

BEST MANAGEMENT PRACTICES

Practice	Details
Preparatory Cultivation	Deep ploughing in summer, 2-3 ploughings between July and September
Organic manures	(tonnes/ ha) FYM @5 to 7.5 tons (whenever available)
Date of planting	Mid October to November
Spacing	70 x 50 cm (SLS); 70 x 70 cm (BS)
Planting method	Flat planting
Method of fertilization	Plant row- plough furrow
Fertiliser dose	Soil test based dose as
(N: P ₂ O ₅ : K ₂ O kg/ha)	recommended by ICAR-CTRI (20% higher Nitrogen than the present recommendation)
Irrigations	Crop is grown on conserved soil moisture
Intercultural operations	Two at 20 & 40 day after planting
Level of topping	Judicious topping at first flower opening
Sucker control	4% Decanol or Royalten
Harvesting	Priming mature leaves (7-9 times)
Curing method	Flue-curing
Grading	Farm grading

Pest and Disease Management

Tobacco caterpillar (<i>Spodoptera litura</i>)	0.5% NSK suspension or NPV 250 L in 1000 L/ha by mixing with 250 g rice flour or starch powder or Emamectin benzoate 5 SG @ 5 g in 10 L of water or Novaluron 10 EC @ 10 ml in 10 L of water
Whitefly (<i>Bemisia tabaci</i>)	Imidacloprid 200 SL @ 2.5 ml or thiamethoxam 25 WG @ 2 g or acetamiprid 20 SP @ 2.5 g in 10 litres of water (3 sprays in 15 days interval of each)
Budworm/capsule borer (<i>Heliothis armigera</i>)	Flubendiamide 480 SC @ 2.5 ml or chlorantraniliprole 18.5 Sc @ 3ml in 10 litres of water
Black shank and leaf blight (<i>Phytophthora parasitica</i>)	<i>Trichoderma viride</i> (2 X 10 ⁷ CFUs/g) with neem cake 30 g /m ² or Bordeaux mixture @ 0.4% (75-100ml/plant) or Copper oxychloride @ 0.2% or Spray Metalaxyl + Mancozeb combination (72% WP) @ 0.2% but it must be restricted to two sprays only or Spray Fenamidone+mancozeb (60% WP) @ 0.3%

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CTRI Sulakshana

(An improved FCV tobacco variety)



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INTRODUCTION

Flue-cured Virginia (FCV) tobacco grown in black soils and Southern light Soils of Andhra Pradesh is known for its neutral coloury filler character. For increasing and stabilizing the productivity levels in these areas, the ICAR-Central Tobacco Research Institute (CTRI), Rajahmundry has been striving hard to develop improved varieties with high yield potential. A new high yielding, superior quality and pest resistant FCV cultivar (TBST2) was evolved through modified pedigree and back cross methods of breeding involving interspecific hybridization. Based on comprehensive evaluation this cultivar was released in the name of "CTRI Sulakshana" for commercial cultivation by AP State Seed Sub-Committee for Varietal Release (vide Lr. No. AGC02-12027(31)/19/2018 Dt 28.12.2018).

CTRI SULAKSHANA - MORPHOLOGY

Plant of CTRI Sulakshana has semi erect habit, grows to above 2 m height, stem is light green to cream coloured and internode short to medium (5.5 cm on an average). The plant produces a total of 30 to 38 leaves with 27-33 economic leaves. Leaves are broadly elliptic, sessile, moderately recurved, light green cast in nature with medium auricle development. Leaf lamina is very long (~80 cm), broad (~42 cm), margin wavy and tip medium pointed with medium puckering. Flowers are medium pink with strong expression of corolla tips. The cured leaf is lemon yellow to lemon-orange colour in lower plant positions and lemon-yellow to light orange in higher plant positions. Cured leaf is medium bodied, oily with good ripeness characteristics and good aroma.



YIELD POTENTIAL

- Yield potential is about 3300 kg/ha under rain-fed conditions of Andhra Pradesh.



SPECIAL TRAITS AND ADVANTAGES

- Resistant to Tobacco Mosaic Virus (TMV)
- Tolerant to Aphid
- Good Smoke flavour profile with higher quantities of Geranyl acetone, Neophytadiene, Megastigmatrienone isomers and 3-Hydroxysolavetivone.
- 15% additional yield advantage over the existing varieties
- Yield stability due to biotic stress tolerance
- Farmer can get an additional income of Rs. 15,000 to 20,000/- kg/ha using this variety



CTRI Sulakshna (TBST2) showing resistance to TMV

RECOMMENDED ZONES

- CTRI Sulakshana is recommended to tobacco growing Black Soil areas of Andhra Pradesh
- It is also suitable for cultivation under Southern Light Soils of AP

UNSUITABLE CONDITIONS

- Saline soils, water logged/low lying areas
- Late or Delayed planting
- Saline irrigation water (High chlorides)

SEED AVAILABILITY

Pure seed of CTRI Sulakshana may be obtained from ICAR-CTRI, Rajahmundry

