




## Mahatma Phule Krishi Vidyapeeth, Rahuri

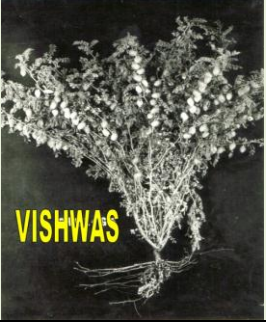
### Information about Crop wise Improved / Hybrid Varieties Developed by University

## 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 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time / Planting period	Optimum sowing period for chickpea : Rainfed crop : 20 <sup>th</sup> Sept to 10 Oct Irrigated crop : 20 <sup>th</sup> Oct to 10 Nov Duration : 105-110 Days	
Seed Rate (Per acre)	Seed rate : 30 kg acre <sup>-1</sup>	
Crop duration	105-110 Days	
Productivity	Rainfed: Trial yield: 10-11 q ha <sup>-1</sup> , Average yield: 10.00 q ha <sup>-1</sup> Irrigated: Trial yield: 22-24 q ha <sup>-1</sup> , Average yield: 15.00 q ha <sup>-1</sup>	
Characters / features	Medium size seeds, less damage by bruchid beetles in storage, Suitable for rainfed condition, Released for Western Maharashtra.	

### Chickpea-Vishwas


	Release year	1985
	Name of Institute / University	Mahatma Phule Krishi Vidyapeeth, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Minimum temperature 10-15 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time / Planting period	Optimum sowing period for chickpea : Rainfed crop : 20 <sup>th</sup> Sept to 10 Oct Irrigated crop : 20 <sup>th</sup> Oct to 10 Nov Duration : 115-120 Days	
Seed Rate (Per acre)	35-40 kg acre <sup>-1</sup>	
Crop duration	115-120 Days	
Productivity	Rainfed : Trial yield: 10-11 q ha <sup>-1</sup> , Average yield: 10.00 q ha <sup>-1</sup> Irrigated: Trial yield: 28-30 q ha <sup>-1</sup> , Average yield: 24.00 q ha <sup>-1</sup>	
Characters / features	Bold seeds, Responsive to irrigation and fertilizer, Released for Maharashtra, Madhya Pradesh, Gujrat, W.Bengal, East Uttar Pradesh, Orissa and Bihar.	




## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Chickpea-Phule G 12

	Release year	1989
	Name of Institute / University	Mahatma Phule Krishi Vidyapeeth, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Minimum temperature 10-15 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time / Planting period	Optimum sowing period for chickpea : Rainfed crop : 20 <sup>th</sup> Sept to 10 Oct Irrigated crop : 20 <sup>th</sup> Oct to 10 Nov Duration : 110-115 Days	
Seed Rate (Per acre)	Seed rate : 30 kg acre <sup>-1</sup>	
Crop duration	110-115 Days	
Productivity	Rainfed: Trial yield : 12 – 13 q ha <sup>-1</sup> , Average yield: 10.00 q ha <sup>-1</sup> Irrigated: Trial yield : 28 – 30 q ha <sup>-1</sup> , Average yield :22.00 q ha <sup>-1</sup>	
Characters / features	Attractive yellowish brown medium size seeds, Suitable for rainfed and irrigated conditions, Released for Maharashtra.	

#### Chickpea-Vijay

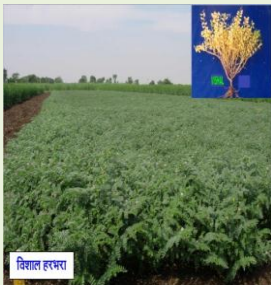
	Release year	1993
	Name of Institute / University	Mahatma Phule Krishi Vidyapeeth, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Minimum temperature 10-15 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time / Planting period	Optimum sowing period for chickpea : Rainfed crop : 20 <sup>th</sup> Sept to 10 Oct Irrigated crop : 20 <sup>th</sup> Oct to 10 Nov Duration : 105-110 Days	
Seed Rate (Per acre)	Seed rate : 30 kg acre <sup>-1</sup>	
Crop duration	105-110 Days	
Productivity	Rainfed: Trial yield: 14-15 q ha <sup>-1</sup> , Average yield: 14.00 q ha <sup>-1</sup> Irrigated: Trial yield: 35-40 q ha <sup>-1</sup> , Average yield: 23.00 q ha <sup>-1</sup> Late sown: Trial yield : 16-18 q ha <sup>-1</sup> , Average yield : 16.00 q ha <sup>-1</sup>	
Characters / features	High yield potential, wilt resistant, drought tolerant, Suitable for rainfed, irrigated and late sown conditions, Released for Maharashtra, Madhya Pradesh and Gujarat.	




## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Chickpea-Vishal

	<b>Release year</b>	1995
	<b>Name of Institute / University</b>	Mahatma Phule Krishi Vidyapeeth, Rahuri
	<b>Soil type</b>	Well drained, medium to deep soils having 45 to 60 cm depth.
	<b>Climate</b>	Minimum temperature 10-15 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
<b>Sowing Time / Planting period</b>	Optimum sowing period for chickpea : Rainfed crop : 20 <sup>th</sup> Sept to 10 Oct Irrigated crop : 20 <sup>th</sup> Oct to 10 Nov Duration : 110-115 Days	
<b>Seed Rate (Per acre)</b>	Seed rate : 35-40 kg acre <sup>-1</sup>	
<b>Crop duration</b>	110-115 Days	
<b>Productivity</b>	Rainfed: Trial yield: 14-15 q ha <sup>-1</sup> , Average yield: 13.00 q ha <sup>-1</sup> Irrigated: Trial yield: 30-35 q ha <sup>-1</sup> , Average yield: 20.00 q ha <sup>-1</sup>	
<b>Characters / features</b>	Attractive yellowish brown bold seeds, wilt resistant, Fetches good market price, suitable for irrigated conditions, Released for Western Maharashtra.	

#### Chickpea-Virat


	<b>Release year</b>	2001
	<b>Name of Institute / University</b>	Mahatma Phule Krishi Vidyapeeth, Rahuri
	<b>Soil type</b>	Well drained, medium to deep soils having 45 to 60 cm depth.
	<b>Climate</b>	Minimum temperature 10-15 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
<b>Sowing Time / Planting period</b>	Optimum sowing period for chickpea : Irrigated crop : 20 <sup>th</sup> Oct to 10 Nov Duration : 110-115 Days	
<b>Seed Rate (Per acre)</b>	Seed rate : 35-40 kg acre <sup>-1</sup>	
<b>Crop duration</b>	110-115 Days	
<b>Productivity</b>	Rainfed: Trial yield: 10 – 12 q ha <sup>-1</sup> , Average yield: 11.00 q ha <sup>-1</sup> Irrigated: Trial yield: 30-32 q ha <sup>-1</sup> , Average yield: 19.00 q ha <sup>-1</sup>	
<b>Characters / features</b>	Extra bold seeded kabuli variety, Wilt resistant, Released for Maharashtra.	




## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Chickpea-Vihar

	Release year	2002
	Name of Institute / University	Mahatma Phule Krishi Vidyapeeth, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Minimum temperature 10-15 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time / Planting period	Optimum sowing period for chickpea : Irrigated crop : 20 <sup>th</sup> 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 <sup>-1</sup>	
Crop duration	90-95 Days (SZ : Karnataka, A.P, Orissa and Tamilnadu)	
Productivity	Irrigated: Trial yield: 30-32 q ha <sup>-1</sup> , Average yield: 18.00 q ha <sup>-1</sup>	
Characters / features	Extra bold seeded kabuli variety, Wilt resistant, Released for Karnataka, Andhra Pradesh, Orissa and Tamilnadu.	

#### Chickpea-Rajas

	Release year	2005
	Name of Institute / University	Mahatma Phule Krishi Vidyapeeth, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Minimum temperature 10-15 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time / Planting period	Optimum sowing period for chickpea : Late sown irrigated crop : First week of December Duration : 135-140 Days in NWPZ	
Seed Rate (Per acre)	Seed rate : 35-40 kg acre <sup>-1</sup>	
Crop duration	135-140 Days in NWPZ	
Productivity	Late sown : Trial Yield : 20-22 q ha <sup>-1</sup> , Average yield : 18.00 q ha <sup>-1</sup>	
Characters / features	Yellowish brown bold seeds, Wilt resistant, Suitable for late sown conditions of North West Plain Zone. Released for Rajasthan, Punjab, Haryana Uttaranchal, New Delhi, and Jammu.	







## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Chickpea-Digvijay

	<b>Release year</b>	2006
	<b>Name of Institute / University</b>	Mahatma Phule Krishi Vidyapeeth, Rahuri
	<b>Soil type</b>	Well drained, medium to deep soils having 45 to 60 cm depth.
	<b>Climate</b>	Minimum temperature 10-15 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
<b>Sowing Time / Planting period</b>	Optimum sowing period for chickpea : Rainfed crop : 20 <sup>th</sup> Sept to 10 Oct Irrigated crop : 20 <sup>th</sup> Oct to 10 Nov Duration : 105-110 Days	
<b>Seed Rate (Per acre)</b>	Seed rate : 35-40 kg acre <sup>-1</sup>	
<b>Crop duration</b>	105-110 Days	
<b>Productivity</b>	Rainfed: Trial yield: 14-15 q ha <sup>-1</sup> , Average yield: 14.00 q ha <sup>-1</sup> Irrigated: Trial yield: 35-40 q ha <sup>-1</sup> , Average yield: 23.00 q ha <sup>-1</sup> Late sown: Trial yield: 20-22 q ha <sup>-1</sup> , Average yield: 21.00 q ha <sup>-1</sup>	
<b>Characters / features</b>	High yield potential, bold seeds, wilt resistant, Suitable for rainfed, irrigated and late sown conditions, Released for Maharashtra	

#### Chickpea-Kripa


	<b>Release year</b>	2009
	<b>Name of Institute / University</b>	Mahatma Phule Krishi Vidyapeeth, Rahuri
	<b>Soil type</b>	Well drained, medium to deep soils having 45 to 60 cm depth.
	<b>Climate</b>	Minimum temperature 10-15 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
<b>Sowing Time / Planting period</b>	Optimum sowing period for chickpea : Irrigated crop : 20 <sup>th</sup> Oct to 10 Nov Duration : 105-110 Days	
<b>Seed Rate (Per acre)</b>	Seed rate : 45-50 kg acre <sup>-1</sup>	
<b>Crop duration</b>	105-110 Days	
<b>Productivity</b>	Irrigated : Trial Yield : 30-32 q ha <sup>-1</sup> , Average yield : 18.00 q ha <sup>-1</sup>	
<b>Characters / features</b>	Extra-large seeded kabuli variety (59.4 g/100 seeds), milky white seed colour, Fetches premium market price, Released for MS, MP and Karnataka	




## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Chickpea-Himali

	<b>Release year</b>	2012
	<b>Name of Institute / University</b>	Mahatma Phule Krishi Vidyapeeth, Rahuri
	<b>Soil type</b>	Well drained, medium to deep soils having 45 to 60 cm depth.
	<b>Climate</b>	Minimum temperature 10-15 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
<b>Sowing Time / Planting period</b>	Optimum sowing period for chickpea :Irrigated crop : 20 <sup>th</sup> Oct to 10 Nov Duration : 190-195 Days (NHZ)	
<b>Seed Rate (Per acre)</b>	Seed rate : 35-40 kg acre <sup>-1</sup>	
<b>Crop duration</b>	190-195 (NHZ)	
<b>Productivity</b>	Irrigated: Average yield : 12.00 q ha <sup>-1</sup> Potential yield- 44.00 q ha <sup>-1</sup>	
<b>Characters / features</b>	Extra bold seeded kabuli variety, 37.7 g. per 100 seeds, Wilt resistant, Released for NHZ (North Hill Zone comprising the states of Jammu and Kashmir, Himachal Pradesh, Uttarakhand and NEH region).	

#### Chickpea-Phule Vikram


	<b>Release year</b>	2016
	<b>Name of Institute / University</b>	Mahatma Phule Krishi Vidyapeeth, Rahuri
	<b>Soil type</b>	Well drained, medium to deep soils having 45 to 60 cm depth.
	<b>Climate</b>	Minimum temperature 10-15 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
<b>Sowing Time / Planting period</b>	Optimum sowing period for chickpea : Rainfed crop : 20 <sup>th</sup> Sept to 10 Oct Irrigated crop : 20 <sup>th</sup> Oct to 10 Nov Late sown : First week of December Duration : 105-110 Days	
<b>Seed Rate (Per acre)</b>	Seed rate : 30 kg acre <sup>-1</sup>	
<b>Crop duration</b>	105-110 Days	
<b>Productivity</b>	Rainfed : Potential Yield : 16-18 q ha <sup>-1</sup> , Average yield : 16.00 q ha <sup>-1</sup> Irrigated : Potential Yield : 35-42 q ha <sup>-1</sup> , Average yield : 22.00 q ha <sup>-1</sup> Late sown : Potential Yield : 20-22 q ha <sup>-1</sup> , Average yield : 21.00 q ha <sup>-1</sup>	
<b>Characters / features</b>	Tall growth habit hence suitable for mechanical harvesting, medium size yellowish brown seeds, Wilt resistant, suitable for rainfed, irrigated and late sown conditions, Released for Maharashtra.	




## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Chickpea-Phule Vikrant (Phule G 0405)

	Release year	2017
	Name of Institute / University	Mahatma Phule Krishi Vidyapeeth, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Minimum temperature 10-15 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time / Planting period	Optimum sowing period for chickpea : Irrigated crop : 20 <sup>th</sup> Oct to 10 Nov Duration : 105-110 Days	
Seed Rate (Per acre)	Seed rate : 30 kg acre <sup>-1</sup>	
Crop duration	105-110 Days	
Productivity	Irrigated : Trial Yield : 35-42 q ha <sup>-1</sup> , Average yield : 20.00 q ha <sup>-1</sup>	
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	Pulse Improvement Project, Mahatma Phule Krishi Vidyapeeth, Rahuri
	Soil type	Well drained, medium to deep soils having 45 to 60 cm depth.
	Climate	Minimum temperature 10-15 <sup>0</sup> C, Maximum temperature 25 to 30 <sup>0</sup> C Rainfall 750 to 1000 mm Humidity 21-41 %
Sowing Time / Planting period	Optimum sowing period for chickpea : Rainfed crop : 20 <sup>th</sup> Sept to 10 Oct Irrigated crop : 20 <sup>th</sup> Oct to 10 Nov Duration : 105-110 Days	
Seed Rate (Per acre)	Seed rate : 30 kg acre <sup>-1</sup>	
Crop duration	95-105 Days	
Productivity	Average yield : 15.63 q ha <sup>-1</sup> (rainfed condition)	
Characters / features	Suitable for rainfed condition Resistant to <i>Fusarium</i> wilt. Yellowish brown, medium size seeds (22-23 g/100 seeds).	



## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Pigeon pea – T-Vishakha 1



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

#### Pigeon pea-Vipula



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







## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Pigeon pea-Rajeshwari

	Release year	2012
	Name of Institute / University	Mahatma Phule Krishi Vidyapeeth, 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	Optimum sowing period for pigeonpea : 2 <sup>nd</sup> fortnight of June to First week of July Duration : 135-150 Days	
Seed Rate (Per acre)	Seed rate : 1.800 - 2.000 kg acre <sup>-1</sup>	
Crop duration	135-150 Days	
Productivity	Trial Yield : 28-30 q ha <sup>-1</sup> , Average yield : 22.00 q ha <sup>-1</sup>	
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

	Release year	2022
	Name of Institute / University	Mahatma Phule Krishi Vidyapeeth, 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	Optimum sowing period for pigeonpea : 2 <sup>nd</sup> fortnight of June to First week of July	
Seed Rate (Per acre)	Seed rate : 1.800 - 2.000 kg acre <sup>-1</sup>	
Crop duration	167-169 Days	
Productivity	Potential Yield : 32.03 q ha <sup>-1</sup> , Average yield : 22.66 q ha <sup>-1</sup>	
Characters / features	Recommended for timely sown condition in <i>kharif</i> season, irrigated and rainfed situation. 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	



## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Pigeon pea- Phule Kaveri



<b>Release year</b>	2022
<b>Name of Institute / University</b>	Mahatma Phule Krishi Vidyapeeth, Rahuri
<b>Soil type</b>	Well drained, medium to deep soils having 45 to 60 cm depth.
<b>Climate</b>	Temperature range: 21 to 25 °C to 30 to 35 °C, Rainfall 750 to 1000 mm Humidity 60-80 %
<b>Sowing Time / Planting period</b>	Optimum sowing period for pigeonpea : 2 <sup>nd</sup> fortnight of June to First week of July
<b>Seed Rate (Per acre)</b>	Seed rate : 1.800 - 2.000 kg acre <sup>-1</sup>
<b>Crop duration</b>	164-166 Days
<b>Productivity</b>	Potential Yield : 24.41 q ha <sup>-1</sup> , Average yield : 15.91 q ha <sup>-1</sup>
<b>Characters / features</b>	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

#### Horsegram - Seena




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




## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Horsegram - Man

	Release year	1986
	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 <sup>-1</sup>	
Crop duration	100-105 days	
Productivity	6-7 q ha <sup>-1</sup> (2.5-3.0 q acre <sup>-1</sup> )	
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 <sup>-1</sup>	
Crop duration	90-95 days	
Productivity	8-10 q ha <sup>-1</sup> (3.0-4.0 q acre <sup>-1</sup> )	
Characters / features	Grain colour -brown, Early maturity, high crude protein-22.09%, Iron37.86mg/100g	
Remarks	Recommended for Maharashtra state	




## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### 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 34.0 °C
Sowing Time / Planting period	15 June to 15 July	
Seed Rate (Per acre)	6.0 kg acre <sup>-1</sup>	
Crop duration	120-130 days	
Productivity	6-7 q ha <sup>-1</sup> (2.5-3.0 q acre <sup>-1</sup> )	
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 fortnight of June to 7 <sup>th</sup> July.	
Seed Rate	6-7 kg ha <sup>-1</sup>	
Crop duration	118 days	
Productivity	6 q ha <sup>-1</sup> (average)	
Characters / features	Early maturity, Moderately resistant to yellow vein mosaic	





## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Cowpea – Phule Pandhari (PCP 9708)



<b>Release year</b>	2007
<b>Name of Institute / University</b>	Mahatma Phule Krishi Vidyapeeth Rahuri
<b>Soil type</b>	Medium to Deep soils Multipliable cropping Systems (Rain fed /Irrigated conditions)
<b>Climate</b>	Humid and Dry land conditions
<b>Sowing Time / Planting period</b>	Through out the year, K:1 <sup>st</sup> Forth night of June to 2 <sup>nd</sup> fort night of July Planting period : K: June to July and Summer : Feb to March
<b>Seed Rate (Per acre)</b>	10-12 kg
<b>Crop duration</b>	65-72 days
<b>Productivity</b>	15-25 q ha <sup>-1</sup>
<b>Characters / features</b>	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)



<b>Release year</b>	2015
<b>Name of Institute / University</b>	Mahatma Phule Krishi Vidyapeeth Rahuri
<b>Soil type</b>	Medium to Deep soils Multipliable cropping Systems (Rain fed /Irrigated conditions)
<b>Climate</b>	Humid and Dry land conditions
<b>Sowing Time / Planting period</b>	Throughout the year, K:1 <sup>st</sup> Forth night of June to 2 <sup>nd</sup> fort night of July Planting period : K: June to July and Summer : Feb to March
<b>Seed Rate (Per acre)</b>	10-12 kg acre <sup>-1</sup>
<b>Crop duration</b>	65-72 days
<b>Productivity</b>	15-25 q ha <sup>-1</sup>
<b>Characters / features</b>	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



## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Cowpea – Phule Rukmini (PCP 0306-1)



<b>Release year</b>	2016 (Central release <b>South zone of India</b> ) (CVRC)
<b>Name of Institute / University</b>	Mahatma Phule Krishi Vidyapeeth Rahuri
<b>Soil type</b>	Medium to Deep soils Multipliable cropping Systems (Rain fed /Irrigated conditions)
<b>Climate</b>	Dry land conditions
<b>Sowing Time / Planting period</b>	Through out the year, K:1 <sup>st</sup> Fort night of June to 2 <sup>nd</sup> fort night of July Planting period : K: June to July and Summer : Feb to March
<b>Seed Rate (Per acre)</b>	10-12 kg acre <sup>-1</sup>
<b>Crop duration</b>	75-77 days
<b>Productivity</b>	10-15 q ha <sup>-1</sup>
<b>Characters / features</b>	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)




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




## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Urdbean – TPU-4

	Release year	1992
	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 <sup>th</sup> July.	
Seed Rate (Per acre)	6-7 kg acre <sup>-1</sup>	
Crop duration	70-75 days	
Productivity	10-12 q ha <sup>-1</sup> (Potential), 9-10 q ha <sup>-1</sup> (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

	Release year	2021
	Name of Institute / University	MPKV Rahuri
	Soil type	Medium to Deep
	Climate	Suitable for <i>Kharif</i> season
Sowing Time / Planting period	First fort night of June to 7 <sup>th</sup> July.	
Seed Rate (Per acre)	6-7 kg acre <sup>-1</sup>	
Crop duration	73 days	
Productivity	8.59 q ha <sup>-1</sup>	
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	



## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Urdbean – Phule Rajan



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

#### Mungbean - Phule M-2



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





## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Mungbean - Vaibhav



<b>Release year</b>	2001
<b>Name of Institute / University</b>	Pulses Improvement Project, MPKV Rahuri
<b>Soil type</b>	Medium to Black Cotton Soil
<b>Climate</b>	Suitable for Kharif planting in all the districts of Maharashtra.
<b>Sowing Time / Planting period</b>	First fort night of June to 7 <sup>th</sup> July.
<b>Seed Rate</b>	15-20 kg ha <sup>-1</sup>
<b>Crop duration</b>	69-74
<b>Productivity</b>	12-14 q ha <sup>-1</sup> (Potential), 10-12 q ha <sup>-1</sup> (Average)
<b>Characters / features</b>	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)




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




## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Mungbean - Phule Suvarn (PM-702-1)

	Release year	2022
	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 <sup>th</sup> July.	
Seed Rate	12-15 kg ha <sup>-1</sup>	
Crop duration	69 days	
Productivity	Average Yield- 8.85 q ha <sup>-1</sup> , Potential yield- 18.70 q ha <sup>-1</sup>	
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 / Planting period	Kharif: 15 <sup>th</sup> June to 15 <sup>th</sup> July Rabi: 15 <sup>th</sup> Oct. to 15 <sup>th</sup> Nov	
Seed Rate	90 kg ha <sup>-1</sup>	
Crop duration	72-74 days	
Productivity	12-13 q ha <sup>-1</sup>	
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	




## Mahatma Phule Krishi Vidyapeeth, Rahuri

### Information about Crop wise Improved / Hybrid Varieties Developed by University

#### Rajmah - Varun

	Release year	2001
	Name of Institute / University	NARP, Ganeshkhind, Pune
	Soil type	Well drained, Medium to deep
	Climate	Cold and Dry climate
Sowing Time / Planting period	Kharif: 15 <sup>th</sup> June to 15 <sup>th</sup> July Rabi: 15 <sup>th</sup> Oct. to 15 <sup>th</sup> November	
Seed Rate (Per acre)		
Crop duration	65-70 days	
Productivity	15-17 q ha <sup>-1</sup>	
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)

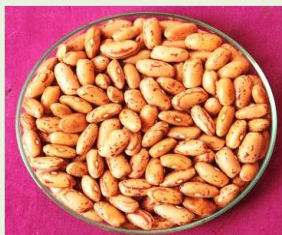
	Release year	2017
	Name of Institute / University	NARP, Ganeshkhind, Pune
	Soil type	Well drained, Medium to deep
	Climate	Cold and Dry climate
Sowing Time / Planting period	Kharif: 15 <sup>th</sup> June to 15 <sup>th</sup> July Rabi: 15 <sup>th</sup> Oct. to 15 <sup>th</sup> November	
Seed Rate (Per ha)	90-100 kg ha <sup>-1</sup>	
Crop duration	76-80 days	
Productivity	17-19 q ha <sup>-1</sup>	
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	



# Mahatma Phule Krishi Vidyapeeth, Rahuri

## Information about Crop wise Improved / Hybrid Varieties Developed by University

### Rajmah – Phule Viraj (GRB-701)



Release year	2022
Name of Institute / University	NARP, Ganeshkhind, Pune
Soil type	Well drained, Medium to deep
Climate	Cold and Dry climate
Sowing Time / Planting period	<i>Kharif</i> : 15 <sup>th</sup> June to 15 <sup>th</sup> July <i>Rabi</i> : 15 <sup>th</sup> Oct. to 15 <sup>th</sup> November
Seed Rate (Per acre)	90 kg ha <sup>-1</sup>
Crop duration	80-82 days
Productivity	Average Productivity-16-17 q ha <sup>-1</sup> , Potential Yield- 21.45 q ha <sup>-1</sup>
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