

Banana in Andhra Pradesh at a glance



Grand Naine crop



Value added products in banana



Elephant foot yam as intercrop in banana



Grand Naine plantation

Banana

Bananas are grown in more than 150 countries, producing 105 million tonnes of fruit per year and it is an important fruit crop in India. The global production of banana is around 102028.17 thousand tonnes of which India contributes 29.19%. Main banana growing states are Tamil Nadu, Maharashtra, Gujarat, Andhra Pradesh and Karnataka. In Andhra Pradesh, Banana is the third important fruit crop after mango and citrus, occupying 14% of the fruit growing area in the State. Although it is cultivated in almost all the districts, it is extending in East Godavari, West Godavari, Cuddapah, Guntur, Krishna, Visakhapatnam, Vizianagaram, Anantapur and Kurnool districts

Botanical name

: *Musa × paradisiaca*

Family and chromosome number

: Musaceae, $2n = 3x = 33$

Botany

: Banana is a large perennial herb with leaf sheaths that form the trunk like pseudostem. It can grow up to 20 to 24 ft tall and its leaves can grow up to 8.0 ft long and 2.0 ft wide. Root development may be extensive in loose soil in some cases up to 30 ft laterally.

Climate and soil requirement

: Banana is essentially a humid tropical plant, coming up well in regions with a mean temperature range of 25 – 30 °C with mean annual rainfall of 100 mm per month. This can be grown an altitude of 1,200 msl. Soils with 50 cm depth, well drained, fertile in nature are required for good crop growth. In Andhra Pradesh mainly cultivating in Alluvial and clay soil with a pH of 6.0 to 7.5

Commercial varieties

: Table varieties: Grand Naine (AAA), Dwarf Cavendish (AAA), Mortman (AAB), Tella Chakkeri Keli (AAA), Karpura Chakkerakeli (Poovan) (AAB)
Culinary varieties: Kovvur Bontha (ABB) and Godavari Bontha (ABB)

Economic part

: Fruit is consumed

Propagation techniques

: It is propagated by sword suckers of 1.5-2.0 kg weight and also with minimum 45 days old tissue culture plants.

Spacing and plant density

: 1.8 x 1.8 mt (3080 plants/ha) for Cavendish types
2.0 x 2.0 mt (2500 plants/ha) for Poovan and bontha types

High density planting

: Paired row system with (1.2 mt x 1.2 mt) x 2.0 mt can accommodate 68% more plants (5,200 plants/ha) over normal planting

Harvesting period

: Year round harvesting based on planting time.

Fruit yield

: The average yield of different varieties of banana ranges from 50-75 t/ha.

Pests

: Rhizome weevil, thrips and Burrowing Nematodes

Diseases

: Panama Wilt, Sigatoka Leaf Spot, Rhizome rot, Bunchy top virus, Streak virus, Bract mosaic and Infectious chlorosis

Physiological disorder

: Kotta vazhai is a malady of unknown etiology mostly effecting poovan banana. Formation of conspicuous seeds in immature dark green fruits. It is suspected to be associated with incidence of banana streak virus.

Shelf-life

: Varies with variety and maturity but average 1 week.

Shelf-life in cold storage/ripening chamber

: At 13.3 to 14.4 °C temperature with 90-95% relative humidity the fruits can be stored in 4-6 weeks.

Post harvest products and value-addition

: Its fruits are consumed as fresh, they can be processed into chips, baby food, jam, jelly, puree, juice, figs, fruit bar and starch.

Nutritional value (per 100 g of edible portion)

Nutrient	Quantity	Nutrient	Quantity
Water	58-80 ml	Phosphorous	27.0 mg
Energy	116 kcal	Potassium	460.0 mg
Protein	1.2 g	Calcium	7.0 mg
Fat	0.3 g	Magnesium	36.0 mg
Carbohydrate	27.0 g	Sulphur	34.0 mg
Fibre	0.5 g	Iron	0.5 mg
Vitamin C	10.0 mg	Vitamin B	0.4 mg



Grand Naine

Karpura (poovan)



Hardened TC banana plants of karpura (Poovan)

Banana fibre from pseudostem



Tella chakkeri keli

In vitro banana



Godavari bontha

Plastic mulch in banana



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