3 (11), F4 (7), F5 (4), F6 (6) with targeted traits like cold tolerance & earliness, plant architecture, reducing internodal distance, heat tolerance, pod size, quality, tolerance to post-emergence herbicide and broadening genetic base were evaluated and advanced. Station trial was conducted with 20 ABLs derived from pre-breeding and wide hybridization crosses with three checks under timely sown conditions. Some lines outyielded the best check GNG 2207 (24 q/ha) - IPC22-106 (T1-A/T39-1); IPC22-44 [IPC04-98/ILWC 179]; IPC21-108 (ICC16696/ICC11276); IPC21-78 [JAKI 9218/ ILWC 257].

At PAU, Ludhiana total 106 wild accessions received from NBPGR were evaluated against Ascochyta blight and seven accessions (C 2024-2, 29, 37, 98, 104, 105, 106) showed resistance against Ascochyta blight under artificial epiphytotic conditions. PAU, Ludhiana is also maintaining 65 accessions of different wild *Cicer* species (*C. reticulatum, C. pinnatifidum, C. judaicum, C. bijugum, C. cuneatum and C. echinospermum*). Thirteen fresh crosses including two back crosses were attempted. Inter-specific

Field view of pre-breeding material at PAU, Ludhiana (2024-25)

breeding materials were generated and evaluated for targeted traits. A set of 158 derivative lines from *C. arietinum* (Bushy Mutant) x *C. pinnatifidum* (IG136820) is maintained for utilization of derived lines in the breeding programme. Besides this, the set has been evaluated for resistance to AB, BGM and tolerance to pod borer infestation. A total of 154 derivative lines, were screened for pod borer tolerance in *rabi* 2024-25. Two interspecific RIL populations i.e. JG14 x GLWP61 (F_6) and C214 x GLWP63 (F_6) are under development.A set of ICC96030 x *C. pinnatifidum* (ILWC 188) derived lines, maintained as mid-term storage (5years) at PAU off-season Research Station, Keylong (H.P.), were planted during *rabi* 2024-25 at PAU, Ludhiana.

At ICAR-IARI, New Delhi efforts were made towards deployment of pre-breeding for introgression of genes for targeted biotic and abiotic stresses**.** A set of 200 chickpea germplasm lines comprising land races and released cultivars were screened at three locations for heat tolerance. The genome wide association analysis for salinity tolerance was investigated by evaluating 138 chickpea landraces through field and pot experiments. A multi-environment analysis identified 130 QTNs and quantitative-by-environment interactions (QEIs) associated with the salt tolerance index of different traits. Among the discovered genes, CarNHX1 emerged as a key player, showing strong associations with QTNs and QEIs related to salt tolerance. Additionally, the study pinpointed 16 candidate genes linked to QTNs, three candidate genes associated with QEIs for stress index traits, and seven candidate genes involved in salt tolerance under controlled and salt-stressed conditions.Besides,88 chickpea crop wild relatives (CWRs) involving *C. reticulatum, C. judiaicum, C. bijugam, C. pinnatifidum, C. echinospermum, C. yamashitae* were evaluated for nutritional quality traits. Amongst them chickpea accessions ICC17148, ICC17271 and ICC17149 were having highest grain iron content i.e. 110.39, 86.43 and 78.36 mg/kg respectively. A set of 105 pre-breeding lines was screened against rust disease under artificial epiphytotic condition and 51 lines were found moderately resistant.

National Crossing Programme

Chickpea

In order to develop a pool of segregating materials, station and national crossing programme were made at AICRP on Rabi pulses centres. Centres made total 605 crosses under national (141 crosses) and station (464 crosses) crossing programme. Crosses were made under national crossing programme at PAU, Ludhiana (4), MPKV, Rahuri (6), CCSHAU, Hisar (4), RAK CoA, Sehore (5), ARS, Sriganganagar (5), JAU, Junagadh (10), BAU, Sabour (4), ARS, Kota (6), IGKVV, Raipur (4), JNKVV, Jabalpur (6), TCA, Dholi (7), NDUA&T, Ayodhya (3), RARS, Nandyal (6), COA, Indore (4),

PDKV, Akola (5), RLBCAU, Jhansi (3), RARI, Durgapura (6), ARS, Badnapur (12), ARS, Kalaburagi (12), CAU Imphal (6), GBPUAT, Pantnagar (3), BAU, Ranchi (4), SK Nagar (8), BCKV, Kalyani (11) and Vijayapur (5). The seeds of these crosses will be advanced and segregating material will be shared among various centres.

Lentil

A national crossing programme was organized at 18 centres for lentil and total 355 crosses were made. Crosses were made under national crossing programme at RARI, Durgapura (6), RAK, Sehore (23), ARS, Sagar (14), AU, Kota (12), IARI, New Delhi (27), IIPR, Kanpur (24), Pantnagar (36), BCKV, Mohanpur (10), PAU, Ludhiana (25), BAU, Ranchi (6), IGKV, Raipur (12), HAU, Hisar (12), Ayodhya (4), TCA, Dholi (8), Sabour (23), BHU, Varanasi (23), VPKAS, Almora (70) and Imphal (20). The seed of these crosses will be advanced and segregating material will be shared among various centres for development of varieties and breeding materials.

Field pea

National crossing programme was organised at 14 centres and total 216 new crosses were made. Crosses were made under national crossing programme at BHU, Varanasi (9), RARI, Durgapura (7), HAU, Hisar (24), Pantnagar (27), RASR, Sagar (6), IIPR, Kanpur (24), BAU, Ranchi (5), IGKV, Raipur (12), SK Nagar (6), Ayodhya (9), CAU, Imphal (12), AU, Kota (14), PAU, Ludhiana (47) and TCA Dholi (14). The seed of these crosses will be advanced and segregating material will be shared among various centres.

Lathyrus

Total 26 new crosses were made at IGKV, Raipur (9) and BCKV, Mohanpur (7) and TCA, Dholi (10). The seed of these crosses will be advanced and segregating material will be shared among various centres for development of varieties and breeding materials.

Shuttle Breeding Programme

Shuttle Breeding provides an opportunity for flow of breeding material of diverse origin among cooperative centres of AICRP on Rabi Pulsesin order to strengthen their own breeding programmes. The material developed through this project also serves as input to breeding programme of other ecologies. During 2024-25, bulk seeds of chickpea advanced breeding material (F_3 and F_4) were supplied to 18centres for strengthening and broadening their breeding base. A total of 94 crosses were supplied to different centres - Akola (4 crosses), Dholi (7 crosses), Ayodhya(10), Hisar (11), Jhansi (9 crosses), Nandyal (2), Ranchi (8 crosses), Sabour (9 crosses), Samba

(01), Sehore (01 crosses), Shillongani (6 crosses), Imphal (04 crosses), Vijayapur (11 crosses), Durgapura (3 crosses), Gulberga (01), Rahuri (3 crosses), and Pantnagar (3 crosses). For the current year, F_3 bulks of 10 crosses from JAU, Junagadh are available for distribution among cooperative centres. ICAR-IIPR has F_3 bulks of 10 crosses for distribution to different centres. Bulks of 7 crosses in F_3 generation are available at JNKVV, Jabalpur for sharing under shuttle breeding programme. PAU, Ludhiana has 5inter-specific cross materials which are available for distribution to other centres. Bulks of 8 F_3 and 2F_2 crosses are available for sharing under shuttle breeding programme at ARS, Kota.

Likewise, in lentil segregating material of 6 crosses were supplied to eight centres i.e. Srinagar, Imphal, Ranchi, Dholi, Sabour, Varanasi, Shillongani and ICAR-IIPR, Kanpur for strengthening and broadening their genetic base. In the case of field pea 10 crosses were supplied to five centres i.e. Srinagar, Ranchi, Dholi, Imphal, and Sabour. In Lathyrus, 14 crosses were shared with four centres i.e. Mohanpur, Raipur, Dholi and Sabour under shuttle breeding programme.

Off-Season Nursery

The chickpea breeding materials for off-season generation advancement were received from AICRP chickpea centres such as Bijapur (27), Jabalpur, (15), Rahuri (43) and IIPR, Kanpur (45) during kharif 2024. The generation advancement was performed during the *Kharif* season and advanced breeding materials were sent to the respective AICRP chickpea centers. Besides, at PAU, Ludhiana off-season Research Station, Keylong (H.P.), a set of 49 elite parental lines were grown to attempt crosses along with 30 backcross progenies for advancement.

Genetic resource management

Chickpea

Total 20497 accessions were evaluated, rejuvenated and maintained at 24 AICRP centres. Breeding materials generated utilizing promising trait specific donors. Besides, breeding materials were generated utilizing promising trait specific donors.

Lentil

A total of 7492 accessions of lentil germplasm were maintained by 17AICRP centres: BCKV, Mohanpur; RVSKVV, Sehore; ICAR-IARI, New Delhi; RPCAU, Dholi; ARS, Kota; IIPR, Kanpur; IGKVV, Raipur; PAU, Ludhiana; JNKVV, Sagar; ANDUAT, Ayodhya; BAU, Ranchi; HAU Hisar; ICAR-VPKAS, Almora; Durgapura, Imphal, Shillongani, and BHU, Varanasi.Three germplasm of lentil INGR 25013, 25014, 25015 were registered as genetic stocks with ICAR-NBPGR, New Delhi

Field pea

Twelve AICRP centres, ICAR-IIPR, Kanpur; IGKVV, Raipur; CCSHAU, Hisar; ANDUAT, Ayodhya; PAU, Ludhiana; JNKVV, Sagar; SDAU, SK Nagar; ARS, Kota; BAU, Ranchi; CAU, Imphal; Shillongani, and Varanasi, maintained a total of1966 accessions of field pea.

Lathyrus

A total of 3248 accessions of lathyrus were maintained by four centres viz., IGKVV, Raipur; IIPR Regional station, Bhopal; BCKV, Mohanpur and RPCAU, Dholi.

Breeder Seed Production

Chickpea

Total chickpea BSP indent was 7104.01 q against which the AICRP Rabi Pulses allotted 7930.50 q for production during rabi 2024-25. The total chickpea breeder seed produced was 13426.95 q, which comprises the DAC indented 101 varieties. A surplus production of 6322.94 q chickpea BSP was recorded, which ensures the future seed availability.

Lentil

In lentil, the total breeder seed production was 963.66 q against the DAC indent of 702.33 q from 36 varieties of lentil. Thus, a surplus of 261.33 q breeder seed was produced against the DAC indent.

Field pea

In Fieldpea, the total breeder seed production was749.44 q. against the indent of 630.18 q from 26 field pea varieties.Hence, a surplus of 119.26q breeder seed was produced against the DAC indent.

Lathyrus

In Lathyrus, the total breeder seed production was 100.15q against the indent of 107.58q from four varieties.

CROP PRODUCTION

Agronomy

Chickpea

- The combination of oxyfluorfen 150 g a.i./ha (pre-emergence) followed by topramezone 20.6 g a.i./ha at 14–21 DAS is recommended for effective broad-

spectrum weed control in chickpea in NWPZ, NEPZ, and CZ, while oxyfluorfen followed by propaquizafop or quizalofop-p-ethyl at 15–20 DAS is suitable for the Southern Zone.

- Chickpea yield under organic cultivation was generally comparable to inorganic practices across locations, with Biophos and Biozinc showing consistent yield improvement. Despite lower net returns and B:C ratios under organic farming, soil health parameters and microbial activity were notably enhanced, indicating long-term sustainability benefits.
- Conservation agriculture practices with 20 cm rice stubble retention improved chickpea yield, soil health, and economic returns, especially under zero tillage. The puddled transplanted rice–zero tilled chickpea system showed the highest profitability, while stubble retention consistently enhanced SOC and nutrient availability.
- Chickpea yield under natural farming was generally lower than the recommended practice across most locations, with few exceptions like Samba and Kalyani. Organic farming consistently improved soil health indicators such as SOC and available NPK, particularly at Durgapura, Kalaburagi, and Junagarh. Overall, recommended practices remained more profitable, while organic management offered soil sustainability benefits.

Lentil

- In organic cultivation of lentil and field pea with foliar application of Biophos and Biozincalong with 100% FYM significantly enhanced yields and soil health. Though yields are generally lower than inorganic systems, long-term sustainability benefits are notable.
- Retaining 20 cm rice residue, especially in ZT-DSR followed by ZT lentil, is boosted yield, soil health, and profitability. However, field pea may perform better under conventional tillage at certain location suggesting that tillage response may vary with crop and location.
- In lentil across the locations recommended practice consistently produced the highest yields, economic returns, and input use efficiencies. In contrast, natural farming resulted in 17.6 % yield reduction. However, both natural and organic systems contributed to improved soil health and microbial activity, highlighting a trade-off between immediate productivity and long-term sustainability.
- Pendimethalin + Quizalofop-p-ethyl, Oxyfluorfen + Propaquizafop (pre+post), or Imazethapyr (post) are effective options for weed control, improving yield and profitability in NWPZ.

Field pea

In field pea across the locations recommended practice consistently produced the highest yields, economic returns, and input use efficiencies. In contrast, natural farming resulted in 30% yield reduction. However, both natural and organic systems contributed to improved soil health and microbial activity, highlighting a trade-off between immediate productivity and long-term sustainability.

Pendimethalin + Quizalofop-p-ethyl or Oxyfluorfen + Propaquizafop (pre+post) are recommended for effective weed control and high yields in NHZ, NWPZ, NEPZ, and CZ.

Microbiology

Chickpea

- A total of 58 *Mesorhizobium* isolates were obtained from chickpea root nodules collected at Ludhiana, New Delhi, and Kanpur centre.
- Multilocation testing of five elite *Mesorhizobium* strains across eight centres revealed marked differences in plant response. The reference strain RFC 117 (Kanpur) recorded the highest nodule biomass across all locations, with 39% increase over the uninoculated control (UI), followed by NS 1 (New Delhi), which showed a 35% increase over UI. The highest grain yield was observed with NS 1 (New Delhi), NBAIM, and RDN, each showing a 21% increase over the uninoculated control. This was closely followed by RFC 117 and LCP-23-33, which recorded 20% increase.
- Rice fallow soil samples were collected from farmers' fields across 20 villages across four districts of Assam, in collaboration with AAU-ZRS, Shillongani. In addition, potential endophytic bacteria were isolated from rice fallow soil received from BCKV, Mohanpur.
- Thirteen AVT-II chickpea entries, including nine checks and four test entries, were evaluated for their inherent nodulation potential with native *Mesorhizobium* strains at five AICRP centres. Based on pooled mean data, a consistent increase in nodule dry weight, corresponding with enhanced plant growth was observed in the check variety Vihar and the test entry NBeG 844 across all five locations.

Lentil

- Rice fallow soil samples were received from BCKV, Mohanpur and endophytic bacteria isolated at ICAR-IIPR, Kanpur.

- Four AVT 2 lentil genotypes including 2 checks were tested for symbiotic efficiency at Sehore and Ludhiana. Higher leghemoglobin content was observed in test entry LL 1809 at both locations.

CROP PROTECTION

Plant Pathology

Chickpea

- For the management of seed and soil borne diseases, the experiment was conducted at twelve centres using seed treatment by different seven new and combi-fungicides. The overall performance of Seed treatment with Mancozeb 50 % + Carbendazim 25 % WP @ 3gm/kg seed was found effective. However, the response of treatments varied in different centres.
- In Elite Plant Pathological Screening Nursery (EPPSN), seventy-one entries showing resistant/moderately resistant reaction to wilt in previous year (23-24), were included for confirmation of wilt resistance at selected thirteen locations having, established wilt sick plots. Out of 71 entries, twenty-nine entries belonging to different groups expressed resistance/tolerance to wilt at 8 or more locations out of the 13 locations, confirming the wilt resistance for the second consecutive year.
- Evaluation of entries against collar rot of chickpea was done at Raipur, Shillongani, Jhansi and Jabalpur. Some entries showing resistance at 50 per cent locations were Jammu Chickpea 5, NBeG 844 (AVT 2), IGK 2025-07, IPCKB 2018-184, NBeG 1711, BG 4061, RLBGK 15, IPCK 2019-182 and Phule G 0517 (ch).
- All the 262 entries were evaluated against AB at PAU Ludhiana under natural epiphytotic conditions. Jammu Chickpea 5, GLD19076, GLD18152 and IGK 2025-07 was found resistant at the centre. GLD20035, H 20-03, GLD20003, CSG-21-2, GLD19079, GNG 2655, NBeG 1539, JGK 2024-94, RLBGK 15, GLD19082, GLD20034, PBG 9 (ch), GNG 1581 (ch), GBM 2 (ch) and BG 4005(Ch) were found moderately resistant to AB.
- Among 262 entries GJG 1907 (AVT 2), RKG 23-1, GJG 2101, JG 2024-86, RSGD 1460, GLD20003, RVSSG 130, NDG 23-5, KCK 2 and AKGK 1802 was found moderately resistant for BGM at two locations out of three.

Lentil

- Entries PL 4, Kota Masoor 2, and Kota Masoor 4 found resistant to rust, whereas the entry IPL356 resistant to wilt.

- Pant bio-agent-3 (*Trichoderma sperilum* + *Pseudomonas fluorescence)* was found highly effective for reducing the disease incidence of wilt and increasing the yield.

Field pea

- The entriesIPF 23-23and IPF 24-15 showed multiple resistance to rust and powdery mildew.

Lathyrus

- Seven entries of lathyrus were evaluated at four locations (Raipur, Shillongani, Dholi and Akola) against powdery mildew disease but the disease did not appear at any of the location.

Entomology

Chickpea

- The incidence of insect pests of chickpea and their natural enemies throughout cropping period was observed in early, timely and late sown crop conditions. There was less larvae per meter row length in early sown crop, hence less pod damage and more grain yield than timely and late sown crop in different zones except at Sriganganagar in NWPZ. The population of larval parasitoid, *Campoletischloridae* and spiders was more under early and timely sown conditions than late sown conditions.
- The bioefficacy experiment on biorationals insecticides against *H. armigera,* the data on per cent pod damage revealed that treatment Chlorantraniliprole 18.5 SC @ 0.25 ml/ L was the best treatment against this pestfollowed by Tetraniliprole 18.18 SC.
- The biointensive IPM module (BIPM) observed lower population of *H armigera*, lower pod damage and higher grain yield as well as higher population of natural enemies as compared to the farmer's practice and untreated control, resulting in higher net returns.
- Based on three years of data, the pooled avoidable yield losses in insecticide and biopesticide-treated plots, over the untreated control, were recorded 34.4% and 24.9% in the NWPZ, 8.8% and 4.51% in NEPZ, 12.1% and 8.7% in the CZ, and 12.4% and 9.1% in the SZ, respectively.

Lentil

- Studies on the seasonal abundance and population dynamics of key insect-pests and natural enemies revealed that the maximum incidence of aphid

(22.4 aphids/10 cm shoot) was observed at Mohanpur, and was significantly positively correlated with maximum & minimum temperature, sunshine hours and rainfall. Maximum peak infestation of pod borer (4.6 larvae/plant) was recorded at Dholi during *rabi* 2024-25.

Field pea

- Evaluation of the bio-intensive IPM module (BIPM) against major insect pests of fieldpea revealed that the BIPM module was more effective as compared to the farmers' practice.
- The highest incidence of pod borer (5.3 larvae per plant), aphid (35.50 per 10 cm shoot) & leaf mine (37.66 % leave damage) was recorded at Varanasi center.

Lathyrus

- *Lecanicillium lecanii* @ 7.5 g/l was found to be superior for the management of aphids in lathyrus at Mohanpur centre.

Front Line Demonstrations

Chickpea

- A total of 400 frontline demonstrations of chickpea were allocated to 28 centres in four zones.
- Three hundred twenty-one demonstrations were conducted on package technology in which 28.6% yield advantage was recorded as compare to farmer practices.
- Forty-nine demonstrations were conducted on package technology in rice fallow, wherein 26.4% higher grain yield was achieved than farmers practices.
- Five demonstrations were conducted on integrated pest management in which 71.7 percent yield enhancement was observed as compare to farmers practices.
- Under the Tribal Sub Plan (TSP), a total of 361 demonstrations were conducted in tribal areas. The average yield with improved practices was recorded as 1540 kg/ha against 1124 kg/ha in farmer practices which was 37.0% higher than farmers practices.

Lentil

- A total of 210 frontline demonstrations of lentil were allocated to 18 centres on package technology across four zones.
- The average yield achieved using package technology was 1376 kg/ha which was 38.1% higher to farmers practices (996 kg/ha).

- In rice fallow conditions average yield recorded 885 kg/ha with package technology which was 31.9% greater than farmers practices (671 kg/ha).
- Under the Tribal Sub Plan (TSP), a total of 190 demonstrations were conducted in tribal areas. The average yield achieved with improved practices was 1101 kg/ha, compared to 819 kg/ha with farmers practices. This demonstrated a yield advantage of 34.4%.

Field pea

- A total 60 frontline demonstrations of field pea were allocated on package technology to 10 centres in three zones.
- The average yield was obtained 1611 kg/ha through package technology against 1117 kg/ha by farmers practices with an increase of 44.2%.
- Eighteen demonstrations were conducted on package technology in rice fallow, wherein 27.1% higher average yield was recorded ha as compare to farmer practices.
- Under the Tribal Sub Plan (TSP) total of 95 demonstrations were conducted in tribal areas. The average yield with improved practices was recorded 1532 kg/ha against 1116 kg/ha in farmer practices. The yield advantage with improved practices was 38%.

BUDGET DETAILS

Head wise break up of Plan Budget Expenditure in respect of AICRP on Rabi Pulses under DARE/ICAR 2024-25

(Rs. In lakh)

Heads	
A. Other than NEH	
Grant in Aid-Capital	19.50
Grant in Aid-Salary	1547.99
Grant in Aid-General	293.22
Total	**1860.71**
Grant in Aid-Capital	-
Grant in Aid-Salary	79.11
Grant in Aid-General	25.41
Total	**104.52**
C. TSP	26.00
Grand Total	1991.23

ACTION TAKEN REPORT

S. No.	Action Point	Action Taken
1.	National crossing program to be designed meticulously and ecology-specific crosses to be allotted to the centers.	The National crossing program was designed after an online meeting held on 10.09.2024 chaired by subject expert Dr Sarvjeet Singh. The specific crosses were allotted to each centre after thorough discussion. The trait specific donors were supplied by the PC unit.
2.	Designation of hot spot for major disease of rabi pulses.	A committee for designation of hot spots in rabi pulses was constituted and an online meeting was held in which the PI (Pathology) made a presentation on the 10 years data of major diseases of chickpea, lentil and fieldpea.
3.	The PC unit to facilitate the sharing of trait specific advanced breeding lines/ population of Pre-breeding and wide hybridization to the specific zones/centers	Advanced breeding lines/pre-breeding lines and segregating material of chickpea, lentil, fieldpea and lathyrus were shared by IIPR, Kanpur, IARI, New Delhi, PAU, Ludhiana and ICARDA, Amlaha to following centres: IGKV, Raipur; 2. Dholi; 3. BCKV, Mohanpur; 4. AAU, Shilongani; 5. BAU, Sabour and 6. BHU, Varanasi
4.	Hundred seed weight may be recorded for kabuli and ELSK entries after receiving seed at PC unit.	100-seed weight of kabuli and ELSK entries was recorded at PC unit after the entries were received and accordingly the entries were classified.
5.	Nursery for biofortified chickpea and lentil need to be started immediately to accelerate delivery of nutrient dense varieties.	New Biofortification nursery was started in chickpea in 2024-25 with 19 entries received from different centres and evaluated at 4 locations in different zones.
6.	Sources of resistance to key diseases should be shared by PC to all the collaborating centres.	The donors for key disease of chickpea, lentil and fieldpea were shared to collaborating centres for use in national crossing program of their centre.
7.	Initiation of new interventions/ trials in rice fallow ecology through identification of beneficial microorganisms for improving nitrogen symbiosis and growth of rabi pulses by prioritizing on study of acid phosphatase, alkaline phosphatase and nitrogenase enzymes activities.	2 new experimentswere initiated from 2024-25 “Identification of beneficial endophytic bacteria for improving symbiosis and growth of chickpea / lentil in rice fallow ecology “ Rice fallow soil samples were collected from farmers’ fields across 20 villages across four districts of Assam, in collaboration with AAU-ZRS, Shillongani. In addition, potential endophytic bacteria were isolated from rice fallow soil received from BCKV, Mohanpur. Characterization of the bacterial isolates for plant growth promoting traits and in vivo plant assay will be carried out in rabi 2025-26.
8.	Additional budget may be provided to designated breeding hubs	Additional research contingency was given to the following breeding hubs: 1. Jabalpur, 2. Kota, 3. Kalaburagi, 4. Pantnagar and 5. Kalyani

Acknowledgement

I acknowledge with thanks the efforts of the cooperating scientists for carrying out the coordinated trials as well as Vice Chancellors and Directors of Research and other officers of state Agricultural Universities and Departments of Agriculture for facilitating the implementation of the envisaged program. I am also grateful to all the Principal Investigators of project, Scientists, Technical officers, staff members of Administration & Accounts section of ICAR-IIPR, Kanpur for their significant contributions.

Place: Kanpur (Shailesh Tripathi)

Date: 05 August, 2025 Project Coordinator

Annexure I

All India area, production and yield of total pulses in India

Year	Area (m ha)	Production (m t)	Yield (kg/ha)
1980-81	22.46	10.63	473
1981-82	23.84	11.51	483
1982-83	22.83	11.86	519
1983-84	23.54	12.89	548
1984-85	22.74	11.96	526
1985-86	24.42	13.36	547
1986-87	23.16	11.71	506
1987-88	21.27	10.96	515
1988-89	23.15	13.85	598
1989-90	23.41	12.86	549
1990-91	24.66	14.26	578
1991-92	22.54	12.02	533
1992-93	22.36	12.82	573
1993-94	22.25	13.3	598
1994-95	23.03	14.04	610
1995-96	22.28	12.31	552
1996-97	22.45	14.24	635
1997-98	22.87	12.98	567
1998-99	23.50	14.91	634
99-2000	21.12	13.42	635
2000-01	20.35	11.08	544
2001-02	22.01	13.37	607
2002-03	20.50	11.13	543
2003-04	23.46	14.91	635
2004-05	22.76	13.13	577
2005-06	22.39	13.39	598
2006-07	23.76	14.2	598
2007-08	23.81	14.76	620
2008-09	22.99	14.57	638
2009-10	23.35	14.66	625
2010-11	26.28	18.24	689
2011-12	24.46	17.09	699
2012-13	23.47	18.34	750
2013-14	25.26	19.25	764
2014-15	23.55	17.15	728
2015-16	24.91	16.35	656
2016-17	29.44	23.13	786
2017-18	29.81	25.41	853
2018-19	29.16	22.08	757
2019-20	27.99	23.02	823
2020-21	28.78	25.46	885
2021-22	30.73	27.30	888
2022-23	28.90	26.06	902
2023-24	27.01	24.25	881
2024-25	27.62	25.24	914

3rd Advance production estimates as on 25.07.2025

Source: *Agricultural Statistics Division, Directorate of Economics &Statistics, Department of Agriculture & Cooperation*

Area, production and yield of major rabi pulses in India

Year	Chickpea			Lentil			Field pea			Lathyrus		
	Area (m ha)	Production (m t)	Yield (kg/ha)	Area (m ha)	Production (m t)	Yield (kg/ha)	Area (m ha)	Production (m t)	Yield (kg/ha)	Area (m ha)	Production (m t)	Yield (kg/ha)
1980-81	6.58	4.33	657	0.91	0.45	499	0.41	0.28	688	1.27	0.44	348
1981-82	7.87	4.64	590	0.92	0.49	528	0.43	0.29	689	1.31	0.50	381
1982-83	7.40	5.29	715	0.97	0.48	497	0.44	0.32	720	1.19	0.48	404
1983-84	7.16	4.75	663	0.98	0.53	544	0.44	0.37	822	1.17	0.48	409
1984-85	6.91	4.56	661	1.06	0.54	510	0.45	0.34	757	1.14	0.53	436
1985-86	7.80	5.79	742	1.07	0.65	610	0.49	0.42	860	1.23	0.49	460
1986-87	6.98	4.53	649	1.07	0.67	621	0.48	0.43	892	1.05	0.49	460
1987-88	5.77	3.63	629	1.05	0.65	620	0.47	0.41	869	1.06	0.52	489
1988-89	6.81	5.13	753	1.09	0.74	680	0.46	0.44	941	0.89	0.43	483
1989-90	6.47	4.22	652	1.10	0.77	700	0.59	0.46	777	0.93	0.48	514
1990-91	7.52	5.36	712	1.16	0.83	727	0.54	0.59	1093	0.94	0.52	554
1991-92	5.58	4.12	739	1.15	0.8	692	0.54	0.54	1000	0.85	0.52	609
1992-93	6.45	4.42	684	1.20	0.79	657	0.61	0.55	903	0.88	0.51	580
1993-94	6.36	4.98	783	1.18	0.75	632	0.69	0.64	927	0.97	0.62	641
1994-95	7.54	6.44	853	1.16	0.78	675	0.76	0.67	879	0.99	0.60	605
1995-96	7.12	4.98	700	1.26	0.71	566	0.76	0.64	836	0.93	0.42	455
1996-97	6.85	5.57	813	1.34	0.88	660	0.73	0.72	947	0.85	0.49	576
1997-98	7.56	6.13	811	1.29	0.8	624	0.74	0.66	891	0.85	0.53	627
1998-99	8.47	6.80	803	1.39	0.94	675	0.83	0.71	855	0.66	0.41	621
99-2000	6.15	5.12	833	1.44	1.05	732	0.80	0.83	1034	0.70	0.51	726
2000-01	5.19	3.86	744	1.48	0.92	619	0.65	0.54	819	0.52	0.33	639
2001-02	6.42	5.47	853	1.47	0.97	664	0.67	0.61	906	0.69	0.44	640
2002-03	5.91	4.24	717	1.37	0.87	634	0.64	0.59	891	0.57	0.35	617
2003-04	7.05	5.72	811	1.40	1.03	743	0.71	0.73	1022	0.63	0.44	698
2004-05	6.71	5.47	815	1.48	0.99	675	0.79	0.78	993	0.64	0.30	474
2005-06	6.93	5.60	808	1.51	0.95	629	0.77	0.71	913	0.63	0.35	552
2006-07	7.63	6.33	830	1.50	0.91	621	0.75	0.62	816	0.62	0.38	615

Year	Chickpea			Lentil			Field pea			Lathyrus		
	Area (m ha)	Production (m t)	Yield (kg/ha)	Area (m ha)	Production (m t)	Yield (kg/ha)	Area (m ha)	Production (m t)	Yield (kg/ha)	Area (m ha)	Production (m t)	Yield (kg/ha)
2007-08	7.58	5.75	759	1.31	0.82	622	0.63	0.48	771	0.60	0.39	640
2008-09	7.89	7.06	895	1.38	0.96	693	0.72	0.66	919	0.54	0.34	636
2009-10	8.17	7.48	915	1.48	1.03	697	0.76	0.67	886	0.45	0.31	698
2010-11	9.19	8.22	895	1.59	0.94	591	0.72	0.59	814	0.52	0.35	675
2011-12	8.32	7.70	912	1.56	1.06	678	0.76	0.71	933	0.48	0.32	671
2012-13	9.51	8.83	929	1.42	1.13	797	0.76	0.84	1100	0.58	0.43	742
2013-14	9.93	9.53	960	1.34	1.02	759	0.96	0.92	960	0.40	0.28	707
2014-15	8.25	7.33	889	1.47	1.04	705	0.97	0.89	912	0.49	0.45	921
2015-16	8.39	7.06	840	1.28	0.98	765	0.90	0.74	821	0.39	0.33	842
2016-17	9.63	9.38	974	1.46	1.22	838	1.06	1.01	955	0.42	0.41	993
2017-18	10.56	11.37	1077	1.55	1.62	1047	0.83	0.99	1204	0.38	0.29	804
2018-19	9.55	9.94	1041	1.36	1.23	901	0.61	0.81	1338	0.33	0.24	729
2019-20	9.68	11.08	1142	1.30	1.10	847	0.60	0.86	1440	0.31	0.19	594
2020-21	9.99	11.91	1192	1.47	1.49	1017	0.64	0.88	1375	0.28	0.26	903
2021-22	10.74	13.54	1261	1.41	1.27	899	0.76	1.00	1318	0.34		
2022-23	10.47	12.27	1172	1.64	1.56	952	0.84	1.13	1352	-	-	-
2023-24	9.59	11.04	1151	1.74	1.79	1028						
2024-25	9.61	11.34*	1180*	1.71	1.77*	1038*						

* 3rd Advance production estimates as on 25.07.2025

Source: *Agricultural Statistics Division, Directorate of Economics &Statistics, Department of Agriculture & Cooperation*

Area, production and yield of chickpea in different states

Year	Andhra Pradesh			Gujarat			Haryana			Karnataka			Madhya Pradesh		
	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P	Y
1971-72	66.00	25.00	379	57.00	40.00	702	1119.00	647.00	578	152.00	62.00	408	1686.00	1148.00	681
1972-73	70.00	18.00	257	34.00	28.00	824	970.00	551.00	568	132.00	20.00	152	1625.00	1109.00	682
1973-74	58.00	20.00	345	59.00	54.00	915	994.00	448.00	451	158.00	75.00	475	1851.00	1056.00	571
1974-75	68.00	28.00	412	37.00	15.00	405	704.00	343.00	487	163.00	66.00	405	1842.00	1144.00	621
1975-76	88.00	37.00	420	77.00	54.00	701	1106.00	907.00	820	192.00	89.00	464	1917.00	1226.00	640
1976-77	77.00	24.00	312	77.00	49.00	636	1029.00	824.00	801	163.00	50.00	307	2018.00	1049.00	520
1977-78	63.00	21.00	333	71.00	39.00	549	1149.00	965.00	840	168.00	59.00	351	1780.00	907.00	510
1978-79	57.00	16.00	281	66.00	59.00	894	1063.00	1044.00	982	164.00	69.00	421	1739.00	1032.00	593
1979-80	54.00	19.00	352	66.00	31.00	470	553.00	316.00	571	153.00	69.00	451	2174.00	924.00	425
1980-81	46.00	14.00	304	64.00	47.00	734	741.00	466.00	629	144.00	58.00	403	1807.00	1063.00	588
1981-82	52.00	24.00	462	88.00	70.00	795	1044.00	309.00	296	137.00	60.00	438	2029.00	1362.00	671
1982-83	60.00	26.00	433	157.00	121.00	771	508.00	282.00	555	145.00	69.00	476	2387.00	1644.00	689
1983-84	59.00	23.00	390	122.00	117.00	959	647.00	315.00	487	155.00	62.00	400	2106.00	1425.00	677
1984-85	52.00	17.00	327	116.00	101.00	871	622.00	319.00	513	221.00	92.00	416	2076.00	1302.00	627
1985-86	49.00	17.00	347	81.00	46.00	568	758.00	622.00	821	191.00	61.00	319	2282.00	1557.00	682
1986-87	60.00	15.00	250	44.00	28.00	636	610.00	413.00	677	230.00	89.00	387	2218.00	1481.00	668
1987-88	53.00	19.00	358	20.00	11.00	550	200.00	66.00	330	245.00	103.00	420	2240.00	1471.00	657
1988-89	48.00	25.30	527	108.00	65.50	606	645.00	604.00	936	188.00	61.70	328	2237.00	1566.80	700
1989-90	61.00	36.90	605	66.00	60.50	917	368.00	700.00	1902	224.00	74.60	333	2157.00	1426.80	661
1990-91	88.00	56.90	647	170.00	115.80	681	649.00	469.00	723	230.00	68.50	298	2462.00	1891.90	768
1991-92	64.00	47.00	734	67.00	40.00	597	305.00	201.00	659	196.00	77.00	393	2138.00	1715.00	802
1992-93	60.00	28.00	467	123.00	78.00	634	387.00	259.00	669	210.00	74.00	352	2346.00	1758.00	749
1993-94	89.00	65.00	730	97.00	55.00	567	405.00	403.00	995	290.00	132.00	455	2342.00	1954.00	834
1994-95	168.00	136.00	810	153.00	122.00	797	403.00	443.00	1099	441.00	222.00	503	2741.00	2487.00	907
1995-96	113.00	71.00	628	82.00	50.00	610	377.00	381.00	1011	293.00	142.00	485	2660.00	1988.00	747
1996-97	106.00	90.00	849	135.00	94.70	701	345.00	276.00	800	348.00	193.90	557	2513.00	2293.30	913
1997-98	147.00	90.00	612	112.30	98.80	880	355.00	310.00	873	337.20	115.00	341	2582.50	2440.90	945
1998-99	146.00	130.00	890	143.90	125.30	871	357.00	295.00	826	355.30	202.50	570	2665.40	2463.40	924
99-2000	163.00	95.10	583	81.90	41.90	512	100.00	58.00	580	319.40	175.30	549	2571.90	2535.10	986
2000-01	201.00	229.00	1139	17.00	9.00	529	125.00	80.00	640	369.50	239.40	648	1978.40	1620.30	819

Year	Andhra Pradesh			Gujarat			Haryana			Karnataka			Madhya Pradesh		
	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P	Y
2001-02	285.00	363.00	1274	49.10	27.20	554	143.00	122.00	853	479.70	281.60	587	2553.90	2408.20	943
2002-03	390.00	382.00	979	57.50	28.90	503	55.00	41.00	745	479.80	251.90	525	2470.60	1713.40	694
2003-04	422.00	457.00	1083	149.60	132.30	884	123.00	100.00	813	509.50	171.10	336	2791.30	2584.90	926
2004-05	341.00	345.00	1012	122.70	98.50	803	107.00	91.00	850	418.00	224.00	536	2746.50	2548.90	928
2005-06	394.00	627.00	1591	167.00	142.00	850	130.00	72.00	554	418.00	229.00	548	2560.70	2371.20	926
2006-07	602.00	653.00	1085	246.00	214.00	870	108.00	91.00	843	651.00	308.00	473	2462.80	2413.00	980
2007-08	630.00	912.00	1448	215.00	210.00	977	107.00	54.00	505	605.00	367.00	607	2438.70	1735.00	711
2008-09	610.00	860.00	1412	180.00	180.00	1011	120.00	130.00	1041	730.00	400.00	552	2840.00	2790.00	981
2009-10	650.00	850.00	1308	130.00	130.00	947	80.00	60.00	738	970.00	570.00	591	3090.00	3300.00	1071
2010-11	580.00	720.00	1241	180.00	200.00	1111	110.00	110.00	1000	960.00	630.00	656	3110.00	2690.00	865
2011-12	570.00	520.00	920	240.00	270.00	1138	80.00	70.00	911	800.00	380.00	473	3040.00	3290.00	1081
2012-13	681.00	759.00	1115	172.00	196.00	1140	47.00	53.00	1128	1025.00	652.00	636	3128.70	3551.20	1135
2013-14	472.10	596.70	1264	247.00	309.00	1251	83.00	75.00	904	946.00	716.00	757	3160.10	3299.10	1044
2014-15	342.00	391.00	1143	161.00	199.00	1236	65.00	42.00	646	939.00	674.00	718	2853.00	2964.00	1039
2015-16	471.00	500.00	1062	115.00	153.00	1330	42.00	26.00	619	1420.00	662.29	466	3017.00	3364.00	1115
2016-17	397.00	381.00	960	164.00	183.00	1116	37.00	44.00	1189	1003.00	592.00	590	3222.00	3544.20	1100
2017-18	520.00	588.64	1132	293.00	376.51	1285	32.00	36.00	1125	1265.00	783.04	619	3590.00	4595.02	1280
2018-19	478.00	243.00	508	173.00	235.00	1358	45.00	62.00	1385	1129.00	574.00	509	3103.00	3997.00	1288
2019-20	459.00	559.06	1218	405.05	635.12	1568	44.00	47.14	1072	864.00	675.65	782	1926.00	2729.14	1417
2020-21	469.00	532.78	1136	816.21	1280.00	1568	36.00	35.87	1005	713.00	445.63	625	2160.00	3214.08	1488
2021-22	445.00	455.24	1023	1101.56	2101.78	1908	38.00	45.37	1194	712.00	491.00	689	1936.00	2931.10	1514
2022-23	329.00	457.00	1388	764.00	1298.00	1699	29.00	26.00	911	822.00	559.00	680	2108.00	3095.00	1468
2023-24	302.00	300.00	994	622.00	1066.00	1714	11.00	11.00	1027	638.00	386.00	605	2110.00	2914.00	1381
2024-25	290.00	307.00	1057	850.00	1479.00	1741	21.00	31.00	1456	675.00	405.00	600	1692.00	2458.00	1453

A : Area (thousand ha) P : Production (thousand tonnes) Y : Yield (Kg/ha)

Area, production and yield of chickpea in different states

Year	Maharashtra			Punjab			Rajasthan			Uttar Pradesh			Bihar		
	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P	Y
1971-72	433.00	133.00	307	335.00	282.00	842	1642.00	885.00	539	1989.00	1566.00	788	241.00	170.00	705
1972-73	242.00	41.00	169	319.00	267.00	837	1204.00	803.00	667	1920.00	1461.00	761	262.00	134.00	511
1973-74	393.00	148.00	377	352.00	315.00	895	1500.00	715.00	477	1956.00	1044.00	534	260.00	114.00	438
1974-75	412.00	141.00	342	266.00	216.00	812	1425.00	796.00	559	1721.00	1010.00	587	248.00	157.00	633
1975-76	456.00	185.00	406	381.00	376.00	987	1952.00	1498.00	767	1726.00	1250.00	724	245.00	135.00	551
1976-77	428.00	135.00	315	349.00	311.00	891	1776.00	1361.00	766	1659.00	1362.00	821	221.00	141.00	638
1977-78	472.00	147.00	311	353.00	322.00	912	1862.00	1488.00	799	1656.00	1207.00	729	227.00	124.00	546
1978-79	460.00	157.00	341	351.00	284.00	809	1748.00	1589.00	909	1641.00	1228.00	748	217.00	134.00	618
1979-80	453.00	173.00	382	236.00	162.00	686	1378.00	750.00	544	1554.00	693.00	446	184.00	112.00	609
1980-81	429.00	150.00	350	258.00	150.00	581	1225.00	854.00	697	1496.00	1288.00	861	196.00	141.00	719
1981-82	461.00	177.00	384	243.00	115.00	473	1935.00	1257.00	650	1571.00	1061.00	675	173.00	124.00	717
1982-83	437.00	148.00	339	124.00	62.00	500	1756.00	1318.00	751	1506.00	1395.00	926	192.00	141.00	734
1983-84	495.00	212.00	428	97.00	58.00	598	1796.00	1089.00	606	1358.00	1186.00	873	189.00	166.00	878
1984-85	509.00	202.00	397	102.00	60.00	588	1533.00	969.00	632	1374.00	1272.00	926	173.00	143.00	827
1985-86	534.00	176.00	330	108.00	98.00	907	1941.00	1623.00	836	1535.00	1327.00	864	191.00	160.00	838
1986-87	482.00	129.00	268	114.00	82.00	719	1412.00	824.00	584	1492.00	1233.00	826	186.00	150.00	806
1987-88	560.00	229.00	409	57.00	29.00	509	684.00	411.00	601	1418.00	1069.00	754	185.00	140.00	757
1988-89	667.00	407.70	611	73.00	72.10	988	1282.00	967.00	754	1325.00	1167.20	881	148.00	129.90	878
1989-90	627.00	334.60	534	54.00	38.70	717	1144.00	711.40	622	1304.00	969.00	743	170.00	139.00	817
1990-91	673.00	357.80	532	61.00	45.20	741	1653.00	1011.00	612	1275.00	1121.60	880	168.00	157.80	939
1991-92	434.00	206.00	475	25.00	18.00	720	1029.00	679.00	660	1105.00	943.00	853	150.00	148.00	987
1992-93	591.00	302.00	511	27.00	18.00	667	1449.00	794.00	548	1065.00	951.00	893	127.00	109.00	858
1993-94	681.00	493.00	724	20.00	16.00	800	1222.00	747.00	611	1013.00	931.00	919	132.00	140.00	1061
1994-95	763.00	469.00	615	19.00	19.00	1000	1587.00	1371.00	864	1037.00	948.00	914	144.00	159.00	1104
1995-96	717.00	376.00	524	20.00	17.00	850	1620.00	1090.00	673	1006.00	698.00	694	141.00	92.00	652
1996-97	750.00	498.40	665	16.00	14.40	900	1519.00	1071.00	705	917.00	852.40	930	126.00	126.70	1006
1997-98	718.00	291.00	405	13.00	11.00	846	2213.90	1924.60	869	881.80	746.50	847	121.70	91.30	750
1998-99	904.20	561.90	621	13.20	10.40	788	2815.70	2073.80	737	896.50	772.90	862	109.10	119.00	1091
99-2000	932.00	600.00	644	6.30	6.10	968	975.30	677.90	695	822.30	779.30	948	97.80	95.40	975

Year	Maharashtra			Punjab			Rajasthan			Uttar Pradesh			Bihar		
	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P	Y
2000-01	676.00	351.00	519	7.70	7.30	948	672.60	396.60	590	833.00	702.70	844	76.20	78.70	1033
2001-02	756.00	450.00	595	7.10	6.20	873	969.60	735.50	759	841.00	817.00	971	68.20	65.30	957
2002-03	796.00	449.00	564	7.00	6.70	957	449.70	340.60	757	872.50	779.10	893	71.40	72.10	1010
2003-04	795.00	421.00	530	6.00	5.40	900	1117.50	707.20	633	760.60	787.10	1035	80.30	78.60	979
2004-05	830.00	466.00	561	5.10	4.40	863	1035.20	773.00	747	738.60	672.20	910	72.10	60.20	835
2005-06	1020.00	705.00	691	4.00	3.00	750	1081.90	478.90	443	739.60	660.60	893	92.40	80.60	872
2006-07	1308.00	924.00	706	3.80	3.80	1000	1010.80	872.60	863	675.00	501.00	742	133.40	117.20	879
2007-08	1353.00	1116.00	825	2.80	2.80	1000	1231.30	574.20	466	505.00	376.00	745	142.70	136.00	953
2008-09	1140.00	770.00	677	2.90	3.40	1172	1260.00	980.00	779	550.00	560.00	1014	65.00	60.00	925
2009-10	1290.00	1110.00	863	3.00	3.40	1133	880.00	530.00	604	620.00	510.00	824	60.00	60.00	1000
2010-11	1440.00	1300.00	903	3.10	3.80	1226	1780.00	1600.00	899	570.00	530.00	930	60.00	73.00	1200
2011-12	1050.00	820.00	775	2.00	2.60	1300	1430.00	990.00	691	580.00	720.00	1248	60.00	67.00	1134
2012-13	1254.00	1058.00	844	2.00	2.80	1400	1252.00	1265.20	1010	604.00	732.00	1212	60.50	86.50	1430
2013-14	1820.00	1622.00	891	1.90	2.30	1211	1923.50	1640.40	853	577.00	475.4	824	61.30	70.30	1147
2014-15	1427.00	1088.00	762	1.80	1.90	1056	1256.30	911.10	725	558.00	367.70	659	60.00	57.50	958
2015-16	1442.00	777.00	539	1.70	2.20	1294	941.95	840.34	892	268.00	164.00	612	59.37	58.55	986
2016-17	1929.30	1719.01	891	1.60	2.20	1375	1547.91	1409.39	911	562.00	626.00	1114	59.36	66.50	1120
2017-18	2000.30	1834.28	917	1.70	2.01	1181	1572.49	1688.85	1074	501.00	578.66	1155	58.22	67.19	1154
2018-19	1694.00	1397.00	825	2.00	3.00	1330	1597.00	1839.00	1152	572.00	728.00	1272	56.00	68.00	1199
2019-20	2043.21	2239.36	1096	1.50	1.83	1219	2463.05	2657.63	1079	621.00	851.39	1371	52.80	38.55	730
2020-21	2231.30	2396.42	1074	2.00	3.00	1322	2113.14	2265.29	1072	611.00	759.47	1243	51.81	54.50	1052
2021-22	2709.00	3101.23	1145	1.80	2.19	1214	2300.72	2685.00	1167	608.00	818.37	1346	52.00	54.38	1053
2022-23	2956.00	3175.00	1074	1.00	1.00	1046	1937.00	1809.00	934	680.00	898.00	1321	53.00	57.00	1076
2023-24	2688.00	2836.00	1055	1.00	2.00	1395	1775.00	1919.00	1081	682.00	786.00	1153	81.00	78.00	974
2024-25	2906.00	3060.00	1053	2.00	3.00	1248	1655.00	1975.00	1193	597.00	688.00	1153	62.00	65.00	1044

A : Area (thousand ha) P : Production (thousand tonnes) Y : Yield (Kg/ha)

Area, production and yield of chickpea in different states

Year	Jharkhand			Chhattisgarh			Odisha			Telangana			West Bengal		
	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P	Y
2000-01	-	-	-	140.10	72.10	515	-	-	-	-	-	-	-	-	-
2001-02	-	-	-	169.50	124.60	735	-	-	-	-	-	-	-	-	-
2002-03	-	-	-	175.60	113.10	644	-	-	-	-	-	-	-	-	-
2003-04	-	-	-	204.70	197.30	964	-	-	-	-	-	-	-	-	-
2004-05	-	-	-	210.50	114.10	542	-	-	-	-	-	-	-	-	-
2005-06	30.20	24.50	811	231.50	163.40	706	-	-	-	-	-	-	-	-	-
2006-07	76.70	70.80	923	213.70	180.20	843	-	-	-	-	-	-	-	-	-
2007-08	74.70	69.10	925	235.50	205.80	874	-	-	-	-	-	-	-	-	-
2008-09	89.50	80.30	897	239.70	199.20	831	-	-	-	-	-	-	-	-	-
2009-10	63.00	57.60	914	252.20	221.90	880	-	-	-	-	-	-	-	-	-
2010-11	65.00	52.00	800	252.00	242.00	952	41.90	32.70	780	109.00	148.20	1360	22.10	23.70	1072
2011-12	149.50	154.80	1036	241.60	240.40	945	39.00	29.80	764	85.00	72.00	847	23.30	24.40	1049
2012-13	132.00	169.00	1281	266.80	285.20	1069	41.20	31.90	774	112.00	164.00	1464	25.10	29.60	1175
2013-14	155.80	181.70	1166	276.50	213.20	771	47.15	36.21	768	113.94	246.34	2162	24.90	29.27	1175
2014-15	160.70	186.40	1160	280.60	290.4	1035	47.25	36.38	770	59.04	81.00	1372	26.18	30.84	1178
2015-16	164.07	163.21	995	303.20	219.00	722	39.18	30.13	769	70.00	50.00	714	30.79	36.70	1192
2016-17	210.74	247.41	1174	307.40	359.90	1171	40.32	30.97	768	102.00	132.00	1294	28.12	28.50	1013
2017-18	232.68	285.74	1228	317.75	320.93	1010	32.94	25.63	778	97.00	147.05	1516	32.00	36.80	1150
2018-19	190.00	221.00	1166	322.00	330.00	1026	30.57	23.84	780	104.00	163.00	1569	35.91	42.33	1179
2019-20	230.07	275.40	1197	381.77	88.19	231	27.82	21.67	779	130.00	199.16	1532	36.10	47.40	1313
2020-21	265.90	334.24	1257	302.59	268.00	887	29.19	23.00	773	143.00	238.38	1667	40.00	50.07	1259
2021-22	260.28	308.69	1186	332.00	240.43	725	35.30	27.46	778	159.00	224.03	1409	39.95	48.17	1206
2022-23	249.00	292.00	1172	306.00	279.00	912	38.00	29.00	763	148.00	232.00	1568	40.00	51.00	1271
2023-24	239.00	278.00	1167	255.00	211.00	828	38.00	29.00	763	97.00	164.00	1686	39.00	48.00	1242
2024-25	297.00	357.00	1203	395.00	303.00	767	49.00	39.00	797	69.00	111.00	1601	38.00	47.00	1240

A : Area (thousand ha) P : Production (thousand tonnes) Y : Yield (Kg/ha)

Area ('000 ha), Production ('000 ton) and Yield (kg/ha) of Lentil in different states

	Assam			Bihar			Madhya Pradesh			Rajasthan			Uttar Pradesh			West Bengal		
Year	**A**	**P**	**Y**	**A**	**P**	**Y**	**A**	**P**	**Y**	**A**	**P**	**Y**	**A**	**P**	**Y**	**A**	**P**	**Y**
1981-85	-	-	-	-	-	-	-	-	-	-	-	-	346.40	205.72	594.0	77.84	35.64	467
1986-90	-	-	-	-	-	-	-	-	-	-	-	-	459.36	325.94	709.0	83.72	54.32	653
1991-95	16.12	7.90	490	177.26	150.22	849	376.92	180.00	478	13.78	11.56	837	515.84	392.98	762.0	56.84	37.20	645
1996-00	21.40	11.10	519	172.12	136.70	792	500.36	237.76	474	34.70	38.06	1068	537.72	402.52	748.0	56.10	42.34	745
2001-05	20.80	11.20	542	174.74	150.04	859	486.56	223.20	458	19.92	20.86	1031	606.06	472.84	784.0	69.64	48.06	685
2005-06	18.60	9.90	532	162.50	114.50	705	564.10	287.50	510	18.50	16.80	908	607.90	434.90	715.0	61.50	47.00	764
2007-08	19.00	10.00	532	163.00	115.00	705	564.00	288.00	510	19.00	17.00	908	608.00	435.00	715.0	62.00	47.00	764
2008-09	21.70	11.10	512	163.80	128.60	785	531.40	268.40	505	20.60	17.90	869	521.00	460.00	883.0	49.70	32.40	652
2009-10	21.40	10.80	503	171.10	150.50	880	541.30	284.40	525	27.00	24.20	895	592.40	475.90	803.0	51.70	47.10	911
2010-11	23.98	11.80	494	238.60	214.70	900	590.50	177.90	301	44.10	38.40	872	586.00	411.00	701.0	57.40	53.40	929
2011-12	23.00	11.50	502	168.5	171.6	1019	620.5	230.0	371	31.9	35.9	1126	573.00	505.00	881.0	59.30	41.20	695
2012-13	28.90	17.00	586	159.7	183.2	1147	570.5	333.4	584	27.6	30.4	1100	495.00	441.00	891.0	64.00	61.50	960
2013-14	30.00	22.40	747	154.1	196.1	1272	530.1	338.3	638	34.3	29.2	851	449.00	310.00	690.0	65.50	62.8	959
2014-15	29.05	22.52	775	196.4	194.1	989	613.7	416.0	678	42.9	39.4	919	438.0	235.00	537.0	66.00	63.5	963
2015-16	28.33	19.65	693	150.7	140.4	932	546.0	392.4	719	74.5	64.0	859	335.0	238.00	710.0	95.50	94.0	985
2016-17	23.78	15.66	658	146.1	146.9	1005	528.8	447.2	846	75.7	75.9	1003	489.0	372.30	761.0	83.00	81.0	976
2017-18	28.02	21.03	746	138.2	147.6	1068	596.0	679.0	1139	31.4	33.7	1074	484.0	498.0	1029.0	158.0	154.9	980
2018-19	26.73	19.57	732	147.9	148.1	1001	421.0	329.6	783	19.8	23.0	1164	476.0	488.4	1026.0	170.2	141.4	831
2019-20	24.10	18.40	764	143.0	90.1	630	379.0	294.5	777	17.0	23.4	1375	463.0	452.8	978	172.0	143.8	836
2020-21	23.27	16.96	729	136.6	124.5	912	542.0	615.2	1135	20.1	26.8	1332	472.0	478.6	1014	159.0.	142.6	897
2021-22	23.46	18.49	788	133.15	124.23	933	492.0	442.3	899	17.00	22.18	1326	494.0	466.3	944	150.0	115.2	769
2022-23	25.00	20.00	799	134.00	132.00	985	655.0	636.0	971	21.00	29.00	1375	544.0	517.0	950	157.0	151.0	960
2023-24	27.00	23.00	845	140.00	114.00	813	715.0	824.0	1152	27.00	34.00	1254	577.0	577.0	1000	158.0	144.0	913
2024-25	26.00	20.00	758	136.00	124.00	914	636.0	728.0	1145	25.00	36.00	1434	604.0	628.0	1039	158.0	145.0	915

Area ('000 ha), Production ('000 ton) and Yield (kg/ha) of Lentil in different states

	Chhattisgarh			Jharkhand		
Year	A	P	Y	A	P	Y
2006-07	16.50	5.40	327	16.70	11.20	671
2007-08	17.30	5.80	335	17.00	11.00	671
2008-09	15.60	5.10	327	19.50	15.80	810
2009-10	16.00	4.90	306	22.90	12.80	559
2010-11	13.90	4.20	302	20.90	17.20	882
2011-12	14.90	5.00	336	48.70	40.90	840
2012-13	12.90	4.20	326	40.80	45.70	1121
2013-14	14.90	4.90	329	44.00	36.50	829
2014-15	17.50	9.50	542	42.40	39.30	926
2015-16	17.20	5.70	331	15.10	11.60	768
2016-17	18.70	7.00	374	62.10	53.70	864
2017-18	13.00	4.60	352	69.40	62.50	900
2018-19	13.70	5.00	364	57.30	50.10	875
2019-20	13.80	4.50	323	62.30	52.90	849
2020-21	14.40	5.80	404	72.40	63.80	880
2021-22	12.82	5.14	401	65.46	57.60	880
2022-23	13.00	5.00	425	59.00	48.00	815
2023-24	13.00	5.00	413	58.00	53.00	917
2024-25	14.00	6.00	400	78.00	67.00	855

Area ('000 ha), Production ('000 ton) and Yield (kg/ha) of Lentil in different states

	Haryana			Himachal Pradesh			Tripura			Punjab			Uttarakhand			Manipur		
Year	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P	Y
2014-15	3.40	3.40	1000	0.60	0.27	475	2.49	1.74	699	0.80	0.50	625	12.40	8.75	706	-	-	-
2015-16	2.60	2.50	962	0.80	0.21	263	-	-	-	-	-	-	10.24	7.47	729	-	-	-
2016-17	4.40	4.50	1023	0.60	0.36	619	3.80	2.54	667	0.70	0.40	571	10.00	8.00	800	0.70	0.66	943
2017-18	1.50	0.90	579	0.40	0.39	875	2.89	2.07	716	0.80	0.45	565	10.00	6.96	696	0.72	0.67	927
2018-19	1.10	0.80	722	0.50	0.43	880	2.52	1.88	746	0.70	0.48	681	11.00	9.70	882	0.76	0.70	923
2019-20	0.80	0.90	1125	0.10	0.50	930	2.2	1.66	748	0.80	0.40	543	11.00	11.20	1014	0.66	0.61	923
2020-21	1.20	0.90	795	0.30	0.20	657	1.56	1.14	728	0.60	0.36	598	12.00	9.01	751	0.81	0.75	923
2021-22	0.51	0.49	965	0.29	0.42	1463	0.73	0.56	766	0.50	0.28	553	9.00	7.88	875	0.95	0.91	963
2022-23			816			1320	1.00	1.00	795	1.00	-	954	11.00	10.00	925	1.00	1.00	967
2023-24			864			1320	1.00	1.00	795	1.00	-	478	10.00	7.00	757	1.00	1.00	970
2024-25			860			1369				1.00	1.00	772	7.00	6.00	818			

Area, Production and Productivity of Field pea in major states of India

	Rajasthan			Uttar Pradesh			Assam			Bihar			Chhattisgarh			Maharashtra		
Year	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P	Y
1976-80	11.22	6.20	595	410.9	309	734	11.62	3.82	334	40.86	20.38	503	-	-	-	9.86	3.88	399
1981-85	8.28	7.94	977	240.62	239.8	999	20	7.3	365	31.42	18.9	604	-	-	-	13.24	3.46	258
1986-90	6.48	13.06	2269	275.28	311.92	1134	-	-	-	33.96	24.14	715	-	-	-	8.76	3.02	356
1991-95	7.14	13.38	1804	385.78	472.14	1233	32.75	16.25	500	32.06	21.38	664	-	-	-	8.9	3.34	345
1996-2000	11.78	24.62	2085	435.28	518.8	1197	26.8	15.75	588	30.54	18.8	661	-	-	-	15.28	7.06	465
2001-05	12.16	25.18	2077	365.9	449.3	1220	24.14	14.44	599	23.86	22.26	932	13.38	4.92	366	15.5	6.28	394
2005-06	13.40	31.70	2366	413	483.3	1170	17.9	11.3	631	24.1	21.5	892	18.2	6.4	352	19.7	8.7	442
2006-07	11.40	23.90	2096	420	406	967	19	12	632	23.7	22	928	16.6	5.9	355	20.3	9	443
2007-08	4.10	5.30	1293	320	300	938	23	14	609	23.4	22.8	974	16.8	6	357	20	11	550
2008-09	3.70	5.80	1568	351	424	1208	20.9	13	622	23.8	22.9	962	15	5.6	373	15	8	533
2009-10	2.80	4.90	1775	312	400.4	1263	20.9	12.8	615	22.2	22.4	1009	17.2	5.9	343	16.5	8.6	519
2010-11	11.30	11.60	1029	304	353	1761	22.4	13.8	614	20	21	1051	14.8	5	338	33	17	515
2011-12	2.70	4.70	1777	323	463	1433	21.8	13.3	608	18.7	19.2	1031	15.5	5.4	348	25.8	11.8	457
2012-13	2.70	5.90	2162	307	459	1495	31	19.8	640	18.5	19.3	1041	14.7	5.5	374	29.3	12.1	412
2013-14	13.60	22.80	1676	357	354	992	31.3	26.5	848	17.3	18.4	1060	14.5	5.3	366	-	-	-
2014-15	17.00	30.90	1817	416	314	755	30	27.7	924	22.1	18.2	824	17	10.3	602	26.3	9.6	366
2015-16	19.50	39.00	1998	286	285	997	15.7	14.1	901	17	17.9	1053	15.5	5.9	381	-	-	-
2016-17	-	-	-	384	418	1089	28.60	26.01	897	16.4	16.7	1020	18.50	7.40	389	-	-	-
2017-18	14.32	36.58	2643	294	432	1469	30.97	28.87	935	16.4	16.9	1063	14.22	5.38	357	-	-	-
2018-19	13.00	26.00	2000	333	539	1619	29.86	27.97	933	17	17	1000	11.54	4.43	333	-	-	-
2019-20	13.59	32.02	2356	344	566	1645	27.89	26.08	935	17.4	18.1	1039	12.29	4.76	387	-	-	-
2020-21	5.85	14.24	2434	361	562	1557	27.98	25.77	921	18.6	19.4	1042	10.67	4.63	434	-	-	-

	Jharkhand			Madhya Pradesh		
Year	A	P	Y	A	P	Y
1970-75	-	-	-	86.10	23.44	272
1976-80	-	-	-	99.92	26.82	268
1981-85	-	-	-	114.74	34.82	303
1986-90	-	-	-	115.86	38.96	339
1991-95	-	-	-	134.00	49.14	365
1996-2000	-	-	-	189.12	79.04	415
2001-05	6.50	5.25	784	192.08	87.08	452
2005-06	7.70	6.20	805	229.20	111.9	488
2006-07	9.20	8.30	902	198.70	89.70	451
2007-08	10.50	9.30	886	166.50	66.50	399
2008-09	25.80	34.90	1353	222.90	111.00	498
2009-10	42.70	34.50	807	288.70	146.70	508
2010-11	36.20	34.20	746	226.50	52.50	276
2011-12	39.9	44.3	1135	263.9	94.2	357
2012-13	30.3	54.9	1811	280.9	194.8	693
2013-14	31.7	37.6	1186	307.1	295.1	961
2014-15	33.3	40.4	1212	355.5	362.9	1021
2015-16	41.6	31.9	766	450.0	267.3	594
2016-17	53.0	64.5	1208	465.3	356.8	768
2017-18	59.1	71.0	1203	312.0	322.0	1032
2018-19	50.0	62.0	1240	65.0	50.0	769
2019-20	59.1	75.0	1263	58.0	48.0	828
2020-21	60.1	70.2	1168	86.0	90.0	1047

	West Bengal			Himachal Pradesh		
Year	A	P	Y	A	P	Y
2016-17	14.0	15.0	1071	13.0	5.0	3846
2017-18	18.0	21.0	1167	2.0	5.0	2500
2018-19	17.0	20.0	1176	3.0	5.0	1667
2019-20	20.0	19.0	950	11.7	41.5	3562
2020-21	18.2	20.3	1115	14.7	38.0	2592

A = Area ('000 ha) P = Production ('000 tonnes) Y = Yield (kg/ha)

Area, Production and Productivity of Lathyrus in major states of India

	Chhattisgarh			Bihar			West Bengal		
Year	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
2010-11	349.3	212.4	608	73.8	73.7	998	25.8	30.2	1172
2011-12	307.6	172.3	560	72.8	92.1	1265	25.8	15.4	595
2012-13	417.0	270.7	649	71.1	83.8	1179	28.5	35.3	1240
2013-14	308.7	176.0	570	63.2	70.6	1116	30.7	38.1	1241
2014-15	362.5	340.6	939	80.6	69.8	867	33.0	41.1	1244
2015-16	275.8	198.4	719	54.6	51.0	934	65.4	84.0	1284
2016-17	308.9	288.8	935	52.1	55.2	1059	55.0	69.0	1255
2017-18	222.72	128.5	577	47.6	50.3	1057	87.0	108.3	1245
2018-19	183.16	113.56	620	50.5	51.4	1018	52.5	72.9	788
2019-20	172.81	67.22	389	43.8	33.3	760	57.1	85.9	885
2020-21	152.32	95.96	630	39.5	42.8	1083	52.9	118.4	1273

Area ('000 ha) Production ('000 tonnes) Yield (kg/ha)

Annexure II

Centrally released varieties of Kabuli chickpea in India

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
1.	Pusa 267 (BG 267 *Kabuli*)	1988	IARI, New Delhi	Semi-erect, tall brown and seeds are medium large (21 g/100 seeds), solmon white	23	145-155	US 613 X BEG 482	Haryana, Delhi, UP, Punjab, Rajasthan, Jammu & Uttaranchal	Irrigated
2.	Alok (KDG 1168)	1997	C S A U & T , Kanpur	Medium tall, semi-erect and medium Large seed (19 g/100 seeds)	19-21	140-150	Selection from K 158	NWPZ	Rainfed
3.	PKV *Kabuli* 2 (KAK 2)	1999	Akola	Semi-spreading, medium tall, Large (38 g/100 seeds) & white.	17-18	90-115	(ICCC 2 x Surutato 77) x ICC 7344-ICCX 870026-PB-PB-14P-BP-62AK-7AK-BAK	UP, MP, Gujarat, Maharashtra & Rajasthan	Normal sown irrigated
4.	Pusa *Kabuli* 1003 (BG 1003)	1999	IARI, New Delhi	White and Large seeded (24 g/100 seeds) *Kabuli* with medium tall stature.	18	130-140	ICCV 32 x Rabat	UP, Bihar, Jharkhand, WB & Assam	Irrigated
5.	Pusa Chamatkar (BG 1053)	2000	IARI, New Delhi	Tall, semi-erect type *Kabuli*. Seeds are white and Large (27 g/100 seeds)	17-19	145-150	ICCV 3 x FLIP 88-20	NWPZ & Central India	Normal sown & irrigated
6.	Jawahar Gram *Kabuli* 1	2002	Jabalpur	Large seeded *Kabuli* (38 g/100 seeds) semi-spreading, early maturing.	15-18	100-110	(ICCV 2 x Surutato) x ICC 7344	CZ	Rainfed &Irrigated

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
7.	Vihar (Phule G 95311)	2002	Rahuri	Seed Large (36 g/100 seeds) wrinkled, cream and suitable for mild and short winter season	22-24	90	(ICCC 32 x ICCL 80004) x (ICCC 49 x FLIP 82-886) x ICCV 3	SZ	Irrigated & Rainfed
8.	HK 2 (HK 94-134)	2005	Hisar	Erect plant growth habit, tall, seeds are creamy white & Large (26 g/100 seeds)	18-20	120-125	(H 82-5 x E100 Ym) x Bheema	NEPZ	Irrigated
9.	Pusa Shubhra (BDG 128)	2006	IARI, New Delhi	Semi erect, with light green foliage, seed colour beige, large (28 g/100 seeds)	18	120	ICCV 2 x ICCV 5	CZ	Irrigated
10.	IPCK 2002-29	2009	IIPR, Kanpur	Erect with light green foliage, large (33 g/100 seed) white seed	22	107	L 144 x H 82-2	CZ	Irrigated
11.	IPCK 2004-29	2009	IIPR, Kanpur	Erect plant, light green, bold white seed	20	108	[(ICCV 2 x ICCV 88507) x ICCV 42] x ICC 7344	CZ	Irrigated
12.	Phule G 0517 (Kripa)	2009	Rahuri	Semi spreading, broad leaves, ivory white extra large seed	18	110	Selection from local germplasm	M.S., M.P., & Karnataka	Irrigated
13.	PKV *Kabuli* 4	2009	Akola	Semi spreading, broad leaves, ceramic white extra large seed	20	110	Selection from local germplasm	M.S. & M.P.	Irrigated
14.	MNK 1	2011	Gulbarga	Erect plant, seeds are milky white, extra large (52 g/100 seeds)	13	100	Selection from local germplasm	SZ	Irrigated

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
15.	HK 05-169 (HK 4)	2012	Hisar	Sees size is large (28.4g/100 seeds) and of white colour. It showed resistance to moderately resistance reaction against wilt.	16.0	125	HK 92-94 x HK-1	NEPZ	Irrigated
16.	CSJK 6	2012	Durgapura	Suitable for normal sown irrigated condition. It posses dull white seed colour with 32.8 g/100 seeds. It matures in 188 days.	11.0	188	RSGK 628 x BG 1053	NHZ	Irrigated
17.	GLK 26155 (L 555)	2012	Ludhiana	Suitable for timely planting under irrigated condition. It has light yellow or creamy seed colour with 27.8 g average 100-seed weight. It matures in 146 days.	22.8	146	BG 1088 x MPJG 2	NWPZ	Irrigated
18.	Phule G 0027	2012	Rahuri	Suitable for normal sown irrigated condition. It has attractive white seed colour.	14.0	196	[(ICCV 95412 x Phule G 92307) x ICCV 95412]	NHZ	Irrigated
19.	GNG 1969	2013	Sriganga nagar	Suitable for normal sown irrigated condition. It posses creamy beige seed colour with 26.2 g/100 seeds.	22.0	146	IPCK 96-3 x GNG 1382	NWPZ	Irrigated

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
20.	GLK 28127	2013	Ludhiana	Large seeds (36.0 g/100 seeds), light yellow or creamy colour with irregular owl head.	21.0	149	GLK 88016 x FLIP 88-34C	NWPZ	Irrigated
21.	Pusa 3022 (BG 3022)	2015	IARI	Large seeded (35.7 g/100 seeds) *kabuli* chickpea with attractive beige coloured seed.	18.00	150	(BG 1048 x BG 1083) x SBD 377	NWPZ	Irrigated
22.	Vallabh *Kabuli* Channa-1 (WCGK-2000-16)	2015	Modipuram	Large seeds (27.5 g/100 seeds), white beige colour, moderately resistant to Fusarium wilt.	23.0	147	L 550 x ICCV 2	NWPZ	Irrigated
23.	NBeG 119	2016	Nandyal	Large seeded (38.8 g/100 seeds) *kabuli* variety.	18.8	90-95	(ICCV 98502 X ICCV 98004) X ICCV 92311	SZ	Irrigated and rainfed
24.	JGK 6 (JGK 2017-32)	2021	Jabalpur	Extra large seeded (40-45 g / 100seeds weight), attractive beige colour *kabuli* seed, moderately resistant to wilt.	14-18	140-145	JGK 2 x ICCV95333	NWPZ	Timely Sown
25.	RVKG 2020 (RVSIG 63)	2021	Sehore	Medium tall and semi spreading plant, white flower with no anthocyanin content in plants, smooth seed surface, cream owls head shape seeds and large seeded,100 seed weight is 39.5 g, moderately resistant to wilt.	16.37	147	JSC 52 x RVKG 100	NWPZ	Timely Sown

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
26.	Kota *Kabuli* Chana -2 (RKGK 13-499)	2021	Kota	Semi erect, medium tall, extra bold wrinkled cream colour seed,100seed weight is 40.7g, mod. resistant to wilt	17.34	135-149	Phule G 517 x MPJGK 6	NWPZ	Timely Sown
27.	Nandyal Gram 810	2021	Nandyal	Semi spreading plant type, medium height, attractive pods with bold seeds, tolerant to wilt, seed size is 41 g/100 seeds.	WCZ-18.36 NWPZ-15.26	WCZ-110-115 NWPZ-145-150	ICCV95311 x ICCV95333	WCZ & NWPZ	Timely Sown
28.	RLBGK 1 (RLB Chana *Kabuli* 1)	2021	Jhansi	Brownish green stem with light green foliage, medium large seeded attractive beige colour seed &100 seed weight 36.0.0g, mod. resistance to wilt,DRR& CR	15.49	94-104	JGK 1 x ICCV95333	SZ	Timely sown
29.	IPCK 13-163(Madhav) *Kabuli*	2021	ICAR-IIPR	Suitable for Irrigated; timely sown condition. 100 seed weight: 28.7 g; Protein content: 20.96%, resistant to wilt	19.71 NWPZ and 16.59 WCZ	130-158 (147 in NWPZ& 103-120 in WCZ)	JGK1 x PG0517	NWPZ	Timely Sown

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
30.	GJGK 1617 (Gujarat *Kabuli* Gram 1)	2021	Junagadh	Moderate resistance against wilt. Bold seeded with beige colour attractive seeds with a protein content of 18.01%, 100 seed weight 42.2g.	13.83	144	ICC 14195-P3 x ICCV93337	NWPZ	Timely Sown, irrigated
31.	RKGK 13-414 (Kota *Kabuli* Chana 3)	2021	Kota	Medium tall (65cm), semi erect, cream colored wrinkled seed, resistant to wilt, 100 seed weight: 27.3g.	17.80	110-115	BG 10444 x BG1111	WCZ	Timely sown, irrigated
32.	CSJK 174 (Karan *Kabuli*- 4)	2021	Durgapura	Attractive beige-coloured medium-large seeds (32g/ 100 seed weight).	14.72	104	ICCV 2 x RSGK 6	SZ	Timely sown
33.	L 558 (GLK 17301)	2023	Ludhiana	Bold seeded with beige colour, owl head shaped seeds with protein content 16%, 100 seed weight 43.6g.	13.86	146	ICC19281 x JGK 1	NWPZ	Irrigated condition
34.	Kota Kabuli Chana 4 (RKGK 13-416)	2023	Kota	Semi erect, medium tall, kabuli with seed weight 26.1 g/100 seed cream color seed moderately resistant to wilt and DRR.	16.59	96-102	BG 1044 x BG 1110	SZ	Timely sown
35.	Raj Vijay Kabuli Gram (RVKG 2024)	2025	CoA, Indore	Extra-large seeded Kabuli 100 seed wt. 44g, moderately resistant to fusarium wilt.	14-15	100-105	BGD 1085 X PKV 4	SZ	Extra Large Kabuli

Centrally released varieties of Desi chickpea in India

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
1.	Pusa 244	1985	IARI, New Delhi	Semi-spreading growth habit, seeds are medium bold (19g/100 seeds), light brown colour	15-16	110-120	(850-3/27 x P 922) x P 9847 -*Kabuli*	Haryana, Punjab, UP, Rajasthan, Jammu, Uttaranchal & Delhi	Rainfed &Irrigated
2.	Pusa 256	1985	IARI, New Delhi	Seeds are large (22 g/100 seeds) and light brown color.	18-20	135-140	(JG 62 x 850-3/27) x (L 550 x H 208)	Haryana, Punjab, MP, WB, UP, Rajasthan, Jammu, Uttaranchal, Bihar, Maharashtra, Gujarat & Delhi	Rainfed &Irrigated
3.	Pusa 261	1985	IARI, New Delhi	Tall plant height, erect, less no. of tertiary leaflet medium, long, ovate and light green colour, Seed golden colour, medium large (16g/100 seeds)	22	135	P 327 X P 9847	NWPZ	Late sown
4.	Pusa 408	1985	IARI, New Delhi	Semi erect, leaflet, narrow with light, green colour, seed yellowish brown 2-3 grains/pod, medium large (13g/100 seeds)	22	135	Mutant of G130	NWPZ	Rainfed &Irrigated

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
5.	Pusa 413	1985	IARI, New Delhi	Semi erect, leaflet, narrow with light, green colour, seed golden yellow medium large (13g/100 seeds), 2-3 grains/pod	19	135	Mutant of G130	UP, Bihar & WB	Rainfed
6.	Pusa 417	1985	IARI, New Delhi	Semi erect, profuse branch, leaflet, ovate and light green, seeds golden yellow, medium large (13g/100 seeds)	20	118	Mutant of variety of BG203	Gujarat, MP & Maharashtra	Rainfed
7.	Vishwas (Phule G 5)	1985	Rahuri	Erect, pigmented stem, large numbers of effective root nodules. Seeds are smooth Large (27 g/100 seeds) and round	20-25	110-115	B 110 X N 31	CZ	Normal sown
8.	PBG 1	1988	Ludhiana	Tall, erect, seeds are brown and medium Large (17 g/100 seeds)	16-18	155-160	GG 578 X NEC 206	NWPZ	Rainfed &Irrigated
9.	Kranti (ICCV 37)	1989	ICRISAT, Hyderabad	Semi-erect, dwarf, bushy with light green and narrow leaves, seeds light brown and medium Large (18 g/100 seeds)	19-20	100-110	(P 481 X JG 62) X P1630	Central & South India, Peninuslar India	Rainfed
10.	GPF 2 (GF 89-36)	1990	ARS, Faridkot	Medium tall and semi-erect, seeds are medium large (17g/100 seeds).	21-23	152-155	GL 769 X H 75-35	NWPZ	Irrigated

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
11.	Haryana Chana 1 (H 82-2)	1990	Hisar	Dwarf & long fruiting branches. Seeds are small (13 g/100 seeds) and light brown color.	22	145-150	F 61 X L 550	NWPZ	Rainfed
12.	Bharti (ICCV 10)	1992	ICRISAT, Hyderabad	Semi-erect and early maturing, seeds are medium large 17 g/100 seeds	20	95-100	P 1231 X P1265	Central & South zone	Irrigated
13.	Udai (KPG 59)	1992	CSAU&T, Bharari	Medium Large seeded, semi-erect, medium tall, double seeded. Seed medium large (19g /100 seeds), smooth & light brown.	19-20	135-140	Radhey X K 468	NEPZ & NWPZ	Rainfed
14.	Pusa 329 (BG 329)	1993	IARI, New Delhi	Semi-erect and Large seeded (22 g/100 seeds) and brown.	20-22	145-155	(BG 203) X P 179	Punjab, Haryana, U.P. & Rajasthan	Rainfed
15.	Pusa 372 (BG 372)	1993	IARI, New Delhi	Semi-spreading. Seeds brown, small (14 g/100 seeds)	18-20	135-140	P 1231 X P 1265	NWPZ, NEPZ & CZ	Rainfed
16.	Vijay (Phule G 81-1-1)	1993	Rahuri	Spreading type growth habit. Seeds small (15 g/100 seeds) and brown	19-21	105-110	P 127 X Annegeri 1	NWPZ, NEPZ & CZ	Rainfed
17.	Vardan (GNG 663)	1994	Sriganga nagar	Semi-spreading, semi-erect, medium dark brown seeds and medium Large (17 g/100 seeds). Zigzag branching pattern	22-25	150-155	GNG 16 X GNG 146	NWPZ	Rainfed

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
18.	Pusa 362 (BG 362)	1995	IARI, New Delhi	Medium tall with brown and Large seeded (23 g/100 seeds)	23-24	145-150	BG 303 X P 179	NWPZ	Rainfed
19.	KWR 108	1996	CSAU&T, Kanpur	Medium tall, semi-erect with brown and medium Large seed (17 g/100 seeds)	20-23	130-135	Selection from genetic stock P 108	NEPZ	Rainfed
20.	Pusa 391 (BG 391)	1996	IARI, New Delhi	Medium tall and erect plant with dark brown and Large seeded (25 g/100 seeds)	20-25	110-120	ICC 3935 X Pusa 256	CZ	Rainfed & irrigated
21.	Samrat (GNG 469)	1996	Sriganga nagar	Erect, tall, semi-spreading, with brown and Large seed.	20-22	145-150	Annegeri1 X H 75-35	Rajasthan, Punjab & Haryana	Rainfed & irrigated
22.	DCP 92-3	1998	IIPR, Kanpur	Semi-erect, medium tall, semi-spreading, yellowish brown &medium Large seed (17 g/100 seeds)	19-20	145-150	Selection from local Germplasm	NWPZ	Irrigated
23.	Karnal Chana 1 (CSG 8962)	1998	Karnal	Medium tall, semi-erect, small (15 g/100 seeds) and brown seeds.	20	150-160	Selection from GPF 7035	NWPZ	Rainfed
24.	Dharwad Pragati (BDG 72)	1999	IARI, New Delhi	Semi-erect, large podded, medium large & brown seeds (25 g/100 seeds)	18-20	115-120	(Pusa 256 x E 100 Ym) x Pusa 256	UP, MP, Gujarat, Maharastra, Rajasthan	Rainfed
25.	Gujarat Gram 1 (GCP 101)	1999	Junagadh	Semi-erect, medium tall, mediumlLarge and dark brown seeds (18g/100 seeds)	18-20	115-120	GCP 2 x ICCV 2	CZ	Rainfed

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
26.	JG 11	1999	Jabalpur, Sehore& ICRISAT, Hyderabad	Semi-spreading, pubescent, large pod, seed large (22 g/100 seeds) smooth & brown color.	15-16	95-100	[(Phule G 5 x Narsinghpur bold) x ICCC 37] ICCX-860263-BF-BP-91 BP	SZ	Irrigated & Rainfed
27.	Gujarat Gram 4 (GCP 105)	2000	Junagadh	Medium tall, semi-erect, pinkish flower smooth, round, medium large (17g/100 seeds) and brown seed	18-20	120-130	ICCL 84224 x Annegeri 1	NEPZ	Irrigated & Rainfed
28-	JG 16 (SAKI 9516)	2000	Sehore, Akola & ICRISAT, Hyderabad	Seed light brown, semi spreading with profuse branching, foliage dark green, medium seed size (19 g/100 seeds)	20	110-140	ICCC 4 x ICCV 10	UP, MP, Gujarat, Maharashtra & Rajasthan	Normal sown
29.	RSG 888 (Anubhav)	2002	Durgapura	Semi-spreading, double podded small seeded (14 g/100 seeds)	21	130-135	RSG 44 x E 100 Y	NWPZ	Rainfed
30.	Anvita (RSG 931)	2004	Durgapura	Double podded, high yielding, semi-erect with profuse branching	20	135	RSG 44 x RSG 524	NWPZ	Rainfed
31.	Aadhar (RSG 963)	2005	Durgapura	Semi-erect and medium Large seed (17 g/100 seeds)	19-20	130-135	RSG 524 x PDG 84-10	Haryana, Punjab, Delhi, UP, Rajasthan, Jammu & Uttaranchal	Rainfed
32.	Pusa 547 (BGM 547)	2006	IARI, New Delhi	Seeds are Large (23 g/100 seeds)	17	120-140	Mutant of BG 256	NWPZ	Irrigated

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
33.	Rajas (Phule G 9425-9)	2006	Rahuri	Semi erect, profuse branches, seeds are yellowish brown medium large (23 g/100 seeds)	19	145	Phule G 91028 x Bheema	NWPZ	Irrigated
34.	JAKI 9218	1997	ICRISAT, Hyderabad	Medium large seeded (18 g/100 seeds) variety	18-20	120	(ICCV 37 x GW 5/7) x ICCV 107	CZ	Rainfed
35.	Ganguar (GNG 1581)	2007	Sriganga nagar	Medium plant height, semi erect,	24	151	GPF 2 x H 82-2	NWPZ	Normal sown & irrigated
36.	JSC 55 (RVG 202)	2012	Sehore	Suitable for planting under late sown condition It showed resistant reaction against wilt and moderately resistance reaction against dry root rot and collar rot.	20.0	102	(JAKI 9226 x DCP 20) X JG 412	CZ	Late sown
37.	JSC 56 (RVG 203)	2012	Sehore	Suitable for planting under irrigated and late sown conditions. It is mod. resistant against wilt and dry root rot.	19.0	100	(ICCV 91902 x ICCV 10) x ICCV 89230	CZ	Irrigated Late sown
38.	GNG 1958	2013	Sriganga nagar	Suitable for normal sown irrigated condition. It matures in 145 days. It has brown seed colour with 25.4 g average 100-seed weight.	26.8	145	GNG 1365 x SAKI 9516	NWPZ	Irrigated

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
39.	GNG 2144	2016	Sriganga nagar	Desi type chickpea with medium bold seeds (15.9g/100 seeds). It has tolerance to fusarium wilt disease.	22.8	133	CSJD 901 X CSG 8962.	NWPZ	Irrigated late sown
40.	CSJ 515	2016	Durgapura	Small brown colour seeds (17.0 g/100 seeds), mod. resistant to dry root rot, wilt &collor rot and tolerant to Ascochyta blight and BGM.	24.0	135	FG 712 x CSJ 146	NWPZ	Irrigated
41.	GJG 0809	2017	Junagadh	Medium brown colour attractive seed (21.5 g/100Seeds), mod. resistant to wilt & stunt, root rot & tolerant to Ascochyta blight.	16.0	157	GJG 9707 x IPC 97-7	NHZ	Irrigated
42.	GNG 2171	2017	Sriganga nagar	Yellow coloured seed of size 15.9 gm/100 seed; tolerant to fusarium wilt disease	20.14	163	GNG 663 X BG 1044	NWPZ	Irrigated
43.	Pant Gram 5	2017	Pantnagar	Brown coloured seed of size 16.2 gm/100 seed; tolerant to fusarium wilt disease	22.15	126-140	PG035 X HC5	NWPZ	Late sown
44.	BG 3043	2018	IARI	Desi variety with medium large (21.4 g/100 seeds) seed.	16.04	127-134	DG 5016 x FLIP 94-509C	NEPZ	Timely sown

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
45.	GNG 2207	2018	Sriganganagar	Desi variety with medium seed (17.4g/100 seed), tolerant to fusarium wilt disease	16-17	130	C 235 x SAKI 9516	NEPZ	Timely Sown
46.	Phule G 0405	2019	Rahuri	Desi variety with yellow brown, medium bold seed (19.9g/100 seed).	20-21	105-110	Digvijay x WCG 2000-2	WCZ	Timely Sown
47.	GNG 2299(Purva)	2019	Sriganganagar	Semi erect, profuse branching attractive seed size 15.9gm/100 seed, tolerant to wilt	15	116	HC 5 x GNG 1581	NEPZ	Late sown
48.	IPC 2006-77	2019	IIPR, Kanpur	Semi erect, early maturing, attractive, seed size 15.6 gm/100seed MR to Wilt	20-22	112	DCP 92-3 x T 39-1	ECZ	Late sown, High Seed Protein content (24.63%)
49.	Pusa Chickpea 10216	2020	IARI,New Delhi	Drought tolerant dise variety with seed size of 23.2 g/100 seeds; moderate resistance against Wilt and DRR.	13.18	110	(BG 372 x ICC 4958) x 2* BG 372	CZ	Drought Tolerant introgression lines
50.	Pusa Parvati (BG 3062)	2020	IARI, New Delhi	Tall growth habit, medium bold, attractive, brown coloured seed with seed size of 23 g/100 seed, tolerant to wilt.	23.62	113	ICCV 10 x ICCL 87322	CZ	Suited to mechanical harvesting
51.	Haryana Chana No. 7 (H 12-55)	2020	Hisar	Profuse branching, yellow brown attractive seed size 14 g/100seed, tolerance to wilt.	26.36	128	HC 1 x H 00-216	NWPZ	Late sown

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
52.	SA -1 (Super Annigeri 1)	2020	Gulbarga	Semi erect plant type, Angular seed Shape with 18-20 g/100 seed weight and highly resistance to wilt.	18.35	104	(Annigeri 1 x WR 315) x 3* Annigeri-1	SZ & CZ	Wilt resistant introgression line
53.	Phule Vikram (Phule G 08108)	2020	Rahuri	Tall growth habit with erect plant type, brown colour medium bold seed weighing 21.6 g/ 100 seeds, resistance to Fusarium wilt,	22.94	113	ICCV 10 x ICCL 87322	CZ	Suited to Mech. Harvesting
54.	Jawahar Gram 24 (JG 2016-24)	2020	Jabalpur	Tall and erect growth habit, 100 seed weight: 29.3 gm,resistant against fusarium wilt	22.37	115	(JG74 x ICC4958)- 21	CZ	Suited to Mech. Harvesting
55.	RVG 204 (RVSSG 8102)	2021	Sehore	Tall and semi erect growth habit, seed size is 23.4 g/100seeds, moderately resistant to wilt.	22.32	111	ICCV10 x ICCL87322	CZ	Suited to Mech. Harvesting
56.	PBG 9 (GL 13001)	2021	Ludhiana	Medium tall , semi erect plant type with medium bold brown attractive seeds (25g/100 seeds), moderate resistant to wilt & DRR.	17.50	132	GL22044 x GL22021	NEPZ	Timely Sown

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
57.	PDKV-Kanak (AKG1303)	2021	Akola	Tall semi erect growth habit, resistant to fusarium wilt, medium bold seeded (21.7g/100seeds)	24.81	108-111	SAKI-9516 x AKG70	WCZ	Timely Sown
58.	Pusa Chickpea 20211 (Pusa Chickpea Manav)	2021	ICAR-IARI New Delhi	Semi- erect plant type, profusely branching, with 100 seed weight19.5g,highly resistant to fusarium wilt & MR to DRR, CR, and stunt	23.92	108	[(Pusa391/// (Pusa 391/ WR315)-3]	CZ	Wilt resistant introgression line
59.	RG 2015-08 (Lochan Chana)	2021	Raipur	Semi- erect plant type, medium pod size, 100 seed weight is 22.6 g, Resistant to wilt.	22.28	100-110	PDE90-2E x JG67	ECZ	Timely Sown
60.	IPC MAS-1(IPC L4-14)	2021	ICAR-IIPR	Suitable for timely sown; rainfed condition. MABC derived improved drought tolerant introgression line in genetic background of DCP92-3 possessing "*QTL hot spot*" region for drought tolerance gene on linkage group 4 (LG4), 100 seed weight: 16.6g, Protein content: 18.1%.	16.64	128-133	(DCP92-3 x ICC4958) * 3DCP92-3	NWPZ	Drought Tolerant introgression line

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
61.	Pusa Chickpea 4005	2021	ICAR-IARI	Suitable for timely sown and rainfed conditions; tolerant to drought. Quality traits: Protein content 17.17 %. Medium bold, yellowish brown seeds with seed size (100-seed wt. of 24 g).	16.18	119	Pusa 362 x (Pusa 362 x (Pusa 362 x ICC 4958)-6	NWPZ	Drought Tolerant introgression line
62.	IPCMB 19-3 (Samriddhi)	2021	ICAR-IIPR	Wilt resistant introgression line of Pusa 256, possessing resistance race 2, 100-seed weight: 24.15 g; protein content: 22.9%	20.81	106	(Pusa 256 x Vijay) x 3*Pusa 256	CZ	Wilt resistant introgression line of Pusa 256; Timely sown, irrigated
63.	NBeG 857	2021	Nandyal	Attractive light brown-coloured seeds, 100 seed weight of 23.4g; protein content 21.7%. tolerant to wilt.	18.20	95	ICC 12419 x JG11	SZ	Timely sown
64.	RG 2016-134 (CG Akshya Chana)	2021	Raipur	Moderately resistant to wilt; protein content: 18.74 %, 100-seed weight: 25.8g	16.78	94	ICCV03112 x ICCV 10	SZ	Timely sown, irrigated
65.	Pusa JG 16 (BGM 10221)	2022	ICAR-IARI	MAS derived drought tolerant introgression line with 100-seed weight 24.9 g, protein content 21.9 %, resistant to *Fusarium* wilt & Stunt Virus	13.51	111	JG 16/JG16/ JG 16/ (JG 16/ ICC 4958)-02	WCZ	Drought tolerant introgression line of JG 16, Timely sown rainfed conditions

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
66.	ADVIKA (NC 7)	2023	NIPGR, New Delhi	MAS derived drought tolerant introgression line, semi erect with medium green foliage and bold seed (26.6 gm/100 seed), moderately resistant to wilt	14	107	(JG 16 x ICC 14649) * JG 16	WCZ	Drought tolerant introgression line of JG 16, timely sown, rainfed conditions
67.	GNG 2461	2023	Sriganganagar	Semi-erect profuse branching attractive seed size (24.6g/100 seed) tolerant to AB, BGM and stunt disease	22	122-158	(KWR 108 x GNG 1861) x (Pant G 186 x GNG 1958)	NWPZ	Rainfed
68.	Saatvik (NC 9)	2024	NIPGR, New Delhi	MAS derived drought tolerant introgression line, semi erect with medium green foliage and bold seed (26.0 gm/100 seed), moderately resistant to dry root rot and stunt.	15-16	105 days	(JAKI 9218/ ICC 14649)-BC_3F_1-***	WCZ	Drought tolerant line of JAKI 9218, timely sown, rainfed conditions
69.	Kundan (IPCB 2015-132)	2024	ICAR-IIPR, Kanpur	Erect plant growth habit, tall, pigmented stem, green foliage and medium seed size with 100 seed wt. 14.7gm. Resistant to wilt	15-20	126-131	GNG 1581 x ILWC 21	NEPZ	Timely sown and suited for mechanical harvesting
70.	Swarna Lakshmi (DBGC 3)	2024	ICAR-RCER, Patna	Semi-erect plant type, profuse branching, dark green foliage, double flower/peduncle. 100 seed wt. 21.3g. moderately resistant to fusarium wilt	17-18	125-130	ICC 13124 X WR 315	NEPZ	Timely sown

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
71.	Kota Desi Chana 2 (RKGM 20-1)	2024	AU, Kota	Medium tall plants, erect to semi erect growth habit, less lodging, rough, medium bold seed. (24.7g/100 seed) Resistant/moderately resistant to wilt, dry root rot, and stunt disease.	17-20	94-96	GL 28143 x GJG -918	SZ	Timely sown, suitable for mechanical harvesting
72.	Kota Desi Chana 3 (RKGM 20-2)	2024	AU, Kota	Semi-erect, medium tall, light brown medium bold, angular rough seed. 100 seed wt. 26.4g, resistant to wilt, dry root rot, and stunt disease.	15-17	126-132	GJG 0731 x Phule G 00108	NEPZ	Timely sown, Suitable for mechanical harvesting
73.	Gujarat Gram 8	2024	JAU, Junagadh	Erect and tall plant type, dark green colour of foliage, Owl's head seed shape, 100 seed wt. is 20.6g. Moderately resistant to fusarium wilt, dry root rot and stunt.	16-17	125-130	PG 07104 x WR 315	NEPZ & SZ	Timely sown and mechanical harvesting
74.	Nandyal Gram 924 (NBeG 924)	2024	Nandyal	Semi spreading plant type, light brown seeds with a 100 seed weight 23.5g, moderately resistant to Fusarium wilt	17-18	105-115	JAKI 9218 × ICC 12478	ECZ	Timely sown

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
75.	Nandyal Gram 1267 (NBeG 1267)	2024	Nandyal	Attractive pods with light brown coloured seeds, 100 seed weight - 21.9g and dhal recovery of 75.2%, protein content of 16%	20-21	90-95	JG 11 x ICCV 05106	SZ	Timely sown and mechanical harvesting
76.	Pant Gram 10	2024	GBPUAT, Pantnagar	Flower colour violet blue, semi-erect plant type with profuse branching, moderate resistance against wilt and stunt diseases, 100 seed weight - 24.6 g, protein content of 17.7%	17-18	130-135	PG041 X PG046	NEPZ	Timely sown irrigated/ rainfed condition
77.	Karan Chana 20 (RSGD 1155)	2025	Durgapura	Semi-erect, seeds greenish brown, medium seed size, moderate resistance to wilt, dry root rot, and stunt disease, protein content (19.7%)	16-17	115-120	RSG 807 x CSJD 884	NEPZ	Late Sown conditions
78.	Pusa Chickpea Aswini (BG 4037)	2025	ICAR-IARI	Protein content 24.8 %, resistant/moderately to *Fusarium* wilt, dry root rot and stunt diseases	26-27	140-145	ICCV 07110 x JG 11	NWPZ	Suitable for mechanical harvesting, irrigated timely sown conditions
79.	Raj Vijay Gram 2023 (RVG 2023)	2025	CoA, Indore	Resistant/moderately resistant to wilt, dry root rot and stunt, protein content -21%.	15-16	120-125	Kripa X ICC5912	NEPZ	Machine harvesting, suitable for late sown condition

State released varieties of Kabuli chickpea in India

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
1.	Gora Hisari (*Kabuli*)	1988	Hisar	Semi-erect, tall, large and white seeded (23 g/100 seeds)	15-16	120-135	L 144 x P 6613	Haryana	Irrigated
2.	Sweta (ICCV 2 : *Kabuli*)	1993	ICRISAT, Hyderabad	Early maturing. Semi-spreading, with white large seeds (26 g/100 seeds)	13	80-90	[((K 850 x GW 5/6) x P 48) x (L 550 x Guamchil 2)]	Maharashtra & Andhra Pradesh	Rainfed & Irrigated
3.	Pragati (K 3256)	1994	CSAUA&T, Kanpur	Tall, spreading, light green foliage, white flower, double podded, seed white and large (25 g/100 seeds)	17-18	140-150	Selection from Cyprus local	U.P.	Irrigated
4.	Sadbhawana (WCG 1)	1996	Modipuram	Semi-erect, pigmented leaf & stem and large seeded (26 g/100 seeds) *Kabuli*	20	135	Mutant of C 235	U.P.	Irrigated
5.	L 551 (K)	1999	Ludhiana	Medium tall and bushy. Seeds medium (20 g/100 seeds).	18	155-160	ICC 32 x ICCX 760581 BRH-10H-BH	Punjab	Irrigated
6.	Virat (Phule G 95418)	2000	Rahuri	Semi-erect, large seeded (36 g/100 seeds), creamy, profuse branching.	18	90-100	(ICC-7676 x ICCC 32) x (ICCC 49 x FLIP-82-IC) x ICCV 3	Maharashtra	Rainfed
7.	GNG 1292 (K)	2002	Sriganga nagar	Semi spreading, profuse branching, medium large seed (22 g/100 seeds), round, whitish brown with uniform	24-26	130-150	Selection from (GNG 149) x (L 550 x L 2)	Rajasthan	Irrigated
8.	HK 1 (HK 89-131)	2002	Hisar	Semi spreading, medium tall, large seed (27 g/100 seeds) with round shape	17-18	150-155	(L 550 x E 100 Ym) x (ICCC 32 X ICC 820001)	Haryana	Irrigated
9.	Asar (RSGK 6)	2003	Durgapura	Early maturing, resistant to wilt	18	136	RSGK 628 x ICCV 2	Rajasthan	Irrigated

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
10.	JGK 2	2006	Jabalpur	Large seeded *kabuli* (34-36g /100 seed better looking quality	18	100	(ICCV 32 x L 144) x ICCC 49 x (FLIP 82-16C) x ICCV 3	M.P.	Irrigated
11.	JGK 3 (JSC 19)	2006	Jabalpur	Extra large seeded *kabuli*, tolerant to wilt for timely sown condition	15	115	ICCV 2 x BG 256	M.P.	Irrigated
12.	Lam Shanaya (LbeG 7)	2006	ANGRAU	Tolerant to wilt and rot condition	20-25	90	(ICCL 8001 x ICCC 32) x (ICCC 49 x FLIP 82-1C) x ICCV 3	M.P.	
13.	Pusa 1108	2006	IARI, New Delhi	Semi erect, broad leaf with light green and large seeded (29g/100 seeds)	29	150	[(BG 315 x ILC 72) x (ICCV 13 x FLIP 85-11)] x (ICCV 32 x Surutoto)	Delhi	
14,. 15.	Gauri (GNG 1499: K)	2007	Sriganga nagar	Semi-erect with medium tall, large seed, beige (pale sandy fawn) colour	18	143	GNG 421 x BG 267	Rajasthan	Irrigated
16.	Pant *Kabuli*chana 1	2010	Pantnagar	Semi spreading, medium height, large seed with prominent beak, late maturing, Tolerant to BGM	14.0	125	Selection	Uttarakhand	Irrigated
17.	Raj Vijay *Kabuli* Gram 101	2011	Sehore	Large seeded *kabuli*, early maturing, Moderately resistant to wilt	20.0	110	ICCV 2 x BG 256	M.P.	Irrigated
18.	JGK 5	2016	Jabalpur	Extra-large seeded (55-60 g/100 seeds) *kabuli* variety having resistance to *Fusarium* wilt and moderate resistance to root rot.	15-17	110-115	Selection from local germplasm from Malwa region	M.P.	Irrigated

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
19.	BDNGK 798	2016	ARS, Jalna	*Kabuli* type with white medium (29g /100 seeds) grains. Moderately resistant to wilt and stunt	16-18	120-135	BGD 2048 x ICC 118	Maharashtra	Irrigated
20.	Pant *Kabuli* Gram-2 (PG071)	2017	GBPUAT, Pantnagar, Uttarakhand	Semi-erect plant type, *kabuli* variety (31.4g/ 100 seeds), tolerant to wilt, BGM	16-17	135-163	BG 1053 x PKC 1	Uttarakhand	Rainfed and Irrigated
21.	RVKG 111	2019	Sehore	Smooth creamy medium seed size, 100 seed wt. 26 gm, MR to wilt	20-22	117	JG 130 x BG 8416	M.P.	*Kabuli* Normal sown
22.	RVKG 151	2019	Sehore	Smooth creamy extra-large seed size 100 seed wt. 54.3 g, medium tall and spreading plant type	20-21	113	Dollar x Kripa	M.P.	*Kabuli* Normal sown
23.	RKGK 13-271	2021	Kota	Medium stature, white flower, creamy coloured seed, 100 seed weight: 31.2 g Moderately resistant to wilt	24.70	110	ICC14194 x BG2058	Rajasthan	Irrigated condition
24.	RVKG- 121	2021	Sehore	Medium tall and semi spreading plants, smooth surface, creamy colour and owl's head shaped seeds, 100 seed weight 27.8 g, resistant to Fusarium wilt	18-20	99-123	Pusa 1088 x FG 711	Madhya Pradesh	Normal sown
25.	Kanchan (IPCK 2009-145)	2023	ICAR-IIPR	Moderate resistance to wilt, medium bold seeded with creamy white beige colour attractive seeds, 100 seed weight 32.8 g.	12.49	135	JGK-1 x ICC 17109	Uttar Pradesh	Irrigated condition

S. No.	Variety	Year of release	Originating centre	Salient features	Yield (q/ha)	Days to maturity	Parentage	Area of adoption	Special features
25.	Gujarat Kabuli Gram 1 (GJGK 1617)	2023	Junagadh	Moderate resistance against wilt, bold seeded with beige colour attractive seeds with protein content of 18%, 100 seed weight 42.2g.	13.83	144	ICC 14195-P3 x ICCV 92337	Gujarat	Irrigated condition
26.	Raj Vijay Gram 2K21 (RVSSG 61)	2024	RVSKVV, Sehore	Seed brown colour, owl's head shape and extra-large seed (42.2 g/100 seeds). Pink flowers with anthocyanin content in plants. Moderate resistance against *Fusarium* wilt.	17-20	110-115	JG16 x Dollar	MP	Irrigated conditions.
27.	Raj Vijay Gram 2021 (RVSSG 62)	2024	RVSKVV, Sehore	Medium tall and semi spreading plant growth habit & white flowers, 100 seed wt. 36.7g. Moderately resistant to Fusarium wilt	18-20	110-115	KAK2 X I PC 9494	MP	Irrigated conditions
28.	Sorath Kabuli 2 (Gujarat Kabuli Gram 2)	2024	JAU, Junagadh	Semi erect and tall, large seed size (35.8 g/100 seeds), resistant to wilt & stunt.	20-21	115-120	Vihar x ICCV 95333	Gujarat	Irrigated timely sown conditions

State released varieties of Desi chickpea in India

S. No.	Variety	Yearof release	Originating centre	Salient features	Yield (q/ ha)	Days to maturity	Parentage	Area of adoption	Special features
1.	CO 3	1985	Coimbatore	Early type and medium large seeded (19 g/100 seeds)	10-11	85	Selection from germplasm obtained from Maharashtra	Tamil Nadu	Rainfed
2.	RAU 52	1985	Dholi	Medium tall and semi-erect with deep green foliage and profuse pod bearing habit. Seeds are dark brown and small (16 g/100 seeds)	15-20	140-145	ST 4 x RS 10	Bihar	Rainfed
3.	Avrodhi	1987	C S A U A & T , Kanpur	Semi-spreading, tall, brown and large seeded (20 g/100 seeds)	22-25	145-150	T 3 x K 315	U.P.	Irrigated
4.	SG 2	1987	Dholi	Double podded	21	145	[(E 100Y x P 436) x (L 550 x F 378)]	Bihar	Suited to Diara area of Bihar
5.	Phule G 12	1990	Rahuri	Early maturing, semi-spreading, seed medium large (16 g/100 seeds)	12-13	96-100	GW 5/7 x Ceylon 2	Maharashtra	Rainfed
6.	RSG 44	1991	Durgapura	Medium tall, semi-erect, purple flower and double pods. Seeds medium large (16 g/100 seeds)	23	135-150	JG 62 x F 496	Rajasthan	Irrigated & Rainfed
7.	Sadabahar	1992	C S A U A & T , Kanpur	Tall, semi-spreading, pink flower, foliage yellowish green, green, medium size seed (16 g/100 seeds).	25	145-150	Hima x L 245	U.P.	Irrigated
8.	JG 218	1995	Jabalpur	Semi-erect, dark green, early maturing, yellowish brown, smooth and medium-large seed (18 g/100 seeds)	15-18	115-120	ICCV 4 x P 1353	M.P.	Irrigated

S. No.	Variety	Yearof release	Originating centre	Salient features	Yield (q/ ha)	Days to maturity	Parentage	Area of adoption	Special features
9.	HirwaChaffa (AKGS 1)	1996	Akola	Semi-spreading, pink flowered, early maturing. Seed small and green (16 g/100 seeds)	15-17	105-110	Selection from local germplasm	Maharashtra	Irrigated
10.	Pant G 186 (PG 88-6)	1996	Pantnagar	Small seeded (15 g/100 seeds).	18	125-135	ILG 613 x Pant G 114	U.P.	Rainfed &Irrigated
11.	Vishal (Phule G 87207)	1996	Rahuri	Early maturing, semi-erect medium-large seeds (17 g/100 seeds)	20	110-115	K 850 x ICCL 80074	Maharashtra	Rainfed
12.	Gulabi Akola 1 (Gulak 1)	1997	Akola	Semi-spreading with white flower, seed gulabi, round large (26 g/100 seed)	12	115	Selection from local germplasm	Maharashtra	Rainfed & irrigated
13.	JAKI 9218	1997	ICRISAT, Hyderabad	Medium large seeded (18 g/100 seeds) variety	18-20	120	(ICCV 37 x GW 5/7) x ICCV 107	CZ	Rainfed
14.	JG 322	1997	Jabalpur	Medium tall plant, 100 seed wt16 g, brown color and angular shape	15-18	110-115	Chaffa x BG 1	M.P.	Rainfed
15.	PBG 3 (GF 89-133/ GPF 133)	1997	PAU, Faridkot	Long fruiting branches, semi-erect, dark green foliage and medium-large seed (16 g/100 seeds) yellowish brown	16	160-165	GL 769 x GNG146	Punjab	Irrigated
16.	CO4	1998	Coimbatore	Early type, light pink flower, and large seed (19 g/100 seeds)	11-12	80-85	ICCC 42 x ICCC 12237	Tamil Nadu	Rainfed
17.	Gujarat Gram 2 (GCP 107)	1999	Junagadh	Medium tall, semi-erect and medium-large seed (18 g/100 seeds), dark brown color, smooth round surface	22-24	95-100	JG 1258 x BDN 9-3	Gujarat	Rainfed

S. No.	Variety	Yearof release	Originating centre	Salient features	Yield (q/ ha)	Days to maturity	Parentage	Area of adoption	Special features
18.	HC 3 (H 86-18)	1999	Hisar	Semi-erect, large seed (24 g/100 seeds), light brown colour	13-14	150-160	L 550 x E 100 Ym	Haryana	Irrigated
19.	JGG 1	1999	Jabalpur	Seeds are round, small (14 g/100 seeds), pink in color with slightly pointed peak and excellent parching quality	13-15	125-130	Selection from germplasm	M.P.	Irrigated
20.	Pant G 10 (WCG 10)	1999	Pantnagar	Semi-erect, Large pods with brown seed (16 g/100 seeds)	17-18	147	Mutant of G 130	U.P.	Rainfed & irrigated
21.	Surya (WCG 2)	1999	Pantnagar	Semi- erect, white flower, light green foliage, small seeds (13g/100 seeds) with yellowish brown colour	18-20	125-145	Mutant of G 130	U.P.	Irrigated
22.	PDG 4	2000	Ludhiana	Semi-erect, tall, dark green leaf, long fruiting branching, brown medium-large seed (17 g/100 seeds)	18	155	(GL 769 x GF 88421) x GF 8976	Punjab	Limited moisture condition
23.	Vaibhav (RSG 9218)	2000	Raipur	Semi-erect, tall and early maturing. Seed small (14 g/100 seeds) with wrinkled & shape attractive	18-19	120-130	Selection from GP ICCV 91106	Chhattisgarh & M.P.	Rainfed
24.	JG 130	2002	Jabalpur	Semi spreading, with profuse branching, medium tall plant and brown large seed (24 g/100 seeds), smooth	18-20	115-120	(Phule G 5 x Narsinghpur bold) x JG 74	M.P.	Rainfed &Irrigated
25.	PBG 5	2002	Ludhiana	Semi-erect, seed small (15 g/100 seeds) and brown	19	160-165	BG 257 x Narsinghpur bold	Punjab	Irrigated & Rainfed
26.	Akash (CSJD 884)	2003	Durgapura	Semi-erect, double podded, medium large seed (16 g/100 seeds), reddish brown	16-17	125-135	RSG 44 x E 100 Y	Rajasthan	Rainfed

S. No.	Variety	Yearof release	Originating centre	Salient features	Yield (q/ ha)	Days to maturity	Parentage	Area of adoption	Special features
27.	Abha (RSG 973)	2004	Durgapura	High yielding, large seeded	16	125	RSG 515 x K 850	Rajasthan	Rainfed
28.	Anuradha (WBG 39/2)	2004	West Bengal	Seeds dark brown, wrinkled and semi erect plant type	24	126	Mahamaya 1 x Radhey	West Bengal	Rainfed
29.	HC 5 (HC 96-99)	2004	Hisar	Erect and deep rooted. Seed (17 g/100 seeds).	20	135-140	H 89-78 x H 89-84	Haryana	Rainfed &Irrigated
30.	JG 412	2004	Jabalpur	Semi-erect and Large seeded (25g/100 seeds)	19	95	Phule G 5 x Narsinghpur Bold) x ICCV 37	M.P.	Rainfed &Irrigated
31.	JG 63	2004	Jabalpur	Semi spreading with profused branching, yellowish brown seeds, medium	23	115	Single plant selection from JG 62	M.P.	Rainfed &Irrigated
32.	Pusa 1103	2004	IARI, New Delhi	Resistant to *Ascochyta* blight and tolerant to wilt	22	130	(Pusa 256 x Cicerreticulatum) x Pusa 362	Delhi/NCR	Irrigated
33.	Abhar (RSG 807)	2005	Durgapura	Widely adaptable, double podded, tolerant to *Ascochyta*	18	140	BG 256 x RSG 44	Rajasthan	High input management
34.	Digvijay	2005	Rahuri	Semi spreading and large, yellowish brown seed	17	110	Phule G 91028 x Bheema	Maharashtra	Rainfed
35.	Pratap Chana 1	2005	Kota	Early maturing, suitable for Paddy-gram cropping system	13	90	ICC 10301 x ICCC 1 (ICC 11522)	Rajasthan	Ranifed
36.	Pusa 1088	2005	IARI, New Delhi	large seed (26g/100 seeds)	23	140	(BG 256 x ICCV 32) x ICCV 32	Delhi	Moisture stress
37.	Pusa 1105	2005	IARI, New Delhi	Erect type plant, seeds medium large and brown colour (30 g/100 seeds)	19	145	(C 104 x BG 1003) x (ICC 88503 x BG 1048)	Delhi/NCR	Irrigated
38.	Arpita (RSG 895)	2006	Durgapura	High yielding with attractive seed colour	15	135	RSG 44 x RSG 255	Rajasthan	Rainfed
39.	Asha (RSG 945)	2006	Durgapura	Medium large seed, white flower, double podded (16g/100 seeds)	20	135	RSG 668 x RSG 817	Rajasthan	Rainfed

S. No.	Variety	Yearof release	Originating centre	Salient features	Yield (q/ ha)	Days to maturity	Parentage	Area of adoption	Special features
40.	JG 226	2006	Jabalpur	Medium height, spreading, good vegetative growth, small light brown, seed coat rough test wt. 15g, protein content 24.8%	21	115	JG 74 x JG 315	M.P.	Moisture stress
41.	Aparna (RSG 991)	2007	Durgapura	Good level of resistance to wilt and dry root rot, suitable for normal as well as late sown conditions	16	135	RSG 289 x BG 1053	Rajasthan	Rainfed
42.	Arpan (RSG 896)	2007	Durgapura	Broad leaf with double podded	14	135	RSG 44 x RSG 538	Rajasthan	Rainfed
43.	Aruna (RSG 902)	2007	Durgapura	Semi erect with profuse branching, double podded	20	135	RSG 44 x PDG 84-10	Rajasthan	Rainfed
44.	Sangam (GNG 1488)	2007	Sriganga nagar	Semi-erect with medium tall, seeds are brown with smooth surface	18	134	KPG 279-3 x GNG 469	Rajasthan	Late sown
45.	BDNG 797	2007	Badnapur	Desi variety resistant to wilt.	15-16	102	-	Maharashtra	
46.	Abhilasha (RSG 974)	2008	Durgapura	It is suitable for late sown situation and resistant to wilt, and tolerant to BGM & stunt	15	130	K 850 x RSG 515	Rajasthan	Rainfed
47.	Ankur (CSJ 140)	2008	Durgapura	It is suitable for irrigated situation and have good resistance to wilt and DRR	16	128	RSG 515 x K 850	Rajasthan	Irrigated
48.	Anshul (RSG 959)	2008	Durgapura	It is suitable for late sown and frost prone situation and shown resistance to wilt and DRR	15	130	RSG 581 x RSG 515	Rajasthan	Late sown
49.	JG 14	2008	Jabalpur	Heat tolerant variety suitable for late sown situation of M.P. It is resistant to wilt and has better milling quality	19	110	[(GW 5/7 x P 327) x ICCL 83149]	M.P.	Late sown

S. No.	Variety	Yearof release	Originating centre	Salient features	Yield (q/ ha)	Days to maturity	Parentage	Area of adoption	Special features
50.	JG 6	2008	Jabalpur	It is resistant to Fusarium wilt and moderately resistant to dry root rot	21	113	(ICCV 10 x K 850) x (H 208 x RS 11)	M.P.	Irrigated
51.	Vallabh Kallar Channa 1 (WCG 3)	2008	Meerut	Suitable for cultivation in mild saline soils, and tolerant to wilt. Seed is medium bold with deep red pigmentation	19	135	Mutant of C 235	U.P.	Irrigated
52.	Gujarat Junagadh Gram 3	2010	Junagadh	Medium height, semi erect, yellow large seeded, early maturing, Resistant to wilt and stunt	15.0	110	ICCV 933001 x ICCV 10	Gujarat	Rainfed
53.	Raj Vijay Gram 201	2011	Sehore	Early maturing, *desi* type, Moderately resistant to wilt	25.0	105	PG 5 x Bheema	M.P.	Irrigated
54.	PKV Harita (AKG 9303-12)	2012	PDKV, Akola	Bold seeded, tolerant to wilt and drought, useful for culinary purpose	12-18	106-110	GREEN MUTANT 121-1 X AKG-46	Vidarbha region of Maharashtra	
55.	NBeG 3	2013	Nandyal	Large seeded *desi* variety (24.0g/100 seeds), tolerant to drought with good rooting quality, tolerant to wilt.	23.0	100	A 1 X ICC 4958	Andhra Pradesh	Irrigated
56.	JG 12	2014	Jabalpur	Desi variety with medium (15g/100 seeds) seed size. Semi-spreading habit with profuse pods.	20.0	110-120	(N. Bold x PG 5) x PG 5	M.P.	Rainfed
57.	PBG 7 (GL26054)	2015	Ludhiana	Desi variety with medium (16.1g/ 100 seeds) seed size. Tall variety with profuse podding	23-24	159	GPF2 x BG1084	Punjab	Irrigated
58.	Birsa Chana 3	2015	BAO, Jharkhand	Desi type, resistant to lodging, shattering, Resistant to wilt	18-20	115-118	ICCV-2 x Bhawanipatna	Jharkhand	Normal sown condition

S. No.	Variety	Yearof release	Originating centre	Salient features	Yield (q/ ha)	Days to maturity	Parentage	Area of adoption	Special features
59.	Bidisha (BG1084) (WBG29)	2015	Berhampur, WB	Medium maturing desi variety with small seeds (12-14 g/ 100 seeds)	25.0	131	(Pusa 256 x GL 84038) x Pusa 267	WB	Normal and late sown condition
60.	Gujarat Junagadh Gram 6(GJG6)	2016	Junagadh	Tolerant to wilt and stunt, suitable for normal sowing.	16 -18	120-130	GJG 0105 x FC 711	Gujarat	Normal Sown
61.	JG 36 (Jawahar Gram 36)	2016	JNKVV, Jabalpur	Semi spreading plant with dark brown seed. Tolerant to wilt.	18 -20	110-120	JG 12 x JG 16	Madhya Pradesh	Rainfed and Irrigated
62.	GBM 2	2016	UAS, Raichur	Tall and erect plant type	18 -20	100-110	Mutant of Annigeri 1	Karnataka	suitable for mechanical harvesting, Irrigated
63.	Indira Chana – 1	2017	IGKVV, Raipur	Erect plant type with more primary branches, resistant to wilt	16	101-116	JG 74 x ICCL 83105	Chhattisgarh	Rainfed and Irrigated
64.	Nandyal Gram 49 (NbeG 49)	2017	ARS, Nandyal	Semi spreading plant type with medium height, Tolerant to wilt.	14-20	90-105	Annegiri x ICC 4958	Andhra Pradesh	Rainfed
65.	Pant Gram-4 (PG 065)	2017	GBPUAT, Pantnagar, Uttarakhand	Semi erect plant type, tolerant to wilt, BGM and dry root rot	18-20	126-162	PG 92-97 x *C reticulatum*	Uttarakhand	Rainfed and Irrigated
66.	Pant Gram-3 (PG 043)	2017	GBPUAT, Pantnagar, Uttarakhand	Semi erect plant type, medium seeds (24.4g/ 100 seeds), tolerant to wilt, BGM	18-24	139-152	K 850 (LM) x Avrodhi	Uttarakhand	Rainfed and Irrigated
67.	Dheera (NBeG 47)	2017	ARS, Nandyal	Semi-erect plan type, suitable for mechanical harvesting.	20-25	90-105	ICCV 2 x PDG 84-16	Andhra Pradesh	Suitable for Machine harvesting
68.	Phule Vikram	2017	MPKV, Rahuri	Semi-erect plan type, early maturing	16.37	105-110	ICCV 10 x ICCL 87322	Maharashtra	Suitable for Machine harvesting

S. No.	Variety	Yearof release	Originating centre	Salient features	Yield (q/ ha)	Days to maturity	Parentage	Area of adoption	Special features
69.	BGD 111-1	2018	IARI, Dharwad	Semi-spreading, medium bold seed (25g/100 seed).	16-17	95	(JG 62 x ICC 12237) x JG 62	Karnataka	Rainfed
70.	PDKV, Kanchan	2019	Akola	Profuse branching, semi spreading growth habit, medium bold seed size 19.7 g/100 seed early and synchronous maturity, resistance to wilt.	19.35	109	SAKI 9516 x FG 716	Maharashtra	Normal sown
71.	RVG 204	2019	Sehore	Tall and semi erect growth habit 100 seed wt. 28.4 g; resistant to wilt	20-25	111	ICCV 10 x ICCL 87322	M.P.	Mech. Harvesting
72.	RVS 205	2019	Sehore	Tall and semi erect plant type, dark green seed colour with 20 g/ 100 seed; resistance to Fusarium wilt	20-25	110-115	BGD 112 x JSC 37	M.P.	Normal / Rainfed
73.	Pant Gram 6	2020	Pantnagar	Tall and semi erect plant type, seed are medium size with 18.1 g/100 seed, tolerance to wilt and BGM	21.67	145	PG 035 x HC 1	Uttarakhand	Rainfed/ Irrigated
74.	IPC 2004-98	2020	IIPR, Kanpur	Medium tall, semi erect growth habit green foliage, large and attractive seed shape and colour, 100 seed wt. 25.8 g	14.29	141	Phule G5 x DCP 92-1	U.P.	Normal sown
75.	IPC 2005-62	2020	IIPR, Kanpur	Medium and semi-erect growth habit, Resistance to wilt, 100 seed wt. 15.2g	10.18	118	DCP 92-3 x T 39-1	U.P.	Late sown,high seed protein content (25.5%)

S. No.	Variety	Yearof release	Originating centre	Salient features	Yield (q/ ha)	Days to maturity	Parentage	Area of adoption	Special features
76.	Sabour Chana 1 (BRC-1)	2020	Sabour	Bold seeded, high yielded in normal sown under irrigated condition, 100 seed wt. 24-26 g, MR to wilt and DRR	22-24	130-135	(PG 5 X H 82-2) X (PG 5 X GNG 469)	Bihar	Normal sown
77.	Him Palam chana 1 (DKG 986)	2020	DhaulaKuan	Early and cold tolerance, 100 seed wt. 12.6 g, medium height, Resistance to AB and BGM	17.72	141-160	ICCV 88506X ICCV 90201	Himanchal Pradesh	Cold tolerance and drought
78.	IPC 2004-01	2021	ICAR-IIPR Kanpur	Medium tall and semi-erect growth habit, medium seed size(20.2 gm /100seed) with light brownish seed and moderately resistant to wilt	13.96	139	{9 RSG533 x BG391) x (ICCC42 xICC106)}	U.P.	Irrigated condition
79.	RKG 13-515	2021	Kota	Semi spreading growth habit, pink flower, medium brown seed colour, 100 seed weight: 22.49g, mod. Resistant to wilt	24.55	104-115	GNG 469 X IPC 2729	Rajasthan	Irrigated condition
80.	IPC 2011-112	2021	ICAR-IIPR Kanpur	Semi erect growth habit,resistant to wilt.	12.96	137	IPC94-94 x IPC2002-120	U.P.	Timely sown condition
81.	Chhattisgarh Chana -2	2021	Raipur	Erect and medium plant, light anthocyanin pigment on stem, 100 seed weight: 23.5 gmmoderately resistant to fusarium wilt	18.73	97	PG92-97 x *C.raticulatum*	Chhattisgarh	Rainfed and semi irrigated condition,
82.	Nandyal Gram 452	2021	Nandyal	Semi spreading plant type, medium height, 100 seed weight 24.0 g, mod. Resistant to wilt.	25.00	90-105	ICCV37 x ICC12451	Andhra Pradesh	Rainfed condition

S. No.	Variety	Yearof release	Originating centre	Salient features	Yield (q/ ha)	Days to maturity	Parentage	Area of adoption	Special features
83.	RVG 210	2021	Sehore	Green plant are pubescent with anthocyanin, yellowish cream seed with smooth surface, 100seed wt. 26.7 g., resistant to wilt & tolerant to pod borer.	18.05	105-110	BG362 x JG16	Madhya Pradesh	Normal sown
84.	Pant Gram 7 (PG172)	2021	Pantnagar	Semi erect plant type, 20.7g/100seed,tolerant to wilt and root rot.	16.53	145	IPC98-12 x ICC395468	Uttarakhand	Normal sown
85.	Pant Gram 8 (PG 170)	2021	Pantnagar	Suitable for rainfed/irrigated conditions, tolerant to wilt with 100 seed weight 20.5g	16.30	144 days	PG 037 x PG 97-10	Uttarakhand	Normal sown
86.	Pant Gram 9 (PG 158)	2021	Pantnagar	Suitable for rainfed/irrigated conditions, tolerant to wilt, 100 seed weight 22.4g	17.26	142 days	ICCC 42 x ICC 1069	Uttarakhand	Normal sown
87.	IPC 2010-134 (Shiva)	2021	ICAR-IIPR	100 seed weight: 23g; moderately resistant to Fusarium wilt	17.06	124-138 days	GNG 469 x FG 711	Uttar Pradesh	Timely sown, irrigated
88.	IPC2007-28 (Atal)	2021	ICAR-IIPR	Resistant against Fusarium wilt.	16.83	112-138 days	DCP 92-3 x JG 16	Uttar Pradesh	Timely sown, irrigated
89.	Sabour Chana 2	2021	Sabour	Suitable for late sown conditions with 100 seed weight 14.5g.	18-20	120 – 125	IPC98-12 x ICCV96029	Bihar	Late sown
90.	GNG 2261(Keshav)	2021	Sriganganagar	Yellowish brown seed colour; protein content: 21.09%; 100 seed weight: 15.0 g	20.72	128 days	GNG 1581 x Pusa 1103	Rajasthan	Late sown, irrigated
91.	PBG 8 (GL 13042)	2021	Ludhiana	Moderately resistant to Botrytis grey mould and Fusarium wilt, 100 seed wt 16.5g	21.00	154-160	(GPF 2 x *Cicerjudaicum* acc. 185) x GPF 2	Punjab	Normal sown, irrigated

S. No.	Variety	Yearof release	Originating centre	Salient features	Yield (q/ ha)	Days to maturity	Parentage	Area of adoption	Special features
92.	Phule G 15109 (Vishwaraj)	2021	Rahuri	100 seed weight: 22-23g; Protein content- 22.9%	16.28	95-105	ICCV 93952 x IVVV 94954	Maharashtra	Rainfed
93.	HC 6 (Haryana Chana 6)	2022	Hisar	Suitable for both timely and late sown conditions, resistant to Fusarium wilt, plant height 63-85 cm, protein content 21.8 %, yellowish brown seed with 17g/100 seed	22.69	147	H99-294x H00-256	Haryana	Rainfed & Irrigated condition
94.	Kuber (IPC 2010-142)	2023	ICAR-IIPR	Resistant to Fusarium wilt, 100 seed weight 29.1g	16.09	136-139	RSG 143-1 x IPC 94-94	Uttar Pradesh	Irrigated Timely sown
95.	Shalimar Chickpea-2 (SKUA-WCKP-101/ RVSSG68)	2023	Srinagar	Tolerant to wilt, 100 seed weight 20g, stay green type with 27% protein content	15.5	99	BGD112 x JG11	Jammu & Kashmir	Rainfed/ Irrigated conditions
96.	Gujrat Gram 7 (Sorath Suraj GJG1611)	2023	Junagadh	Attractive brown colour with rough testa, seed size 26 g/100 seed, Semi-erect, resistant to stunt and moderately resistant against wilt disease, protein (23.65%)	18.59	80-111	ICCV 03112 x JG 130	Gujarat	Rainfed
97.	JG 18 (Jawahar Gram 2019-155-118)	2023	Jabalpur	Brown angular seeds and 30g/100 seed, resistant to multiple diseases, good parching quality.	21	110		Madhya Pradesh	Timely sown
98.	JG 52 (Jawahar Gram 2018-52)	2023	Jabalpur	Light brown angular seeds (6.0-18.0 g/100 seed, multiple disease resistant.	23	110		Madhya Pradesh	Timely sown

S. No.	Variety	Yearof release	Originating centre	Salient features	Yield (q/ ha)	Days to maturity	Parentage	Area of adoption	Special features
99.	Pusa Chickpea Vijay (BGM 10217)	2023	ICAR-IARI, New Delhi	Seed size 18.5g/100 seed medium tall with semi-erect growth habit, resistant to fusarium wilt.	1852	128	JG 11 x ICC 4958	Uttar Pradesh	Irrigated timely sown conditions
100.	JG 14	2023	JNKVV, Jabalpur	Semi erect growth habit. Light green foliage, angular seed shape (24.9g/100 seeds). Resistant to wilt disease.	22-23	101-107	(GW 5/7 × P327) × ICCL 83149	Gujarat	Irrigated timely sown conditions
101.	NBeG 776	2023	Nandyal	Suitable for combine harvest, crop duration 90-105 days ,Attractive light brown coloured seeds ,100 seed weight of 25.0g, wilt tolerant	15-20	90-105	ICC 12419 X JG 11	Andhra Pradesh	Ranfed
102.	Pusa Chickpea 3057 (BG 3057)	2024	ICAR-IARI, New Delhi	Semi-erect plant type, light green foliage, resistant to Fusarium wilt and collar rot; moderately resistant to *Ascochyta* blight. 100-seed weight is 30-35 g	18-20	135-140	FLIP 94-509C X Pusa 1088	NCR Delhi	Timely sown conditions
103.	KCD 11 (KCD 2019-05)	2024	ZARS, Kalaburagi	Moderately resistant to wilt	17-18	95-100	JG 11 X WR 315	Karnataka	Early maturity
104.	Dheera (NBeG 47)	2024	ARS, Nandyal	Semi-erect plan type	20-25	90-105	ICCV 2 x PDG 84-16	Area extension Karnataka Zone 4	Suitable for Machine harvesting
105.	PBG 10	2024	PAU, Ludhiana	Semi erect with green foliage and bold seeds, 100 seed wt 25.9g, moderately resistant to *Ascochyta* blight and *Botrytis* grey mould.	21-22	151-155	ICCV95803/ ICCV96836/ /Moti/ICC12965	Punjab	Irrigated Condition

S. No.	Variety	Yearof release	Originating centre	Salient features	Yield (q/ ha)	Days to maturity	Parentage	Area of adoption	Special features
106.	Kota Desi Chana 4 (RKG 13-380)	2024	AU, Kota	100 seed wt. 22-23gm, moderately resistant to wilt, and DRR	30	110-125	BG 1044 X BG 1110	Rajasthan	Timely sown
107.	Kota Desi Chana 5 (RKG 13-515-1)	2024	AU, Kota	100 seed wt. 23gm, moderately resistant to wilt, and DRR	29	110-130	GNG 469 X IPC 97-29	Rajasthan	Late sown irrigated
108.	Kota Desi Chana 6 (RKG 19-1)	2024	AU, Kota	100 seed wt. 25.5g,moderately resistant to wilt and Dry root rot	21-22	110-115	JAKI 9118 X ICCV00108	Rajasthan	Timely sown
109.	Parbhani Chana 16 (BDNG 2018-16)	2024	Badnapur	Bold seeded, 100 seed wt 30 g, resistant to wilt,	27-28	110-115	BCP 60 X Vishal	Marathwada region of Maharashtra	Timely sown, irrigated
110.	ADBeG 2 (Adilabad Shangla-2)	2025	PJTAU, Hyderabad	Early, resistant to *Fusarium* wilt, semi erect plant type	25-26	100-105	JG 11 X (ICC16641 X JG11)	Telangana	Rainfed and Irrigated condition
111.	BGD 133 (Pusa Sumangala)	2025	ICAR-IARI, Dharwad	Bold seeded(28g/100 seed) moderately resistant to *Fusarium* wilt	17-18	94-96	BGD 111-1 X ICCC 42	Karnataka	Timely sown, rainfed/ irrigated
112.	AKG 1402(PDKV Super JAKI)	2025	PDKV, Akola	Early, bold seeded (26g/100 seed), moderately resistant to *Fusarium* wilt	20-21	95-100	JAKI 9218 X BG 3003	Maharashtra	Suitable for machine harvesting

Centrally released varieties of lentil (Large Seeded)

S. No.	Name of Variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major diseases	Area of adaptation	Any other relevant information
1.	K 75 (Malika)	CSAUAT, Kanpur	Local sel. From Bundelkhand region	1986	13-14	130-135	-	NEPZ, CZ	Foliage dark green; semi spreading seeds gray mottled
2.	LH 84-8 (Sapna)	CCS HAU, Hissar	L 9-12 x JLS 2	1991	15-16	130-135	Resistant to rust	NWPZ	Plant semi-spreading; seeds gray mottled bold
3.	Lens 4076	IARI, New Delhi	PL 234 x PL 639	1993	14-15	135-140	Resistant to rust	NWPZ & CZ	Dark green foliage, semi spreading,
4.	DPL 15 (Priya)	IIPR, Kanpur	PL 406 x L 4076	1995	15-16	135-140	Resistant to rust & tolerance to wilt	NWPZ	
5.	DPL 62 (Sheri)	IIPR, Kanpur	JLS 1 x LG 171	1997	17-18	130-135	Resistant to rust & tolerance to wilt	NWPZ	
6.	JL 3	JNKVV, Sehore	Land race Sel. From Sagar	1999	14-15	110-115	Resistant to wilt	CZ	
7.	IPL 81 (Noori)	IIPR, Kanpur	K 75 x PL 369	2000	12-13	110-115	Moderately resistant to rust and wilt	CZ	
8.	VL 507	VPKAS. Almora	Sel. From ILL-7978	2006	12-13	160-170	Resistant to wilt	NHZ	
9.	IPL 406	IIPR, Kanpur	DPL 35 x EC 157634/ 382	2007	17-18	125-130	Resistant to rust	NWPZ	

S. No.	Name of Variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major diseases	Area of adaptation	Any other relevant information
10.	IPL 316	IIPR, Kanpur	Sehore 74-3 x DPL -58	2013	14-15	110-115	Moderately resistant to wilt and rust	Central Zone	
11.	RVL 11-6	RAK College, Sehore	JL 3 x DPL 62	2017	11-12	107-113	Moderately resistant to wilt.	Central Zone	
12.	L 4717 (Pusa Ageti Masoor)	IARI New Delhi	ILL 7617 x 91516	2017	12-13	96-106	Resistant to wilt and Ascochyta blight	Central Zone	Extra early type,
13.	Kota Masoor 1 (RKL 607-1)	AU, Kota	KLB 339 x SL 94-09	2017	10-14	98-107		Central Zone	Tolerant to drought and high temperature
14.	RKL 14-20 (Kota Masoor 2)	AU, Kota	LL 1049 x RKL 11	2018	12-15	97-104		Central Zone	Tolerant to drought, high temperature
15.	L 4727	IARI, New Delhi	Sehore 74-3 x Precoz	2018	11-15	92-128	Moderately resistant to wilt	Central Zone	Suitable for timely planting under rainfed conditions,
16.	L- 4729	IARI, New Delhi	SKL 259 x L 4147	2019	17-18	96-110	Moderately resistant to wilt	Central Zone	Suitable for timely planting under rainfed conditions.
17.	LL 1373	PAU, Ludhiana	IPL406 x FLIP 2004-7L	2019	15-16	125-130	Moderately resistant to wilt & rust	NWPZ	

S. No.	Name of Variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major diseases	Area of adaptation	Any other relevant information
18.	Kota Masoor 3 (RKL 605-03)	AU, Kota	L 4682 x SL 73-3	2020	18-19	105-110	Moderately resistant to wilt	CZ	Suitable for normal sown conditions.
19.	Kota Masoor 4 (RKL 58 F 3715)	AU, Kota	Mutant of DPL 62	2020	18-19	110-115	Resistant to rust &*Stemphylium* blight, moderately resistant to wilt.	CZ	Suitable for timely sowing (10th November)
20.	LL 1613	PAU, Ludhiana	LL 1112 x PL 02-6	2023	16-17	115-120	Moderately resistant to wilt & rust	NWPZ	
21.	Kota Masoor 6 (RKL 20-26)	AU, Kota	RKL 11 X PL5	2024	16-17 (NWPZ) and 17-18 (CZ)	125-140 (NWP), 85-125 (CZ)	Moderately resistant to rust and wilt	NWPZ and CZ	protein content: 21.07%
22.	Pant Lentil 16 (PL 366)	GBPUAT, Pantnagar	L4188 X L4147	2025	14-15	150-155	Moderately resistance to rust and wilt	NHZ	protein content of 22%.

Centrally released varieties of lentil (Small Seeded)

S. No.	Name of Variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major diseases	Area of adaptation	Any other relevant information
1.	Pant Lentil 4	GBPUA&T, Pantnagar	VPL 175 x (PL 184 x P 288)	1993	16-17	135-140	Resistant to rust& wilt	NWPZ	Plant semi-spreading, dark-green, foliage,
2.	PusaVaibhav (L 4147)	IARI, New Delhi	(L 3875 x P 4) x PKVL	1996	17-18	130-135	Resistant to rust	NWPZ	
3.	KLS 218	CSAU, Kanpur	KLS 133 x L 9362	2005	13-14	120-125	Resistant to rust	NEPZ	
4.	HUL 57	BHU, Varanasi	Mutant of HUL –11	2005	14-15	120-125	Rust Resistant	NEPZ	
5.	VL 126	Almora	LL 498 x LH 84-8	2006	13-14	160-170	Resistant to rust	NHZ	
6.	WBL 77	Berhampore (W.B)	ILL 7723 x BLX 88176	2008	14-15	115-120	Resistant to rust	NEPZ	
7.	Pant L 8 (Pant L 063)	GBPUA&T, Pantnagar	DPL 59 x IPL 105	2010	15-16	130-135	Moderately resistant to rust and wilt	NWPZ	
8.	IPL 220	IIPR, Kanpur	(DPL 44 x DPL 62) x DPL 58	2018	14-18	119-122	Resistant to rust and Fusarium wilt	NEPZ	Suitable for normal sown conditions,
9.	V L Masoor-148	VPKAS Almora	DPL-15 x L-4076	2019	11-12	145-160	Moderately resistant to wilt & rust	NHZ	Suitable for rainfed conditions.

S. No.	Name of Variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major diseases	Area of adaptation	Any other relevant information
10.	LL 1655	PAU, Ludhiana	LL 1112 x LL 699	2024	14-15	140-145	Moderately resistant to rust and tolerant to wilt	NWPZ	
11.	LH 17-19	HAU, Hisar	LH 07-26 x PL 01	2024	15-17	130-135	Resistant to rust and moderately resistant to wilt.	NWPZ	medium maturity, greyish brown seed (2.4g/100 seeds) with small black spots.
12.	Pant Lentil 14 (PL 320)	GBPUAT, Pantnagar	Pant Lentil 5 x L 4145	2024	15-16	125-130	Resistant to rust and Stemphylium blight,	NWPZ	Protein content of 25.72 %
13.	Pant Lentil 15 (PL 342)	GBPUAT, Pantnagar	Pant Lentil 8 x DPL 58	2024	15-16	125-130	Resistant to Ascochyta blight,moderately resistant to rust and wilt	NWPZ	protein content 26.24 %

Centrally released varieties of field pea (Tall)

S. No.	Name of variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major disease	Area of adaptation	Any other relevant information
1.	Pant P 5	GBPUA&T, Pantnagar	T 10 x T 163	1987	20-21	140-145	Resistant to powdery mildew	NWPZ	White round smooth large
2.	MalviyaMatar2	BHU, Varanasi	(Alfaknud x C 5064) x S 143	1988	21-22	120-130	Resistant to powdery mildew	NEPZ	leafless
3.	JP 885	JNKVV Jabalpur	(T 163 x 6588-1) x 46C	1992	21-22	135-140	Resistant to powdery mildew	CZ	
4.	(KFP 103) Shikha	CSAU, Kanpur	KPMR 83 x KPMR 9	1993	20-21	130-140	Resistant to powdery mildew	NWPZ	
5.	DMR 7 (Alankar)	IARI, New Delhi	6587 x L 116	1996	23-24	115-135	Resistant to powdery mildew	NWPZ	large seed
6.	Ambika	JNKVV, Raipur	DMR 22 x HUP 7	2000	18-19	100-125	Resistant to powdery mildew	CZ	
7.	Adarsh (IPF 99-25)	IIPR, Kanpur	PDPD 8 x Pant P 5	2000	23-24	110-115	Resistant to powdery mildew	CZ	
8.	VL 42	Almora	VL Matar 1 x P 388	2007	19-20	125-130	Resistant to powdery mildew	NEPZ	
9.	Pant P 42	GBPUA&T, Pantnagar	(HUDP 7 x HFP 4) x EC 1	2007	22-23	130-135	Resistant to powdery mildew& moderately resistant to rust	NWPZ & NHZ	wide adaptability
10.	HFP 9426	HAU, Hisar	KPMR 84-2 x EC 109195	2008	25-26	135-140	Resistant to powdery mildew & tolerance to root rot	Haryana & NHZ	Shining green seed,

S. No.	Name of variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major disease	Area of adaptation	Any other relevant information
11.	IPF 5-19 (Aman)	IIPR, Kanpur	KPMR 144-1 x EC 8495	2009	22-23	120-130	Resistant to powdery mildew & moderately resistant to rust	NWPZ	
12.	TRCP 8 (Gomati)	ICAR Res. Complex Agartala	T 163 x DMR 4	2009	14-15	125-135	Resistant to powdery mildew	NEHZ	
13.	Pant Pea 243	GBPUAT, Pantnagar	Pant P 14 x Pant P 41	2018	19-20	105-110	Moderately resistant to powdery mildew, rust and Ascochyta blight	CZ	
14.	IPF-16-13	IIPR, KANPUR	IPF 99-25 x VRP-22	2019	18-20	115-120	Moderately resistant to powdery mildew and rust	NEPZ	
15.	Pant Pea 497	GBPUAT, Pantnagar	IPFD 5-19 x HFP 530	2024	19-20	120-125	Moderately resistance to rust and powdery mildew,	NWPZ	Protein content: 25.05 %
16.	Pant Pea 498	GBPUAT, Pantnagar	IPFD 5-19 x HFP 530	2024	20-21	120-125	Moderately resistance to rust and powdery mildew	NWPZ	Protein content: 22.51 %
17.	Pant Pea 501	GBPUAT, Pantnagar	IPFD 5-19 x HFP 530	2024	21-22	120-125	Resistant to powdery mildew & *Ascochyta* blight	NWPZ	Protein content: 22.70 %
18.	Pant Pea 517	GBPUAT, Pantnagar	IPFD 05-19 X HFP 530	2025	21-22	125-130	Resistance to powdery mildew and *Ascochyta* blight	NWPZ	Protein content: 23.2%

Centrally released varieties of field pea (Dwarf)

S. No.	Name of variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major disease	Area of adaptation	Any other relevant information
1.	HFP 4 (Aparna)	CCS HAU, Hisar	T 163 x EC 10916	1988	26-27	140-145	Resistant to powdery mildew	NWPZ	leafless
2.	Uttra (HFP 8909)	HAU, Hisar	EC 109185 x HFP 4	1996	22-23	128-130	Resistant to powdery mildew	NWPZ	
3.	Sapna KPMR 144-1	CSAU, Kanpur	Rachna x HFP 4	1997	24-25	125-130	Resistant to powdery mildew	CZ	leafless
4.	Swati (KFPD-24)	CSAUAT, Kanpur	Flavanda x HFP-4	1999	28-29	115-120	Resistant to powdery & tolerance to rust		leafless
5.	HUDP 15 (Malviya Mattar 15)	BHU, Varanasi	F2[PG 3 x S 143)] x FC 1	1999	23-24	125-130	Resistant to powdery mildew, rust	NEPZ, NHZ	Resembles HFP 4 but slightly taller
6.	DDR 23 (Pusa Prabhat)	IARI, New Delhi	HFP 4 x Pusa 10	2000	15-16	105-110	Resistant to powdery mildew	NEPZ	Very early variety
7.	DDR 27 (Pusa Panna)	IARI, New Delhi	HFP 4 x P 1542	2001	17-18	105-110	Resistant to powdery mildew	NWPZ	Very early
8.	KPMR 400	CSAUAT, Kanpur	Rachna x HFP 4	2001	20-22	105-110	Resistant to powdery mildew	CZ	
9.	KPMR 522	CSAU, Kanpur	KPMR 156 x HFP 4	2001	22-23	130-135	Resistant to powdery mildew	NWPZ	
10.	Vikas (IPFD 99-13)	IIPR, Kanpur	HFP 4 x LFP 80	2005	23-24	100-105	Resistant to powdery mildew	CZ	
11.	Prakash (IPFD 1-10)	IIPR, Kanpur	POPD 8 x HUDP 7	2006	22-23	110-115	Resistant to powdery mildew and rust	CZ, NHZ	
12.	HFP 9907 B	HAU, Hisar	Rachna x Bonneville	2007	23-24	125-130	Resistant to powdery mildew	NWPZ	green seeded

S. No.	Name of variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major disease	Area of adaptation	Any other relevant information
13.	Pant P 74	GBPUA&T, Pantnagar	HUDP 6 x Pant P 11	2009	22-23	120-130	Resistant to powdery mildew & moderately resistant to rust	NWPZ	
14.	Dantiwada Fieldpea 1 (SKNP 04-09)	SDAU, S.K. Nagar	Sel. From DDR 49	2011	17-18	120-130	Resistant to powdery mildew	NEPZ	
15.	HFP 529	CCS HAU, Hisar	HUDP 9 x Arkel x (HUDP 12 x Arkel)	2012	22-25	120-125	Resistant to powdery mildew & tolerance to rust	NWPZ	
16.	IPFD 10-12	IIPR, Kanpur	IPF 99-25 x EC 384275	2014	22-25	110-115	Resistant to powdery mildew	CZ	green dry seeds
17.	HFP 715	CCS HAU, Hisar	DMR 50 x HFP 9948	2014	15-16	115-120	Resistant to powdery mildew	NHZ	
18.	IPFD 11-5	IIPR, Kanpur	(DDR 16 x HUDP 7) x DDR 16	2016	19-20	105-110	-	CZ	
19.	IPFD 12-2	IIPR, Kanpur	HUDP 15 x EC 342002	2017	22-25	110	Resistant to Powdery mildew,	CZ	
20.	IPFD 2014-2	IIPR, Kanpur	IPFD 99-13 x P 1297-97	2018	22-23	105-110	Resistant to powdery mildew	CZ	early vigour
21.	Pant Pea 250	GBPUAT, Pantnagar	Pant P 14 x Pant P 41	2018	23-24	120-125	Resistant to powdery mildew and moderately resistant to rust, Ascochyta blight and root rot	NWPZ	

S. No.	Name of variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major disease	Area of adaptation	Any other relevant information
22.	HFP 1428	HAU, Hisar	HFP 529 x Pant P 25	2020	25-26	120-125	Resistant to powdery mildew, Ascochyta blight & root rot and moderately resistant to rust	NWPZ	
23.	Pant Pea- 347 (Pant P 347)	GBPUAT, Pantnagar	Pant P 13 x IPFD 08-3	2021	25-26	120-125	Resistant to powdery mildew & Ascochyta blight	NWPZ	suitable for rainfed as well as irrigated condition
24.	Shikhar (IPFD 19-1)	IIPR, Kanpur	IPF 5-19 x MDP 2	2023	19-20	120-125	Resistant to powdery mildew and moderately resistance to rust	NEPZ	semi-leafless type, medium bold seed size (18.0 g)
25.	Pant Pea 462 (Pant P 462)	GBPUAT, Pantnagar	HFP 529 x Pant P 31	2023	18-19	120-122	Moderately resistant to rust, resistant to powdery mildew	NEPZ	leafy type, Suitable for rainfed and irrigated conditions, Protein content 24.12%
26.	Arpan (IPFD 19-3)	IIPR, KANPUR	IPFD 1-10 x IPFD 10-13	2023	17-18	120-125	Moderately resistant to rust and resistant to powdery mildew.	NEPZ	Leafy type, protein content: 20-22%,Fe: 91.5 ppm; Zn:50.5 ppm
27.	HFP 1426	HAU, Hisar	HFP 529 x Pant P 25	2023	18-19	120-122	Protein 23.35%, resistant to powdery mildew and moderately resistant to rust	NEPZ	

S. No.	Name of variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major disease	Area of adaptation	Any other relevant information
28.	Pant Pea 484	GBPUAT, Pantnagar	Pant P 200 x VL 201	2024	23-24	120-125	Moderately resistant to rust and powdery mildew diseases	NWPZ	protein content: 26.17 %
29.	Pant Pea 509	GBPUAT, Pantnagar	Pant P 26 X FC 1	2025	18-19	115-120	Resistant to powdery mildew and *Ascochyta* blight	NEPZ	Protein content: 26.36%.
30.	HFP 1709	HAU, Hisar	(Pant P 25 x HFP 8909) x Pant P 25	2025	16-17	110-115	Resistant to powdery mildew	NEPZ	Protein content: 21.6%
31.	Purvansh (IPFD 18-3)	ICAR-IIPR, Kanpur	HUDP 15 x P 1544-4	2025	17-18	115-120	Resistant to powdery mildew &*Ascochyta* blight	NEPZ	Protein content: 25.7%.

Centrally released varieties of lathyrus

S. No.	Name of variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Tolerance to moisture stress	Area of adaptation	Any other relevant information
1.	Bio L 212 Ratan	IARI, New Delhi	Somaclone of P 24	1997	15-16	110-115	Tolerant to moisture stress	NEPZ	Low ODAP, large seed, blue flower
2.	Prateek	IGKV, Raipur	LS 8246 x a-60	2006	15-16	110-115	Tolerant to stress & PM	Chhattisgarh	Low ODAP (0.109%)
3.	Mahateora	IGKV, Raipur	Ratan x JRL-2	2008	15-16	110-115	Tolerant to stress	Chhattisgarh	Low ODAP (0.074 %) large seed

State released varieties of Lentil (Large Seeded)

S. No.	Name of Variety	Source Centre	Pedigree	Year of release	Average yield (q/ ha)	Days to maturity	Reaction to major diseases	Area of adaptation	Any other relevant information
1.	Garima	CCS HAU, Hisar	Pusa 2 x No. 4	1997	12-14	140-145	Tolerant to rust	Irrigated areas of Haryana	
2.	LL 699	PAU, Ludhiana	PL 639 x PL77-2	2002	14-15	140-145	Moderately res. to rust and blight and tolerance to pod borer	Punjab state	
3.	KL 320 (Shekhar 3)	CSAUA&T, Kanpur	PL 405 X P237	2004	20-22	120-125	Tolerance to wilt	Whole U.P.	
4.	KLB 303 (Shekhar2)	CSAUA&T, Kanpur	LG 60 X Sagar local	2004	15-18	125-130	Tolerance to wilt	Whole U.P.	
5.	Shalimar Masoor-1	Srinagar Centre, SKUAST-K	Single plant selection from EC-2216	2005	10-11	190-200	Moderately resistant to root rot and res. to leaf spot and pod blight	Rainfed marginal Karewa land of Kashmir	
6.	LL 931	PAU, Ludhiana	LH90-103 x LL608	2009	12-13	145-150	Resistant to lentil rust and tolerant to pod borer	Punjab state	
7.	Pant L 7	GBPUA&T, Pantnagar	L 4076 x DPL 15	2009	16-18	125-145	Resistant to rust	Uttarakhand	
8.	VL Masoor 514 (VL 514)	VPKAS, Almora	VL 501 x VL Masoor 103	2011	8-10	155-160	Moderately resistant to wilt and rust	Uttarakhand hills	
9.	RVL 31	RAK, Sehore	Selection from local collection from Shajahpur	2014	18-19	110-115	Resistant to wilt	M.P.	high biomass
10.	Shalimar Masoor-2 (SKUAL 9)	Srinagar Centre, SKUAST-K	EC-3109 (Selection from ICARDA material)	2015	12.85	200-205	Moderately resistant to wilt and rust, resistant to white grub	Kashmir Valley up to an altitude of 1850 m amsl	Protein: 23.03%

S. No.	Name of Variety	Source Centre	Pedigree	Year of release	Average yield (q/ ha)	Days to maturity	Reaction to major diseases	Area of adaptation	Any other relevant information
11.	KLB 2008-4 (Krati)	CSAUA&T, Kanpur	LG 362 xDPL 62	2015	18-20	115-120	Resistant to wilt	U.P.	
12.	RLG 5 (Keshwanand Masoor 1)	RARI, Durgapura	Sel. from local germplasm	2016	15-16	130	Tolerant to root knot nematode.	Rajasthan	Double podded, rainfed condition
13.	KLB 345 (Shekhar 4)	CSAUA&T, Kanpur	Precoz x KLB 231	2017	18-20	111	Resistant to rust and wilt	U.P.	
14.	IPL 526	IIPR, Kanpur	DPL 62 x DPL 58	2018	10-12	101-110	Tolerance to rust and wilt	U.P.	
15.	IPL 315	IIPR, Kanpur	PL 4 x DPL 62	2018	12-13	135-140	Resistant to rust & tolerant to wilt	U.P.	
16.	IPL 321	IIPR, Kanpur	DPL 62 x K 75	2018	9-10	130-135	Resistant to wilt	U.P.	
17.	Shalimar Masoor -3 (SKUA-L_2-96	SKUAST-K, Srinagar	KLS 221 (Sel. from IIPR germplasm)	2019	11.5-12.5	200-205	Tolerant to frost and winter chilling	Kashmir valley	Bold seeded (100 seed wt. 5.5g)
18.	IPL 534	IIPR, Kanpur	KL 178 x DPL 62	2019	16-18	100-107	Resistant to rust & wilt	M.P.	
19.	Chhattisgarh Masoor -1 (RL 3-5)	IGKVV, Raipur	Selection from Germplasm	2020	10-11	90-95	Resistant to rust & wilt	Chhattisgarh	
20.	IPL 329	IIPR, Kanpur	KL 178 x DPL 62	2020	10-11	120-125	Resistant to Fusarium wilt and rust	Uttar Pradesh	
21.	Pant L 11 (P L 164)	GBPUAT, Pantnagar	DPL 15 x L 4188	2021	11-12	101-132	Resistant to rust	UK	
22.	Jammu Lentil 144	SKUAST, Jammu	ILL 10829 x ILWL 30	2021	11-12	102-125	Resistant to wilt and root rot	J&K	
23.	Jammu Lentil 71	SKUAST, Jammu	ILL-8006 x ILWL-62	2021	10-11	140-145	Resistant to wilt and root rot	J&K	

24.	PSL 17	ICAR-IARI, New Delhi	L-4076 x PSL-11	2024	10-11,	120-125	Resistant to wilt, and rust	NCR Delhi	Salt tolerant
25.	JL 6-3	JNKVV, Jabalpur	RL3 X PL5	2025	16-17	105-115	Moderately resistant to wilt and rust	Madhya Pradesh	
26.	IPL341	ICAR-IIPR Kanpur	Sehore74-3 X DPL 62	2025	17-18	105-115	Moderately resistant to wilt and rust	Madhya Pradesh	
27.	IPL342 (Uttam)	ICAR-IIPR Kanpur	DPL 62 X JL 3	2025	15-16	110-115	Resistance to wilt and rust	Madhya Pradesh	
28.	Kota Masoor 5 (RKL 14-175)	AU, Kota	IPL 313 X RKL 11	2025	20-21	110-130	Moderately resistant to wilt and rust	Rajasthan	Rainfed condition, Protein: 22 %,

State released varieties of Lentil (Small Seeded)

S. No.	Name of Variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major diseases	Area of adaptation	Any other relevant information
1	JL 1	JNKVV, Jabalpur	Selection from local collections	1991	11-15	110-120	-	M.P.	Suitable for rainfed condition,
2	Markanday	CSK HPKV, HAREC, Dhaulakuan	Selection from Exotic material	2005	10-12	160-170	Res. to rust, root rot, wilt & blight	Low & Mid Hills	
3	Pusa Shweta (PSL-19)	ICAR-IARI, New Delhi	PDL 1 x L 4147	2024	18-20	120-125	Salt tolerant and resistant to wilt and Ascochyta blight.	NCR Delhi	Salt tolerant,
4	Narendra Masoor 1	NDUA&T, Faizabad	Precoz x L 9-12	1996	20-22	134-140	Rust and wilt tolerant	U.P.	
5	HM-1	CCS HAU, Hisar	K 75 x L 4076	2006	14-16	135-140	Resistant to rust	Irrigated areas of Haryana	
6	VL Masoor 129	VPKAS, Almora	VL 101 x VL 1	2009	7-11	145-150	Resistant against wilt and root rot.	Uttarakhand hills	
7	Pant L 6	GBPUA&T, Pantnagar	Pant L 4 x DPL 55	2009	16-18	125-145	Resistant to rust	Uttarakhand	
8	KLS 09-3 (Krish)	CSAUA&T, Kanpur	L9-12 x WBL 58	2015	18-20	105-110	Resistant to wilt and rust	U.P.	
9	Pant Lentil – 9 (PL 098)	GBPUA&T, Pantnagar	Pant L 5 x IPL 105	2017	13-14	113-135	Resistant to rust, wilt and *Ascochyta* blight diseases	Uttarakhand	
10	KLS 122 (Shekhar 5)	CSAUA&T, Kanpur	KLS 564 x KL 320	2017	16-18	105-115	Resistant to rust and wilt	U.P.	

S. No.	Name of Variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major diseases	Area of adaptation	Any other relevant information
11	IPL 225	IIPR, Kanpur	(DPL 44 x DPL 62) x DPL 58	2020	10-11	105-120	Resistant to Fusarium wilt and rust	Uttar Pradesh	
12	IPL 230	ICAR-IIPR Kanpur	IPL 522 × DPL 62	2022	15-16	115-120	Resistant to rust	Uttar Pradesh	
13	VL Masoor 150 (VL 150)	ICAR-VPKAS, Almora	VL 501 x VL 502	2022	14-15	145-160	Resistant to rust	Uttarakhand	
14	Bidhan Lentil 16 (BL 16)	BCKV, Mohanpur	LL56 ×L4710	2022	15-16	109-132	Resistant against Stemphyllium blight and Collar rot	West Bengal	
15	Pant Lentil 12	GBPUA&T, Pantnagar	PL 6 x DPL 58	2023	8-10	155-160	Resistant to rust and moderately resistant to Pod borer	Uttarakhand	
16	L 4717 (Pusa Ageti Masoor)	ICAR-IARI, New Delhi	ILL 7617 X 91516	2024	14-15	95-105	Moderately resistant to wilt	Area extension for Bihar state	Extraearly, Protein: 25.7%

State released varieties of field pea (Tall)

S. No	Name of Variety	Source Centre	Pedigree	Year of release	Average yield q/ha)	Days to maturity	Reaction to major diseases	Area of adaptation	Any other relevant information
1	HFP-9426	CCS HAU, Hisar	KPMR 84-2 x EC 109195	2008	25-26	135-140	Resistant to PM; tolerant to rust	Irrigated areas of Haryana	Shining green seed
2	IPF 4-9	IIPR, Kanpur	KPMR 144-1 x EC 8495	2010	8-10	125-130	Resistant to Powdery mildew, and moderately to rust.	U.P.	Tendril type
3	TRCP 9	ICAR Res. Complex Agartala	BMR 7 x P 163	2018	21-22	85-90	Resistant to rust and root knot nematode	Tripura	
4	VL Matar 64 (VL 64)	VPKAS, Almora	VL 42 x DDR 23	2022	11-13	154-165	Resistant to powdery mildew & moderately resistant to wilt	Uttarakhand	Suitable for rainfed/ irrigated condition,
5	Subhra (IM9101)	IGKV Raipur	Rachna x JP 885	2001	15-20	90-100	Resistant to powdery mildew	Chhattisgarh	
6	VL Matar 47	VPKAS, Almora	JPV 14 x HFP 4	2010	10-14	142-162	Resistant against wilt, rust and powdery mildew disease.	Uttarakhand hills	
7	RFP 2009-1 (Indira Matar 1)	IGKV, Raipur	Rachna x EC 334160-1	2016	17-18	100-105	Tolerant to powdery mildew and rust	Madhya Pradesh and Chhattisgarh	Suitable for rice fallow cultivation
8	RFP 4 (Keswanand Matar 1)	RARS, Durgapura	Bonneville x NPL	2016	17-18	110-120	Moderately resistant to Powdery mildew, rust , root rot & root knot nematode.	Rajasthan	Seed medium bold
9	Anindya (WBFP 14-S9)	PORS, Berhampore, West Bengal	JVP 11 x VL 37	2024	16-18	113-126	Resistance to powdery mildew, Ascochyta blight and rust	West Bengal	Suitable for irrigated condition

State released varieties of field pea (Dwarf)

S. No.	Name of Variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major diseases	Area of adaptation	Any other relevant Information
1	Jayanti (HFP 8712)	CCS HAU, Hisar	HFP 4 X PG 3	1998	20-25	120-125	Resistant to powdery mildew	Irrigated areas of Haryana	Dual purpose
2	Pant Pea 14	GBPUA&T, Pantnagar	HFP 4 x Longittee	2004	15-20	125-130	Resistant to PM & rust	Hills and plains of Uttrakhand	
3	Paras	IGKV Raipur	DDR 12 x Rachna	2006	15-20	100-105	Resistance to powdery mildew	Chhattisgarh	
4	Pant Pea 25	GBPUA&T, Pantnagar	(EC 32410 x FC 1) x FC 1	2006	15-20	125-130	Resistant to PM & rust	Hills and plains of Uttarakhand	
5	GDF-1	SDAU, S.K.Nagar	Selection from DDR-49	2010	18-20	100-110	Resistantto powdery mildew; tolerant to rust	Gujarat	
6	Shalimar Pea-1	Srinagar Centre, SKUAST-K	Selection of KFPD-8	2015	13-14	210-215	Resistant to Powdery Mildew and moderately resistant to rust, moderately resistant to pod borer and white grub	Suitable for Kashmir Valley up to an altitude of 1850 meters 5ams l6	Higher protein content 20.65%
7	Pant Pea - 155	GBPUA&T, Pantnagar	Pant P 13 x DDR 27	2016	18-20	120-135	Resistant to rust and powdery mildew diseases and tolerant to pod borer pest	Uttarakhand	
8	IPFD 6-3	IIPR, Kanpur	KPMRD 389 x HUDP 7	2016	19-20	110-115	Resistant to Powdery mildew and moderately resistant to rust.	U.P.	Tendril type
9	IPFD 9-2	IIPR, Kanpur	IPFD 98-1 x HUDP 15	2018	15-16	105-110	Resistant to powdery mildew & tolerant to rust	U.P.	
10	VL Matar -61	VPKAS, Almora	DDR-23 x VL-1	2019	11-12	150-160	Resistant to powdery mildew & rust	Uttarakhand	
11	IPFD 12-8	IIPR, Kanpur	IPFD 1-10 x DDR-27	2020	16-17	115-130	Resistant to powdery mildew & tolerant to rust	U.P.	

S. No.	Name of Variety	Source Centre	Pedigree	Year of release	Average yield (q/ha)	Days to maturity	Reaction to major diseases	Area of adaptation	Any other relevant Information
12	IPFD 13-2	IIPR, Kanpur	IPFD 1-10 x DDR-23	2020	16-17	115-120	Resistant to powdery mildew & tolerant to rust	U.P.	
13	Kota Matar - 1 (KPF 101)	AU, Kota	(Jayanti x EC-398602) x (Uttra x EC-502159)	2020	18-20	110-115	Resistant to powdery mildew & downy mildew	Rajasthan	
14	IPFD 16-3	IIPR, Kanpur	IPFD 9913 x VRP 3	2021	16-17	115-125	Resistant to powdery mildew & downy mildew	Uttar Pradesh	
15	Pant Pea - 195 (Pant P 195)	GBPUAT, Pantnagar	Pant P 13 x IPFD 1-10	2021	14-15	114-135	Resistant to powdery mildew &rust diseases	Uttarakhand Plains	Suitable for rainfed/ irrigated condition,
16	Shalimar Pea 2 (SKAU-P-17)	SKUAST, Srinagar	Shalimar Pea 1 x EC 8495	2024	12-13	200-205	Resistant to powdery mildew	Kashmir	Protein: 25.5%
17	IPFD 12-2	ICAR-IIPR, Kanpur	HUDP 15 x EC 342002	2024	18-19	120-125	Resistant to powdery mildew	Area extension for Punjab	Protein: 24.5%

State released varieties of lathyrus

S.No.	Name of variety	Source Centre	Pedigree	Year of release	Average yield (q/ ha)	Days to maturity	Area of adaptation	Any other relevant information
1	Bidhan Khesari-1 (BK 14-1)	BCKV, Mohanpur	Nirmal x BioL-212	2018	13-14	100-110	West Bengal	Early maturing, low neurotoxin
2	Hazari (WBK 1401-3)	PORS, Berhampore, W.B.	RLS-3004-5 X Nirmal (B1)	2024	17-19	114-124	West Bengal	Suitable for irrigated condition, maturity 114-124 days, average yield 17-19 q/ha, resistant to wilt and rust and ODAP content – 0.16%

Annexure III

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