

Information about Crop wise Improved / Hybrid Varieties Developed by University

Improved / Hybrid Varieties of Chickpea

Chickpea-Vikas

	Release year	1982
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Minimum temperature 10-15°C, Maximum temperature 25 to 30°C Rainfall 750 to 1000 mm Humidity 21-41 %
	Optimum sowing period for chickpea: Rainfed crop: 20 th Sept to 10 Oct Irrigated crop: 20 th Oct to 10 Nov	
Sowing Time /		
Planting period		
	Duration: 105-110	Days
Seed Rate (Per acre)	Seed rate: 30 kg acre ⁻¹	
Crop duration	105-110 Days	
Due de eticite	Rainfed: Trial yield: 10-11 q ha ⁻¹ , Average yield: 10.00 q ha ⁻¹	
Productivity	Irrigated: Trial yield: 22-24 q ha ⁻¹ , Average yield: 15.00 q ha ⁻¹	
Characters / factures	Medium size seed	ls, less damage by bruchid beetles in storage,
Characters / features	Suitable for rainfed condition, Released for Western Maharashtra.	

Chickpea-Vishwas

	Release year	1985
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
VISHWAS W	Climate	Minimum temperature 10-150C, Maximum temperature 25 to 300C Rainfall 750 to 1000 mm Humidity 21-41 %
	Optimum sowing period for chickpea: Rainfed crop: 20th Sept to 10 Oct Irrigated crop: 20th Oct to 10 Nov Duration: 115-120 Days	
Sowing Time /		
Planting period		
Seed Rate (Per acre)	35-40 kg acre ⁻¹	
Crop duration	115-120 Days	
D 1 (1.1)	Rainfed: Trial yield: 10-11 q ha ⁻¹ , Average yield: 10.00 q ha ⁻¹	
Productivity	Irrigated: Trial yield: 28-30 q ha ⁻¹ , Average yield: 24.00 q ha ⁻¹	
	Bold seeds, Responsive to irrigation and fertilizer, Released for	
Characters / features	Maharashtra, Madhya Pradesh, Gujrat, W.Bengal, East Uttar Pradesh,	
	Orissa and Bihar.	



Chickpea-Phule G 12

	Release year	1989
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Minimum temperature 10-15°C, Maximum temperature 25 to 30°C Rainfall 750 to 1000 mm Humidity 21-41 %
	Optimum sowing period for chickpea:	
Sowing Time /	Rainfed crop: 20 th Sept to 10 Oct Irrigated crop: 20 th Oct to 10 Nov Duration: 110-115 Days	
Planting period		
Seed Rate (Per acre)	Seed rate: 30 kg acre ⁻¹	
Crop duration	110-115 Days	
Productivity	Rainfed: Trial yield: 12 – 13 q ha ⁻¹ , Average yield: 10.00 q ha ⁻¹ Irrigated: Trial yield: 28 – 30 q ha ⁻¹ , Average yield: 22.00 q ha ⁻¹	
Characters / features	Attractive yellowish brown medium size seeds, Suitable for rainfed and irrigated conditions, Released for Maharashtra.	

Chickpea-Vijay

	Release year	1993
THE THE PARTY OF T	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
दिजय इत्परा	Climate	Minimum temperature 10-15°C, Maximum temperature 25 to 30°C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time /	Optimum sowing period for chickpea: Rainfed crop: 20 th Sept to 10 Oct Irrigated crop: 20 th Oct to 10 Nov	
Planting period		
	Duration : 105-110	Days
Seed Rate (Per acre)	Seed rate: 30 kg acre ⁻¹	
Crop duration	105-110 Days	
	Rainfed: Trial yield: 14-15 q ha ⁻¹ , Average yield: 14.00 q ha ⁻¹	
Productivity	Irrigated: Trial yield: 35-40 q ha ⁻¹ , Average yield: 23.00 q ha ⁻¹	
	Late sown: Trial y	ield: 16-18 q ha ⁻¹ , Average yield: 16.00 q ha ⁻¹
Characters / features	rainfed, irrigated	al, wilt resistant, drought tolerant, Suitable for and late sown conditions, Released for
	Manarashtra, Madh	ya Pradesh and Gujarat.



Chickpea-Vishal

1 to 1	Release year	1995
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
विशाल हरमप	Climate	Minimum temperature 10-15°C, Maximum temperature 25 to 30°C Rainfall 750 to 1000 mm Humidity 21-41 %
	Optimum sowing period for chickpea: Rainfed crop: 20 th Sept to 10 Oct	
Sowing Time /		
Planting period	Irrigated crop: 20 th	Oct to 10 Nov
	Duration: 110-115 Days	
Seed Rate (Per acre)	Seed rate: 35-40 kg acre ⁻¹	
Crop duration	110-115 Days	
Due de estectos	Rainfed: Trial yield: 14-15 q ha ⁻¹ , Average yield: 13.00 q ha ⁻¹	
Productivity	Irrigated: Trial yield: 30-35 q ha ⁻¹ , Average yield: 20.00 q ha ⁻¹	
Characters / features	~	h brown bold seeds, wilt resistant, Fetches good ble for irrigated conditions, Released for Western

Chickpea-Virat

	Release year	2001
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
<u>विराट हरमरा</u>	Climate	Minimum temperature 10-15°C, Maximum temperature 25 to 30°C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time /	Optimum sowing period for chickpea:	
Planting period	Irrigated crop: 20 th Oct to 10 Nov	
rianting period	Duration: 110-115 Days	
Seed Rate (Per acre)	Seed rate: 35-40 kg acre ⁻¹	
Crop duration	110-115 Days	
Productivity	Rainfed: Trial yield: $10 - 12$ q ha ⁻¹ , Average yield: 11.00 q ha ⁻¹ Irrigated: Trial yield: $30-32$ q ha ⁻¹ , Average yield: 19.00 q ha ⁻¹	
Characters / features	Extra bold seeded kabuli variety, Wilt resistant, Released for Maharashtra.	



Chickpea-Vihar

and the state of t	Release year	2002
विहार हरफरा -	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Minimum temperature 10-15°C, Maximum temperature 25 to 30°C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time / Planting period	Optimum sowing period for chickpea: Irrigated crop: 20 th Oct to 10 Nov Duration: 90-95 Days (SZ: Karnataka, A.P, Orissa and Tamilnadu)	
Seed Rate (Per acre)	Seed rate: 35-40 kg acre ⁻¹	
Crop duration	90-95 Days (SZ : Karnataka, A.P, Orissa and Tamilnadu)	
Productivity	Irrigated: Trial yield: 30-32 q ha ⁻¹ , Average yield: 18.00 q ha ⁻¹	
Characters / features	Extra bold seeded kabuli variety, Wilt resistant, Released for Karnataka, Andhra Pradesh, Orissa and Tamilnadu.	

Chickpea-Rajas

	Release year	2005
W.	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
ग्रवस हम्पर्	Climate	Minimum temperature 10-15°C, Maximum temperature 25 to 30°C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time /	Optimum sowing period for chickpea:	
Sowing Time /	Late sown irrigated crop: First week of December	
Planting period	Duration: 135-140	
Seed Rate (Per acre)	Seed rate: 35-40 kg acre ⁻¹	
Crop duration	135-140 Days in NWPZ	
Productivity	Late sown: Trial Yield: 20-22 q ha ⁻¹ , Average yield: 18.00 q ha ⁻¹	
Characters / features	conditions of Nor	oold seeds, Wilt resistant, Suitable for late sown th West Plain Zone. Released for Rajasthan, ttaranchal, New Delhi, and Jammu.



Chickpea-Digvijay

	Release year	2006
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
दिविज्ञय हरमा	Climate	Minimum temperature 10-15°C, Maximum temperature 25 to 30°C Rainfall 750 to 1000 mm Humidity 21-41 %
	Optimum sowing period for chickpea: Rainfed crop: 20 th Sept to 10 Oct Irrigated crop: 20 th Oct to 10 Nov Duration: 105-110 Days	
Sowing Time /		
Planting period		
Seed Rate (Per acre)	Seed rate: 35-40 kg acre ⁻¹	
Crop duration	105-110 Days	
	Rainfed: Trial yield: 14-15 q ha ⁻¹ , Average yield: 14.00 q ha	
Productivity	Irrigated: Trial yield: 35-40 q ha ⁻¹ , Average yield: 23.00 q ha ⁻¹	
	Late sown: Trial yield: 20-22 q ha ⁻¹ , Average yield: 21.00	
C1/	High yield notential hold seeds wilt resistant Suitable for	
Characters / features	irrigated and late so	wn conditions, Released for Maharashtra

Chickpea-Kripa

	Release year	2009
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
कृषा हरमा	Climate	Minimum temperature 10-15°C, Maximum temperature 25 to 30°C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time / Planting period	Optimum sowing period for chickpea: Irrigated crop: 20 th Oct to 10 Nov Duration: 105-110 Days	
Seed Rate (Per acre)	Seed rate: 45-50 kg acre ⁻¹	
Crop duration	105-110 Days	
Productivity	Irrigated: Trial Yield: 30-32 q ha ⁻¹ , Average yield: 18.00 q ha ⁻¹	
Characters / features	Extra-large seeded kabuli variety (59.4 g/100 seeds), milky white seed colour, Fetches premium market price, Released for MS, MP and Karnataka	



Chickpea-Himali

The state of the s	Release year	2012
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
Secretary of the second	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
W Tr	Climate	Minimum temperature 10-15°C, Maximum temperature 25 to 30°C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time /	Optimum sowing period for chickpea :Irrigated crop : 20 th Oct to 10	
Planting period	Nov Duration: 190-195 Days (NHZ)	
Seed Rate (Per acre)	Seed rate: 35-40 kg acre ⁻¹	
Crop duration	190-195 (NHZ)	
Productivity	Irrigated: Average	yield: 12.00 q ha ⁻¹ Potential yield- 44.00 q ha ⁻¹
Characters / features	Released for NHZ (N	abuli variety, 37.7 g. per 100 seeds, Wilt resistant, Forth Hill Zone comprising the states of Jammu and Pradesh, Uttarakhand and NEH region).

Chickpea-Phule Vikram

58883 Miles	Release year	2016
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Minimum temperature 10-15°C, Maximum temperature 25 to 30°C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time / Planting period	Optimum sowing period for chickpea: Rainfed crop: 20 th Sept to 10 Oct Irrigated crop: 20 th Oct to 10 Nov Late sown: First week of December Duration: 105-110 Days	
Seed Rate (Per acre)	Seed rate: 30 kg acre ⁻¹	
Crop duration	105-110 Days	
Productivity	Rainfed: Potential Yield: 16-18 q ha ⁻¹ , Average yield: 16.00 q ha ⁻¹ Irrigated: Potential Yield: 35-42 q ha ⁻¹ , Average yield: 22.00 q ha ⁻¹ Late sown: Potential Yield: 20-22 q ha ⁻¹ , Average yield: 21.00 q ha ⁻¹	
Characters / features	size yellowish brown	ence suitable for mechanical harvesting, medium seeds, Wilt resistant, suitable for rainfed, irrigated ons, Released for Maharashtra.



Chickpea-Phule Vikrant (Phule G 0405)

Walter Street	Release year	2017
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
W. A.	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Minimum temperature 10-15°C, Maximum temperature 25 to 30°C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time /	Optimum sowing period for chickpea:	
Planting period	Irrigated crop: 20 th Oct to 10 Nov	
Training period	Duration: 105-110 Days	
Seed Rate (Per acre)	Seed rate: 30 kg acre ⁻¹	
Crop duration	105-110 Days	
Productivity	Irrigated: Trial Yield: 35-42 q ha ⁻¹ , Average yield: 20.00 q ha ⁻¹	
Characters / features	Yellowish brown medium size seeds, Wilt resistant, suitable for irrigated condition, Released for WCZ (MS, Gujarat, West MP and South Rajasthan)	

Chickpea-Phule Vishwaraj

	Release year	2020
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Minimum temperature 10-15°C, Maximum temperature 25 to 30°C Rainfall 750 to 1000 mm Humidity 21-41 %
	Optimum sowing period for chickpea: Rainfed crop: 20 th Sept to 10 Oct Irrigated crop: 20 th Oct to 10 Nov	
Sowing Time /		
Planting period		
	Duration: 105-110 Days	
Seed Rate (Per acre)	Seed rate: 30 kg acre ⁻¹	
Crop duration	95-105 Days	
Productivity	Average yield: 15.63 q ha ⁻¹ (rainfed condition)	
Characters / features		fed condition Resistant to <i>Fusarium</i> wilt. nedium size seeds (22-23 g/100 seeds).



Pigeon pea – T-Vishakha 1

	Release year	1982
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	21 to 25 °C to 30 to 35 °C, Rainfall 750 to 1000 mm Humidity 60-80 %
Sowing Time / Planting period	2 nd fortnight of June to First week of July	
Seed Rate (Per acre)	Seed rate: 1.800 - 2.000 kg acre ⁻¹	
Crop duration	135-140 Days	
Productivity	Irrigated: Average yield: 10-12 q ha ⁻¹	
Characters / features	Early maturity, Suitable for sole and multiple cropping, red colour seeds, Released for Maharashtra.	

Pigeon pea-Vipula

	Release year	2006
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
विवृता तूर	Climate	21 to 25 °C to 30 to 35 °C, Rainfall 750 to 1000 mm Humidity 60-80 %
Sowing Time / Planting period	2 nd fortnight of June to First week of July Duration : 160-170 Days	
Seed Rate (Per acre)	Seed rate: 1.800 - 2.000 kg acre ⁻¹	
Crop duration	160-170 Days	
Productivity	Trial Yield: 28-30 q ha ⁻¹ , Average yield: 16.00 q ha ⁻¹	
Characters / features	Resistant to <i>Fusarium</i> wilt, moderately resistant to sterility mosaic disease, Red colour medium seeds, Released for Maharashtra.	



Pigeon pea-Rajeshwari

	Release year	2012
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
这个人	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Temperature range: 21 to 25 °C to 30 to 35 °C, Rainfall 750 to 1000 mm Humidity 60-80 %
Sowing Time /	2 nd fortnight of June to First week of July	
Planting period	Duration: 135-150 Days	
Seed Rate (Per acre)	Seed rate: 1.800 - 2.000 kg acre ⁻¹	
Crop duration	135-150 Days	
Productivity	Trial Yield: 28-30 q ha ⁻¹ , Average yield: 22.00 q ha ⁻¹	
Characters / features	Early maturity, dark brown colour, medium bold seeds (10.5 to 11.0 g/100 seeds), Moderately resistant to wilt and sterility mosaic diseases, Released for Maharashtra, MP and Gujarat	

Pigeon pea- Phule Trupti

ARRIVA	Release year	2022
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Temperature range: 21 to 25 °C to 30 to 35 °C, Rainfall 750 to 1000 mm Humidity 60-80 %
Sowing Time / Planting period	2 nd fortnight of June to First week of July	
Seed Rate (Per acre)	Seed rate: 1.800 - 2.000 kg acre ⁻¹	
Crop duration	167-169 Days	
Productivity	Potential Yield: 32.03 q ha ⁻¹ , Average yield: 22.66 q ha ⁻¹	
Chamatana / factoria	Recommended for timely sown condition in <i>kharif</i> season, irrigated and rainfed situation.	
Characters / features	Light brown colour, bold seeds (10.81 g/100 seeds), Moderately resistant to wilt and sterility mosaic diseases, released for Maharashtra, Madhya pradesh, Gujarat and Chattisgard	

Pigeon pea- Phule Kaveri

	Release year	2022
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Temperature range: 21 to 25 °C to 30 to 35 °C, Rainfall 750 to 1000 mm Humidity 60-80 %
Sowing Time / Planting period	2 nd fortnight of June to First week of July	
Seed Rate (Per acre)	Seed rate: 1.800 - 2.000 kg acre ⁻¹	
Crop duration	164-166 Days	
Productivity	Potential Yield: 24.41 q ha ⁻¹ , Average yield: 15.91 q ha ⁻¹	
Characters / features	Recommended for timely sown condition in <i>kharif</i> season, irrigated and rainfed situation. Light brown colour, bold seeds (11.52 g/100 seeds), Moderately resistant to wilt and sterility mosaic diseases, released for	
	Tamilnadu, Karnataka, Andhra Pradesh and Telangana	

Pigeonpea - Phule Pallavi (PT-12-19-2)

THE RESERVE WITH THE PROPERTY OF THE PROPERTY		
	Release year	2024
	Name of Institute / University	Pulses Improvement Project, MPKV, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
THE STATE OF THE S	Climate	Temperature range: 21 to 25 °C to 30 to 35 °C, Rainfall 750 to 1000 mm Humidity 60-80 %
Sowing Time / Planting period	Second fortnight of June to first week of July	
Seed Rate	5.00 kg/ha for 180 x 30 cm spacing.	
Seed Rate	Line sowing by see	d drill and 8-10 kg/ha for 90 x 30 cm sowing.
Crop duration	Mid early maturity (157-159 days)	
Productivity	Average yield- 21.45 q ha ⁻¹ , Yield potential- 37.11 q ha ⁻¹	
	Light brown color and bold grains (11.00g /100 seeds), Moderately	
Characters / features	resistant to wilt and sterility mosaic diseases and showing less	
	incidence of pod borer and pod fly	
	Recommended for central zone (Maharashtra, Gujarat, Madhya	
Remark	Pradesh, Rajasthan and Chhattisgarh) of India	



Horsegram - Seena

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Release year	1984
	Name of Institute / University	AICRP on DLA, Solapur, MPKV, Rahuri
	Soil type	Light soil
等 基 等	Climate	Optimum Temperature:22.0 to 32.0 °C
Sowing Time / Planting period	15 June to 15 July	
Seed Rate (Per acre)	6.0 kg acre ⁻¹	
Crop duration	115-120 days	
Productivity	6-8 q ha ⁻¹ (2.5-3.0 q acre ⁻¹)	
Characters / features	Grain colour brick red	
Remarks	Recommended for Maharashtra state	

Horsegram - Man

	Release year	1986
(part)	Name of Institute / University	AICRP on DLA, Solapur, MPKV, Rahuri
事使 福州	Soil type	Light soil
	Climate	Optimum Temperature:22.0 to 32.0 °C
Sowing Time / Planting period	15 June to 15 July	
Seed Rate (Per acre)	6.0 kg acre ⁻¹	
Crop duration	100-105 days	
Productivity	6-7 q ha ⁻¹ (2.5-3.0 q acre ⁻¹)	
Characters / features	Grain colour -Ash, high crude protein-18.37%, Iron 36.23 mg/100g, Erect type	
Remarks	Recommended for Maharashtra state	



Horsegram - Phule Sakas

	Release year	2016
	Name of Institute / University	AICRP on DLA, Solapur, MPKV, Rahuri
	Soil type	Light soil
	Climate	Optimum Temperature:22.0 to 32.0 °C
Sowing Time / Planting period	15 June to 15 July	
Seed Rate (Per acre)	6.0 kg acre ⁻¹	
Crop duration	90-95 days	
Productivity	8-10 q ha ⁻¹ (3.0-4.0 q acre ⁻¹)	
Characters / features	Grain colour -brown, Early maturity, high crude protein-22.09%, Iron37.86mg/100g	
Remarks	Recommended for Maharashtra state	

Mothbean - MBS-27

	Release year	1989
	Name of Institute / University	AICRP on DLA, Solapur, MPKV, Rahuri
	Soil type	Light soil
	Climate	Optimum Temperature:22.0 to 340 °C
Sowing Time / Planting period	15 June to 15 July	
Seed Rate (Per acre)	6.0 kg acre ⁻¹	
Crop duration	120-130 days	
Productivity	6-7 q ha ⁻¹ (2.5-3.0 q acre ⁻¹)	
Characters / features	Grain colour -brown	
Remarks	Recommended for	Maharashtra state



Moth bean - Phule Sarita (MBS-803)

	Release year	2020
	Name of Institute / University	ZARS, Solapur
	Soil type	Light to Medium Soil
	Climate	Suitable for <i>Kharif</i>
Sowing Time / Planting period	First fort night of June to 7 th July.	
Seed Rate	6-7 kg ha ⁻¹	
Crop duration	118 days	
Productivity	6 q ha ⁻¹ (average)	
Characters / features	Early maturity, Moderately resistant to yellow vein mosaic	

Cowpea – Phule Pandhari (PCP 9708)

	Release year	2007
	Name of Institute / University	Mahatma Phule Krishi Vidyapeeth Rahuri
	Soil type	Medium to Deep soils Multipliable cropping Systems (Rain fed /Irrigated conditions)
PCP- 9708	Climate	Humid and Dry land conditions
Sowing Time / Planting period	Through out the year, K:1 st Forth night of June to 2 nd fort night of July Planting period: K: June to July and Summer: Feb to March	
Seed Rate (Per acre)	10-12 kg	
Crop duration	65-72 days	
Productivity	15-25 q ha ⁻¹	
Characters / features	High yielding, Short duration Erect growth habit, Brown shiny grains, suitable for multiple cropping system, Pale green leaf &stem colour, non-Lodging, Moderately resistant to Pest and Diseases	



Cowpea – Phule Vithai (PCP 05040)

	Release year	2015
	Name of Institute / University	Mahatma Phule Krishi Vidyapeeth Rahuri
	Soil type	Medium to Deep soils Multipliable cropping Systems (Rain fed /Irrigated conditions)
	Climate	Humid and Dry land conditions
Sowing Time / Planting period	Throughout the year, K:1st Forth night of June to 2nd fort night of July Planting period: K: June to July and Summer: Feb to March	
Seed Rate (Per acre)	10-12 kg acre ⁻¹	
Crop duration	65-72 days	
Productivity	15-25 q ha ⁻¹	
Characters / features	High yielding Indeterminate, off white kidney shape seeds, Early, Erect growth habit, Suitable for multiple of Western Maharashtra cropping system, Dark green and medium size leaflets, Dark purple flower colour non Lodging, Moderately resistant to Pest and Diseases	

Dhulo Dulemini (DCD 0206 1)

Cowpea – Phule Rukmini (PCP 0306-1)		
	Release year	2016 (Central release South zone of India) (CVRC)
	Name of Institute / University	Mahatma Phule Krishi Vidyapeeth Rahuri
	Soil type	Medium to Deep soils Multipliable cropping Systems (Rain fed /Irrigated conditions)
	Climate	Dry land conditions
Sowing Time /	Through out the year,	
<u> </u>	K:1 st Forth night of June to 2 nd fort night of July	
Planting period	Planting period: K:	June to July and Summer: Feb to March
Seed Rate (Per acre)	10-12 kg acre ⁻¹	
Crop duration	75-77 days	
Productivity	10-15 q ha ⁻¹	
Characters / features	High yielding Indeterminate, Pearly white kidney shape seeds, Early, Erect growth habit, Suitable for multiple cropping system of south zone of India, Dark green and medium size leaflets, non-Lodging, Moderately resistant to Pest and Diseases	

Cowpea – Phule Sonali (PCP-1123)

1 dele	Release year	2020
	Name of Institute /	Pulse, Oilseed Crops Research & Training
	University	Centre, Pandharpur, Dist. Solapur
	Soil type	Medium to Deep soils Multipliable cropping Systems (Rain fed /Irrigated conditions)
	Climate	Dry land conditions
Sowing Time /	Kharif- June to July	
Planting period	Summer- February to March	
Seed Rate (Per acre)	10-12 kg acre ⁻¹	
Crop duration	75-77 days	
Productivity	14 q ha ⁻¹	
Characters / features	Determinate and uniform maturing, Dwarf, Erect Compact,	

Urdbean – TPU-4

对。这种人的一样 是	Release year	1992
TPU4	Name of Institute / University	Name of Institute/University: BARC, Mumbai and Pulses Improvement Project, MPKV Rahuri
	Soil type	Medium to Black Cotton Soil
	Climate	Suitable for Kharif planting in all the districts of Maharashtra, Madhya Pradesh and Gujrat.
Sowing Time / Planting period	First fort night of June to 7 th July.	
Seed Rate (Per acre)	6-7 kg acre ⁻¹	
Crop duration	70-75 days	
Productivity	10-12 q ha ⁻¹ (Potential), 9-10 q ha ⁻¹ (Average)	
Characters / features	Tolerant to Powdery mildew and Yellow mosaic virus, Growth habit: Tall, semi spreading, Profuse branching, broad leaves, bold seed size.	



Urdbean – Phule Vasu

4	Release year	2021
	Name of Institute / University	MPKV Rahuri
1	Soil type	Medium to Deep
Phule Vasu (PU-609-43)	Climate	Suitable for <i>Kharif</i> season
Sowing Time / Planting period	First fort night of June to 7 th July.	
Seed Rate (Per acre)	6-7 kg acre ⁻¹	
Crop duration	73 days	
Productivity	8.59 q ha ⁻¹	
Characters / features	Tolerant to Powdery mildew and Yellow mosaic virus, early maturity, bold seeded, test weight- 4.87 g/ 100 seeds.	
Remark	Recommended for cultivation in Maharashtra in rainfed conditions	

Urdbean – Phule Rajan

Specific essential characteristics used for establishing distinctness	Release year	2022
	Name of Institute / University	MPKV Rahuri
PU-819-18 /	Soil type	Medium to Deep
Single Plant Fruit & Calculus of Grain	Climate	Suitable for <i>Kharif</i> season
Sowing Time / Planting period	First fort night of June to 7 th July.	
Seed Rate (Per acre)	6-7 kg acre ⁻¹	
Crop duration	77 days	
Productivity	8.32 q ha ⁻¹ (potential yield- 18.30 q ha ⁻¹)	
Characters / features	Moderately tolerant to Powdery mildew and Yellow mosaic virus, test weight- 3.92 g/ 100 seeds, bright, bold, black seed	
Remark	Recommended for cultivation in Maharashtra	



Mungbean - Phule M-2

MANUAL PROPERTY.	Release year	1989
	Name of Institute / University	Mahatma Phule Krishi Vidyapeeth, Rahuri
	Soil type	Medium black
	Climate	Kharif & Summer
Sowing Time / Planting period	Second week of June	
Seed Rate	15-20 kg acre ⁻¹	
Crop duration	60-65 days	
Productivity	8-10 q ha ⁻¹	
Characters / features	Medium size, green colour seeds, (100 seed wt: 3.6-3.8 g), suitable for kharif and summer season, released for W. Maharashtra	

Mungbean - Vaibhav

A STATE OF THE STA	Release year	2001
	Name of Institute / University	Pulses Improvement Project, MPKV Rahuri
Veibhav	Soil type	Medium to Black Cotton Soil
	Climate	Suitable for Kharif planting in all the districts of Maharashtra.
Sowing Time / Planting period	First fort night of June to 7 th July.	
Seed Rate	15-20 kg ha ⁻¹	
Crop duration	69-74	
Productivity	12-14 q ha ⁻¹ (Potential), 10-12 q ha ⁻¹ (Average)	
Characters / features	Resistant to Powdery mildew, Growth habit: Tall, semi spreading, Profuse branching, green stem with, light pigmentation, broad leaves, with brown midrib, long pods with bold seed size.	

Mungbean - Phule Chetak (PM-707-5)

Shekin !	Release year	2020
STEWN WAR	Name of Institute / University	Oil Seed Research Station, Jalgaon
Mungbean pM-707-5	Soil type	Medium to Deep
19 A. C.	Climate	Suitable for Kharif season
Sowing Time / Planting period	First fort night of June to 7 th July.	
Seed Rate	12-15 kg ha ⁻¹	
Crop duration	65- 69 days	
Productivity	Average Yield- 10 q ha ⁻¹ , Potential yield- 19 q ha ⁻¹	
Characters / features	Bold seeded (average 100 seed weight 4.77g), moderately resistance to major diseases (powdery mildew, mungbean yellow mosaic virus) under field conditions.	

Mungbean - Phule Suvarn (PM-702-1)

The same of the sa	Release year	2022
MAN SAN	Name of Institute / University	Oil Seed Research Station, Jalgaon
	Soil type	Medium to Deep
	Climate	Suitable for <i>Kharif</i> season
Sowing Time / Planting period	First fort night of June to 7 th July.	
Seed Rate	12-15 kg ha ⁻¹	
Crop duration	69 days	
Productivity	Average Yield- 8.85 q ha ⁻¹ , Potential yield- 18.70 q ha ⁻¹	
Characters / features	Suitable for late sown condition, medium seeded (average 100 seed weight 3.77g), moderately resistance to major diseases (powdery mildew, mungbean yellow mosaic virus) under field conditions.	



Rajmah - Mutha (HPR-35)

	Release year	1994	
	Name of Institute / University	NARP, Ganeshkhind, Pune	
	Soil type	Medium deep soil	
	Climate	Cold and dry climate	
Sowing Time /	Kharif: 15 th June to 15 th July		
Planting period	Rabi: 15 th Oct. to 15 th Nov		
Seed Rate	90 kg ha ⁻¹		
Crop duration	72-74 days		
Productivity	12-13 q ha ⁻¹		
Characters / features	Purple with black streak, Bold seed (35.00g./100g.seed), Protein content-23.33%, Carbohydrate content- 63.73%, Moderately resistant to anthracnose and CBMV, Resistance to water lodging condition		

Rajmah - Varun

	Release year	2001	
	Name of Institute / University	NARP, Ganeshkhind, Pune	
and the second second	Soil type	Well drained, Medium to deep	
VARUN	Climate	Cold and Dry climate	
Sowing Time /	Kharif: 15 th June to 15 th July		
Planting period	Rabi: 15 th Oct. to 15 th November		
Seed Rate (Per acre)			
Crop duration	65-70 days		
Productivity	15-17 q ha ⁻¹		
Characters / features	Dough white with purple streak attractive seed coat color, Bold seed (34.00 g./100g.seed), Protein content-23.60%, Carbohydrate content- 61.64%, Moderately resistant to Anthracnose and CBMV, Flower color: pinkish white		



Rajmah - Phule Rajmah (GRB-902)

	Release year	2017	
	Name of Institute / University	NARP, Ganeshkhind, Pune	
	Soil type	Well drained, Medium to deep	
	Climate	Cold and Dry climate	
Sowing Time /	Kharif: 15 th June to 15 th July		
Planting period	Rabi: 15 th Oct. to 15 th November		
Seed Rate (Per ha)	90-100 kg ha ⁻¹		
Crop duration	76-80 days		
Productivity	17-19 q ha ⁻¹		
Characters / features	Dough white with pinkish streak attractive seed coat color, Bold seed (36.50g./100g.seed), Protein content-23.38%, Carbohydrate content- 63.93%, Moderately resistant to Fusarium wilt and CBMV Moderately resistance to pod borerand white fly, Flower color: Pinkish white		

Rajmah – Phule Viraj (GRB-701)

ASU.	Release year	2022	
	Name of Institute / University	NARP, Ganeshkhind, Pune	
	Soil type	Well drained, Medium to deep	
	Climate	Cold and Dry climate	
Sowing Time /	<i>Kharif</i> : 15 th June to 15 th July		
Planting period	Rabi: 15 th Oct. to 15 th November		
Seed Rate (Per acre)	90 kg ha ⁻¹		
Crop duration	80-82 days		
Productivity	Average Productivity-16-17 q ha ⁻¹ , Potential Yield- 21.45 q ha ⁻¹		
Characters / features	Dough white with purple streak attractive seed coat color, Bold seed (35.80 g./ 100g seed), Protein content- 24.26 %, Carbohydrate content- 64.72 %, tolerant to <i>Fusarium wilt</i> and BCMV		
Remark	Recommended for <i>Kharif</i> season in Western Maharashtra		