

Improved / Hybried Varieties of Sugarcane

Go 0419 (PoJ 2878 x Co 290)	Release year	1996
May a MA	Name of Institute / University	Central Sugarcane Research Station, Padegaon, MPKV, Rahuri.
	Soil type	Medium to deep black, fertile, Well drained
	Climate	 Germination Stage: Hot and dry with clear sunshine, Optimum temperature 20-32°C Tillering Stage: Hot with bright sunshine for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity stage: Cool and dry, Night Temperature 7-14 °C.
Sowing Time /	Adsali -15 July to 15 August	
Planting period	Suru -15 January to 15 February	
Seed Rate (Per acre)	10000-12000 two eye bud setts or 4500-5500 sugarcane plantlets	
Crop duration	Adsali – 16-18 months Suru- 12-14 months	
Productivity	Adsali- 154 t /ha Suru- 122 t /ha	
Characters / features	Leaves – Medium broad, Green and spines on leaf sheath, Cane Medium thick, Green cane turns purple when exposed to sunlight, Best for drinking juice (<i>Rasvanti</i>), Best rationing ability, No pith formation, Midlate maturing, Excellent jaggery quality, Sparse flowering	



	Release year	1956
Co 740 (Co41) x Co44) x (Co44) (Co44)	Name of Institute / University	Central Sugarcane Research Station, Padegaon, MPKV, Rahuri.
	Soil type	Medium to deep black, fertile, Well drained
	Climate	 Germination Stage: Hot and dry with clear sunshine, Optimum temperature 20-32°C Tillering Stage: Hot with bright sunshine for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity stage: Cool and dry, Night Temperature 7-14 °C.
Sowing Time /	Adsali -15 July to 1	
Planting period	Preseason- 15 October to 15 November	
Training period	Suru -15 January to	15 February
Seed Rate (Per acre)	10000-12000 two eye bud setts or 4500-5500 sugarcane plantlets	
Crop duration	Adsali – 16-18 mor Preseason- 14-16 m Suru- 12-14 month	nonths
	Adsali- 156 t /ha	
Productivity	Preseason- 123 t/ha	
	Suru- 106 t /ha	
Characters / features	sheath, Cane- Green breaking on internot tillering, Best ratio	broad, Green with masaic and spines on leaf eenish yellow, Medium thick, if lodging no odes, Drought tolerant, Salinity tolerant, Profuse oning ability, No pith formation, Susceptible to e maturing, no sugar deterioration if delayed



Sanjivani (Co-7219)

	Release year	1982
Co 740 (Co 421 x Co 440) x (Co 464 x Co 440)	Name of Institute /	Central Sugarcane Research Station,
XIAMINAVIV	University	Padegaon, MPKV, Rahuri.
	Soil type	Medium to deep black, fertile, Well drained
	Climate	 Germination Stage: Hot and dry with clear sunshine, Optimum temperature 20-32°C Tillering Stage: Hot with bright sunshine for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity stage: Cool and dry, Night Temperature 7-14 °C.
Sowing Time / Planting	Preseason- 15 Octob	er to 15 November
period	Suru -15 January to	15 February
Seed Rate (Per acre)	10000-12000 two ey	re bud setts or 4500-5500 sugarcane plantlets
Crop duration	Preseason – 14-16 m Suru- 12-14 months	nonths
Productivity	Preseason - 131 t /ha Suru- 110 t /ha	1
Characters / features	Leaves – Yellowish Green, Broad, spines on leaf sheath, bended from middle of leaf, Cane- Medium thick, Green with purple blotches, bud groove present, small and round buds, pith formation if water stress, Susceptible to smut disease, Moderately resistant to grassy shoot disease (GSD), Early maturing and Sparse flowering	



Sampada (CoM-7125)

	Release year	1982
CoM 7125 (Co 740 x Co 775)	Name of Institute / University	Central Sugarcane Research Station, Padegaon, MPKV, Rahuri.
	Soil type	Medium to deep black, fertile, Well drained
	Climate	 Germination Stage: Hot and dry with clear sunshine, Optimum temperature 20-32°C Tillering Stage: Hot with bright sunshine for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity stage: Cool and dry, Night Temperature 7-14 °C.
Sowing Time / Planting period	Suru -15 January	to 15 February
Seed Rate (Per acre)	10000-12000 two eye bud setts or 4500-5500 sugarcane plantlets	
Crop duration	Suru- 12-14 months	
Productivity	Suru-104 t /ha	
Characters / features	Cane- Medium th	Medium long leaves with dark green colour, ick, Yellowish green, non lodging, Resistant didlate to late maturing



	Release year	1988
Co 7527 (Co 62175 x Co 658)	Name of Institute / University	Regional Sugarcane and Jaggery Research Station, Kolhapur, MPKV, Rahuri.
	Soil type	Medium to deep black, fertile, Well drained
	Climate	 Germination Stage: Hot and dry with clear sunshine, Optimum temperature 20-32°C Tillering Stage: Hot with bright sunshine for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity stage: Cool and dry, Night Temperature 7-14 °C.
Sowing Time / Planting period	Suru -15 January to	15 February
Seed Rate (Per acre)	10000-12000 two eye bud setts or 4500-5500 sugarcane plantlets	
Crop duration	Suru- 12-14 months	
Productivity	Suru-122 t /ha	
Characters / features	long, Cane- Thick,	ended towards earth, Dark green, Medium , Green, Non lodging, Suitable for flood ble to smut and rust disease, Late maturing,



Krishna (CoM-88121)

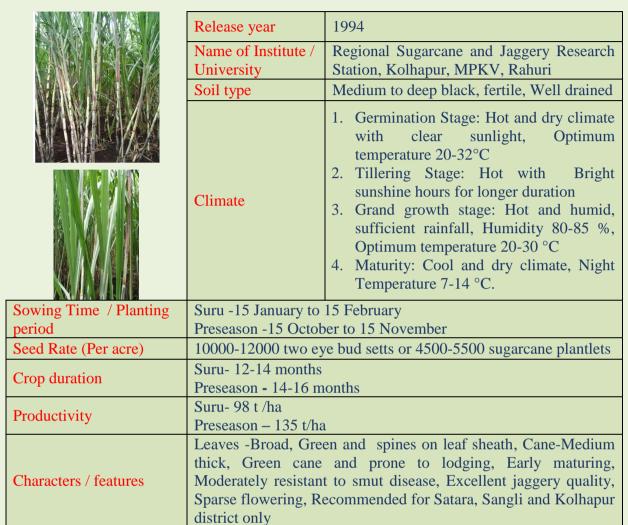
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	Release year	1993
Com 88121 (Co 740 x Co 6806)	Name of Institute / University	Central Sugarcane Research Station, Padegaon, MPKV, Rahuri.
	Soil type	Medium to deep black, fertile, Well drained
	Climate	 Germination Stage: Hot and dry with clear sunshine, Optimum temperature 20-32°C Tillering Stage: Hot with bright sunshine for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity stage: Cool and dry, Night Temperature 7-14 °C.
Sowing Time / Planting period	Adsali -15 July to 1 Preseason- 15 Octo Suru -15 January to	ber to 15 November
Seed Rate (Per acre)	· ·	ye bud setts or 4500-5500 sugarcane plantlets
Crop duration	Adsali – 16-18 mor Preseason- 14-16 m Suru- 12-14 month	onths
Productivity	Adsali- 166 t /ha Preseason- 130 t/ha Suru- 115 t /ha	
Characters / features	Cane- Medium thi wax on internoc	owards earth, Yellowish green, Medium long, ck, Turns purple when exposed to sunlight, des, Drought tolerant, Profuse tillering, nt to smut disease, Late maturing, no sugar syed harvesting



Mahatma Phule Krishi Vidyapeeth, Rahuri

Information about Cropwise Improved / Hybried Varieties Developed by University

Mahalaxmi (Co-8014)





Nira (Co-86032)

	Release year	1996
Co 86032 (Co 62198 x CoC 671)	Name of Institute	Central Sugarcane Research Station,
	/ University	Padegaon, MPKV, Rahuri
	Soil type	Medium to deep black, fertile, Well drained
	Climate	 Germination Stage: Hot and dry climate with clear sunlight, Optimum temperature 20-32°C Tillering Stage: Hot with Bright sunshine hours for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity: Cool and dry climate, Night Temperature 7-14 °C.
	Adsali -15 July to 1	
Sowing Time / Planting	· ·	ber to 15 November
period	Suru -15 January to	
Seed Rate (Per acre)	10000-12000 two eye bud setts or 4500-5500 sugarcane plantlets	
	Adsali – 16-18 mor	nths
Crop duration	Preseason- 14-16 months	
	Suru- 12-14 months	S
	Adsali – 150 t/ha	
Productivity	Preseason- 139 t/ha	
	Suru- 106 t/ha	
		S yield, Sparse flowering, Easy de-trashing,
Characters / features	Profuse tillering, Good ratoonability, Midlate maturing,	
	Moderately resistant to smut, Red rot, wilt and Grassy shoot disease, Drought tolerant.	
	and tube, Brought to	



Manual Ma	Release year	2004
	Name of Institute /	Central Sugarcane Research Station,
	University	Padegaon, MPKV, Rahuri.
	Soil type	Medium to deep black, fertile, Well drained
	Climate	 Germination Stage: Hot and dry with clear sunshine, Optimum temperature 20-32°C Tillering Stage: Hot with bright sunshine for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity stage: Cool and dry, Night Temperature 7-14 °C.
Sowing Time / Planting	Preseason- 15 Octob	per to 15 November
period	Suru -15 January to	15 February
Seed Rate (Per acre)	10000-12000 two ey	ye bud setts or 4500-5500 sugarcane plantlets
Cron dynation	Preseason- 14-16 me	onths
Crop duration	Suru- 12-14 months	
Productivity	Preseason- 135t/ha	
Productivity	Suru- 98 t /ha	
Characters / features	Leaves – Broad, Yellowish green, Erect, Spines on leaf sheath, Cane- Medium thick, Turns purple when exposed to sunlight, wax on internodes, Drought tolerant, No breaking on internodes when lodged, High sugar (CCS 14.24 %), Moderately resistant to smut and red rot disease, Early maturing, Yield reduction if harvesting is delayed.	



Phule-265 (CoM 0265)

	Release year	2007
	Name of Institute	Central Sugarcane Research Station,
	/ University	Padegaon, MPKV, Rahuri
	Soil type	Medium to deep black, fertile, Well drained, can grow in saline soil also.
		1. Germination Stage: Hot and dry climate with clear sunlight, Optimum temp. 20-32°C
	Climate	 Tillering Stage: Hot with Bright sunshine hours for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity: Cool and dry climate, Night Temperature 7-14 °C.
Sowing Time / Planting period	Adsali -15 July to 1 Preseason- 15 Octo Suru -15 January to	ber to 15 November
Seed Rate (Per acre)	10000-12000 two e	eye bud setts or 4500-5500 sugarcane plantlets
Crop duration	Adsali – 16-18 moi	
Productivity	Adsali – 200 t/ha Preseason- 164 t/ha Suru- 150 t/ha	ì
Characters / features	tillering, Sparse flo soils also, Good	ane and CCS yield than Co 86032, Profuse owering, easy de-trashing, Can grow in saline rationability, Midlate maturing, moderately ed rot and wilt disease, Drought tolerant.



	Release year	2009
	Name of Institute / University	Regional Sugarcane and Jaggery Research Station, Kolhapur, MPKV, Rahuri
	Soil type	Medium deep to deep red Soils, Well drained fertile soils
	Climate	 Germination Stage: Hot and dry climate with clear sunlight, 20-32°C Temp. Tillering Stage: Hot, Bright sunshine hours for longer duration Grand growth stage: Hot and humid, sufficient rainfall, 80-85 % Humidity, 20-30 °C Temperature Maturity: Cool and dry climate, 7-14 °C Temperature at night.
Sowing Time / Planting period	Suru -15 January to	15 February
Seed Rate (Per acre)	10000-12000 two ey	ve bud setts or 4500-5500 sugarcane plantlets
Crop duration	Suru- 12 - 14 months	
Productivity	Suru- 128 t/ha	
Characters / features	Higher jaggery yield than Co 86032, CoC 671 and Co 8014, A ₁ Quality jaggery with higher jaggery recovery and getting higher price for jaggery, Early maturity with higher CCS %, Recommended Satara, Sangali and Kolhapur districts of Maharashtra, Excellent keeping quality during storage, Moderately susceptible to smut disease, resistant to red rot and wilt diseases.	



MS-10001 (Phule 10001)

	Release year	2017
	Name of Institute/ University	Central Sugarcane Research Station, Padegaon, MPKV, Rahuri.
	Soil type	Medium to deep black, fertile, Well drained
	Climate	 Germination Stage: Hot and dry with clear sunshine, Optimum temperature 20-32°C Tillering Stage: Hot with bright sunshine for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity stage: Cool and dry, Night Temperature 7-14 °C.
Sowing Time / Planting		ber to 15 November
period	Suru -15 January to	15 February
Seed Rate (Per acre)	10000-12000 two e	ye bud setts or 4500-5500 sugarcane plantlets
Crop duration	Preseason- 14-16 m Suru- 12-14 months	
Productivity	Preseason- 151 t/ha Suru- 133 t /ha	
Characters / features	No pith formation, ratoonability, Easy	S yield, Tolerant to salinity, Sparse flowering, Profuse tillering, Drought tolerant, Excellent y detrashing, Early maturing, Moderately of and wilt, Resistant to smut, Moderately node borer



Mahatma Phule Krishi Vidyapeeth, Rahuri

Information about Cropwise Improved / Hybried Varieties Developed by University

Phule 09057



Sowing Time / Planting

Seed Rate (Per acre)

Characters / features

Crop duration Productivity

period

Release year	2019		
Name of Institute	Central Sugarcane Research Station,		
University	Padegaon, MPKV, Rahuri		
Soil type	Medium to deep black, fertile, Well drained		
Climate	 Germination Stage: Hot and dry with clear sunshine, Optimum temperature 20-32°C Tillering Stage: Hot with bright sunshine for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity stage: Cool and dry, Night Temperature 7-14 °C. 		
Suru -15 January to 15 February			
10000-12000 two eye bud setts or 4500-5500 sugarcane plantlets			
Suru- 12-14 months			
Jaggery 17.61 t/ha			
Midlate maturing variety, recommended for suru season.			
Recommended for Jaggery making in Maharashtra State.			
• Resistant (R) to smut, Moderately susceptible (MS) to red rot			
and Moderately resistant (MR) to wilt.			
• Resistant to foliar diseases (Rust, brown spot, Pokka boeng) under natural conditions.			



Phule 11082 (CoM 11082)

	Release year	2021	
	Name of Institute/ University	Central Sugarcane Research Station, Padegaon, MPKV, Rahuri.	
	Soil type	Medium to deep black, fertile, Well drained	
	Climate	 Germination Stage: Hot and dry with clear sunshine, Optimum temperature 20-32°C Tillering Stage: Hot with bright sunshine for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity stage: Cool and dry, Night Temperature 7-14 °C. 	
Sowing Time /	Preseason- 15 October to 15 November		
Planting period	Suru -15 January to 15 February		
Seed Rate (Per acre)	10000-12000 two eye bud setts or 4500-5500 sugarcane plantlets		
Crop duration	Early maturing (Duration 12 months)		
Productivity	Cane Yield Suru– 107 t ha ⁻¹ and Preseasonal- 118 t ha ⁻¹		
Characters / features	Sucrose content (19.87 %), moderately Resistant to red rot and wilt,		
	resistant to smut and yellow leaf disease, least susceptible to ESB,		
	INB, top shoot borer, moderately susceptible to mealy bugs.		
Remark	Recommended in Maharashtra for suru and presesonal planting.		



Phule Sugarcane 15012 (MS 17082)

	Release year	2022	
	Name of Institute/	Central Sugarcane Research Station,	
	University	Padegaon, MPKV, Rahuri.	
	Soil type	Medium to deep black, fertile, Well drained	
	Climate	 Germination Stage: Hot and dry with clear sunshine, Optimum temperature 20-32°C Tillering Stage: Hot with bright sunshine for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity stage: Cool and dry, Night Temperature 7-14 °C. 	
Sowing Time / Planting period	Autumn-15 th Oct to 30 th Nov and Spring-15 th Dec to 15 th February, Adsali- 15 th July – 15 th August		
	10000 two eye bud setts or 4500 settlings per acre. Row		
Seed Rate (Per acre)	Spacing- 120 cm medium soils and 150 cm in Deep black soil.		
Crop duration	12 months		
Productivity	Cane yield: <i>Adsali</i> -164 tha ⁻¹ , <i>Preseason</i> -156 tha ⁻¹ and <i>Suru</i> - 130 tha ⁻¹ , Ratoon crop: Cane yield- 128 tha ⁻¹		
Characters / features	CCS yield: <i>Adsali</i> -23.7 tha ⁻¹ , <i>Preseason</i> -21.6 tha ⁻¹ and <i>Suru</i> - 18.8 tha ⁻¹ and CCS yield- 17.7 tha ⁻¹ , midlate variety, best for rasvanti, drought tolerant, moderately resistant to red rot and wilt, resistant to smut & YLD, least susceptible (LS) to early shoot borer, internode borer, top shoot borer & scale insect.		
Remark	Recommended for recommended for adsali, preseason and suru in Maharashtra state		



Phule Sugarcane 13007 (MS 14082)

	Release year	2023	
	Name of Institute/	Central Sugarcane Research Station,	
	University	Padegaon, MPKV, Rahuri.	
	Soil type	Medium to deep black, fertile, Well drained	
	Climate	 Germination Stage: Hot and dry with clear sunshine, Optimum temperature 20-32°C Tillering Stage: Hot with bright sunshine for longer duration Grand growth stage: Hot and humid, sufficient rainfall, Humidity 80-85 %, Optimum temperature 20-30 °C Maturity stage: Cool and dry, Night Temperature 7-14 °C. 	
Sowing Time / Planting	Preseason- 15 October to 15 November		
period	Suru -15 January to 15 February		
Seed Rate (Per acre)	25000 two eye bud setts / ha, Spacing between rows- 120 cm		
Crop duration	12-14 months		
Productivity	Cane yield- 128.60 t/ha, CCS yield- 17.58 t/ha		
Characters / features	Midlate maturing variety for autumn (Pre-season) and spring (Suru) planting season, moderately resistant to red rot and wilt, moderately resistant to smut, resistant to YLD, least susceptible (LS) to early shoot borer, internode borer, top shoot borer & scale insect.		
Remark	Maharashtra, Gujarat, Karnataka, Tamil Nadu, Andhra Pradesh, Madhya Pradesh and Chhattisgarh (Peninsular Zone)		