

FCJ 11: A High Yielding FCV Tobacco Cultivar for Northern Light Soils of Andhra Pradesh



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Introduction

Flue-cured Virginia (FCV) tobacco grown in Northern Light Soils (NLS) of Andhra Pradesh is known as semi-flavourful to flavourful tobacco. About 75% of the tobacco produced here is being exported to other countries. In order to increase the yield levels of tobacco in these areas and for making it more remunerative in the international market, the ICAR-Central Tobacco Research Institute (CTRI), Rajahmundry has been pursuing a rigorous breeding programme to develop high yielding and better quality tobacco variety suitable for NLS areas. As a result of the intense breeding efforts and systematic evaluation, FCJ 11 a high yielding and better quality FCV cultivar was developed. This was identified for release to NLS area by a Varietal Identification Committee during the XXIV Tobacco Workshop of All India Network Project on Tobacco held at Anand Agricultural University (AAU), Anand, Gujarat on 28th December, 2019.



Characteristic Features



Plants of FCJ 11 are open conical in shape and grows to about 180 cm height. The leaves are long (~84 cm), broad (~39 cm), sessile, broad elliptic in shape and strongly recurved with strongly pointed tip. The leaves are dark green in colour with strong puckering. The cultivar produces around 35 total leaves with around 32 good bodied curable leaves. Flowers are light-medium pink in colour with strong expression of corolla tips. Cured leaf is bright lemon to orange in colour with good aroma.

Yield Potential

- Has an yield potential of more than 3300 kg/ha under irrigated conditions of Northern Light Soils of Andhra Pradesh. FCJ 11 can even yield up to 3900 kg/ha under favorable conditions



Benefits of FCJ 11

- Suitable for cultivation under irrigated condition of NLS
- Withstand rain damage to certain extent during crop growth compared to other varieties grown in the region
- FCJ 11 gives higher yields than control, Kanchan with existing fertilizer recommendation with 3 kg higher cured leaf per kg nitrogen applied
- It has acceptable range of physical, chemical and smoke quality parameters
- It has around 35% additional yield potential (900 kg/ha) than the existing variety (Kanchan)
- FCJ 11 shows lower incidence of *Spodoptera*, budworm and aphids under field condition
- Gives more income compared to other cultivars
- Seed cost is minimal (₹ 900/- per kg)



Zone of Adaptation

- FCJ 11 is suitable for cultivation under Northern Light Soils of Andhra Pradesh and hence, identified for release to NLS area

Management Practices

All the standard crop management technologies recommended by ICAR-CTRI for NLS tobacco can be adopted in cultivating FCJ 11, with following suggestions, to realize higher yields.

- Early planting
- Topping at higher levels (> 24 leaves), based on crop growth
- Apply fertilizers as per standard recommendation for better leaf quality

Source of Seed Availability

ICAR-CTRI, Rajahmundry or ICAR-CTRI Research Station,
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