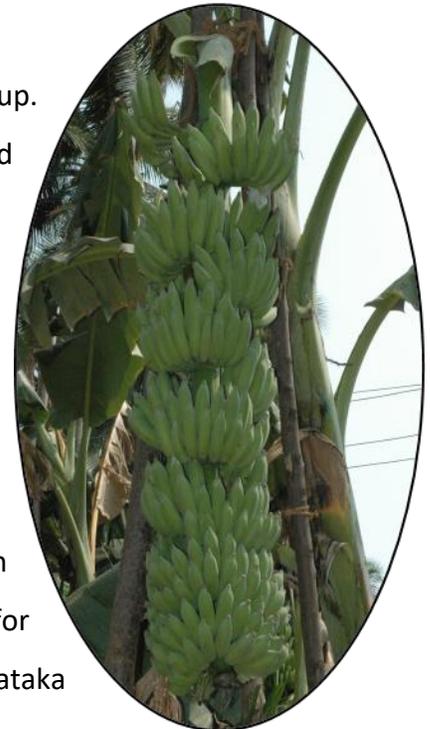


Varieties Developed @ ICAR-NRCB

ICAR-NRCB, Trichy since its inception has made twelve selections of which five are exotic in origin and the remaining are indigenous. NRCB selection 001 was released as Udhayam (ABB, Pisang Awak) in 2005. FHIA 01 and FHIA 03 were tested in different AICRP centres and recommended for release. The other two selections namely Saba (ABB, Bontha) and Bangrier (ABB, Bluggoe) were tested under AICRP- Fruits and they were released in 2016-2017. Namwa Khom (ABB, Pisang Awak) and Popoulou (AAB, French plantain) are under multilocational evaluation in the AICRP centres. Another somaclonal variant of cv.Manoranjitham, the fragrant banana is also under MLT in farmers fields under different agro-ecological conditions and altitudes. The foresaid selections were made based on various traits which are briefed hereunder.

Udhayam

This is a single plant selection belonging to Pisang Awak subgroup. The average bunch weight is 37 kgs and has a potential to yield upto 45 kgs under good management practices. It gives 30-35 per cent higher yield than local Karpuravalli. Crop duration is 14 - 15 months and yield remains stable even in ratoons. Exhibits field tolerance to Sigatoka leaf spot and nematodes. The cylindrical bunch and well spaced hands makes it suitable for long distance transportation and less prone to fruit damage during transit. It has high sugar content with 31°B with harmonious blend of acidity and sweetness and hence suitable for use in Fig industry. Udhayam performs well in Kerala, Karnataka Andhra Pradesh Bihar, West Bengal and North eastern India.



Bangrier

This is a single plant selection from the local land race, Bangrier, having genomic group ABB and Bluggoe subgroup. Being starchy in nature, it is mainly used for cooking purposes. Selected for its higher yield of 28-30 kgs which is 20% over local Monthan and stable yield over a period of 4 years (main crop + 2 ratoon crops). Good fruit quality for cooking with mealy texture. Fruits are elongated with pointed tip. This reduced the wastage of fruits which is more in Monthan. Crop is 25-30 days early maturing over local check and it ranged from 360-390 days. This was tested under MLT in AICRP-Fruits and evaluated across five agro-climatic zones over three years and found superior over respective controls. Selection-08 is reported to be tolerant to Fusarium wilt (FoC race 2) at BRS, YSRHU, Kovvur.



Saba

Saba is an exotic introduction from Philippines and belongs to ABB genomic group and Bontha subgroup. Medium statured plant with 3-3.5m height. Leaves are dark green and shiny. Bunch is slightly angular in position. There 9- 10 hands in a bunch and are loosely packed. Weight of the bunch ranged from 26- 29 kg, and the duration is 360 – 380 days. Fruits are dark green, flattened with blunt tip. Fruit pulp is starchy. It is grows well both in plains and higher altitudes. Saba is more suitable for marginal cultivation and saline sodic soils with pH ranging from 8.8 to 9.0. Among the ABB types, this is more tolerant to drought. This can be used for both culinary and dessert purpose. This was also tested under MLT in AICRP-Fruits and evaluated across five agro-climatic zones over three years and found superior over respective controls. This can be a suitable substitute for local Bluggoe and Bontha type bananas viz., Adukku Monthan and Vayalvazhai.



Namwa Khom

It is also one of the exotic introductions from Philippines. It belongs to ABB genomic group and Pisang Awak sub group. Plant is dwarf statured with 2-2.4m height with about 90 cm circumference at the base and therefore suitable for high density planting and needs no propping. Leaves are almost erected in position. Petiole bases are tightly clasped on the pseudostem. Among the Pisang Awak sub group, it exhibits the shortest duration of 12 months and hence suitable for annual cropping system. Average yield is 20 kgs, with a potential to yield upto 25 kg. Bunch is acceptable size and the fruits are marketable quality with sugary taste and 29 °Brix. Performance evaluation was done at two places namely ICAR-NRCB, Trichy and BRS, Kannara, Kerala. Results indicated its superiority over local Karpuravalli used as check. It has already received much appreciation and attention of the banana growers. Presently under MLT in five AICRP (Fruits) centres.



Popoulou

Popoulou (AAB, French plantain) bananas are indigenous to the Pacific region. This was introduced into India from International Transit Centre, Belgium through ICAR-NBPGR, New Delhi.

Initially, this germplasm material was evaluated simultaneously at ICAR-NRCB, Trichy and Banana Research Station, Kannara, Thrissur. Under Kerala conditions, it performed well and the yield was found to be stable for the third year (2014-2015). It was similar to Nendran with respect to crop duration (290 days) and superior to Nendran with respect to yield (17.5 kgs and 75 fruits per bunch as against 11.5 kgs and 54 fruits per bunch). But its performance at Trichy was not on par with that in Kerala due to high temperature. Recent evaluation revealed this selection is medium statured with height ranging from 2.2-2.4m. This had a short duration of 310-320 days with shorter

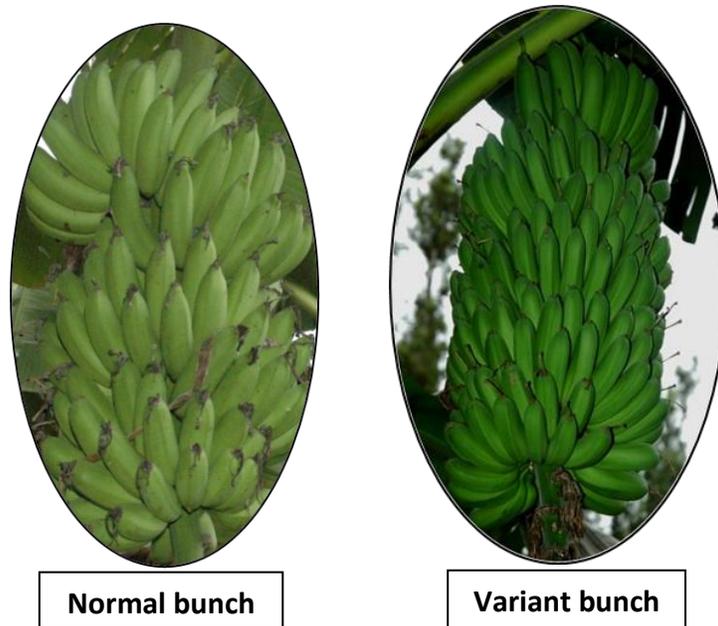


maturation time of 50-55 days, yielding 14-15 kgs, 6-7 hands with 10-12 loosely packed fruits and 60-65 fruits per bunch. Fruits are very bold fruits with 15-16 cm circumference. Individual fruit weight is nothing less than 150g. Pulp of the ripened fruit is orange yellow and mild taste. However, the unripe mature fruits are highly suitable for making banana snacks like bajji, chips making etc. though the pulp looks orangish it is not as sweet as plantain. Fruits are eaten raw as well as cooked.

The planting material of this variety has also been supplied to BCKV, Mohanpur and BRS, Kovvur under AICRP – Fruits. In near future, it will also be supplied to other AICRP centres.

Manoranjitham variant

This belongs to AAA genomic group and has unique features like good aromatic and fragrant pulp. There are 13-14 fruits in a hand. Fruits are dark in green at maturity and yellowish green at ripening. Average yield ranged from 13-15 kg. Crop duration is 13-14 months. Tolerant to leaf spot disease. ICAR-NRCB, Trichy has identified a high yielding somaclonal variant during the field evaluation of tissue cultured Manoranjitham at Kolli hills of Tamil Nadu. Plant height ranged from 4.9-5.2 m with a pseudostem girth of 110 cm. The bunch weight almost 51 kgs (more than 300% increase in yield) with 12-14 hands and 17-20 fingers per hand as against 13-15 kg in local Manoranjitham. The yield was almost stable even during the third ratoon (46 kgs).



To evaluate the yield stability of the high yielding variant selected from Kolli hills, they were mass multiplied and evaluated at three different locations in Tamil Nadu at different altitudes.

Germplasm details	
Genome	Core collections
AA	26
AAA	26
AAAA	1
AAB	99
AB	23
ABB	103
ABBB	7
BB	20
Rhodochlamys	5