

East African Tall Zanzibar (EAT33)

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Conservation

East African Tall Zanzibar (EAT33) is conserved at the Central Plantation Crops Research Institute in Kasaragod (Kerala) and at the research stations in Aliyarnagar and Veppankulam (Tamil Nadu), Jagadapur (Madhya Pradesh), Konark (Orissa) and Mondour (West Bengal), India.

History

This variety was introduced to India in 1955. Bourdeix (1977) suggested that Zanzibar Tall of India is a subpopulation of the East African Tall variety which is scattered on a large area in the world. The Indian population is renamed as East African Tall-33 (EAT-33). The original place of collection may have been Tanzania or Kenya.

Identification

The palm grows up to 13-14 m with about 36 leaves on the crown. The stem girth at 1 m height from the ground is 101 cm. The leaves are 5.2 m long with 232 leaflets. The leaflets are 117 cm long and 5.5 cm wide. This variety is a late flowering type, starting to flower 12 years after planting. The palm produces an average of 10 inflorescences per year. The inflorescence is 128 cm long with a long but strong stalk (69.5 cm). Inter-spadix overlapping is observed in 24% of the inflorescences (duration=3.3 days). Fruits are oval-shaped and greenish yellow in colour. The fruits have medium husk content. The husked nut is oval in shape with pointed bottom. The kernel is thick.

Yield and production

Fruiting starts 14 years after planting. The yield in Kasaragod is 86 nuts per palm; in Aliyarnagar, 57 nuts; in Veppankulam, 41 nuts; in Konark, 22 nuts and in Mondouri, 52 nuts. The fruits are medium-sized, weigh about 861g with 569g nut weight. The husk constitutes 34% to the whole fruit weight. Copra content in Kasaragod is 184g per nut; in Konark, 220g; in Mondouri, 176g; and in Veppankulam, 140g. The oil content in copra is 68%. The palms at Kasaragod gave 2.8 t of copra and 1.9 t of oil per ha.

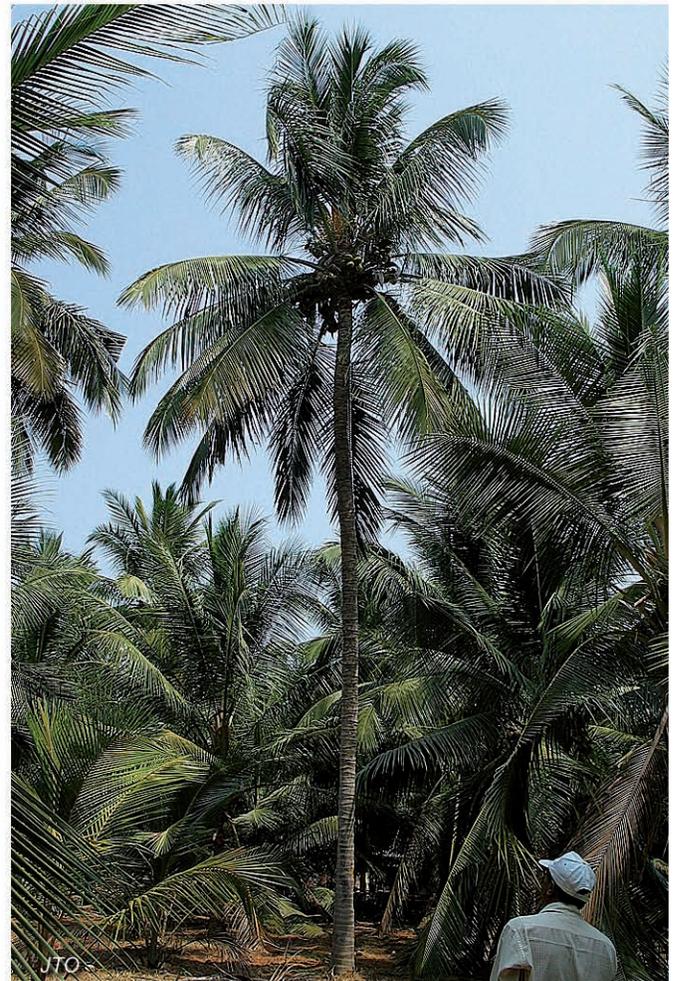
Other information

EAT33 is resistant to lethal yellowing. This variety is not being used in breeding programmes in India.

References

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Pemba Red Dwarf Tanga (PRD01)

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Conservation

In Tanzania, Pemba Red Dwarf Tanga (PRD01) is conserved in situ and ex situ. Ex situ conservation is mainly at Chambezi while in situ, the palm remains in smallholdings along the coconut growing area of Tanzania.

History

In Tanzania, Pemba Red Dwarf, as the name suggests, was collected from Pemba Island. Its historical background and local name Kitamli suggest its introduction by the Tamil traders to East Africa. PRD is present everywhere along the Tanzanian and Kenyan coastal area, as well as in Mozambique, Madagascar, Comoros and Mauritius.

Identification

Pemba Red Dwarf palms have a close resemblance to certain exotic varieties, such as Cameroon Red Dwarf (CRD) from West Africa or Madang Red Dwarf from Papua New Guinea. The trunk is very short and the leaves are comparatively short and erect. The fruits are oval and golden in colour. The bunch stalks are long, holding the fruits of all ages at the same distance. The similarity to other varieties was not noticed until after the Cameroon Red Dwarf (CRD) had been introduced for hybrid seed production purposes. Most Pemba Dwarfs resemble CRD, about 7% show characteristics of another exotic variety, Malayan Red Dwarf (MRD). It is significantly taller than CRD subtype and the leaves are longer and curve down. The fruit are round and fruit colour is more reddish (apricot) and the bunch stalks are shorter.

PRD bears no bole, it has a thin stem measuring 15cm (and 20cm at 20cm and 100cm above ground level respectively) in diameter. Top leaves are erect and straight, peduncles and petioles are straight. Reproductive system is direct autogamy. Within a subtype the colour is stable; differences are due to coexistence with other subtypes. Characterization data can be found in Tanzania. In most parameters PRD is similar to CRD and Mourassi.

Yield and production

Pemba Red Dwarf produce medium size oval shaped fruits. The husk is thin and the average fruit weight is 690g. The nut is oval and weighs about 500g. Under favourable edaphic and climatic conditions, PRD is highly precocious coming to first bearing in 2-3 years after field planting. It produces 30-70 fruits per palm per year under rain-fed conditions. It is mainly grown for its sweet and tasty liquid endosperm. The low oil and sugar content in the solid endosperm makes it of low importance in copra production. It is a very good ornamental palm. PRD is sensitive to drought and this may be the reason that it is mostly found around homesteads. Pemba Island (its primary source in East Africa) provides optimal growing conditions for the Dwarf in Tanzania.

Other information

Molecular DNA studies have shown that the Pemba Red Dwarf and the Cameroon Red Dwarf are closely related. Anyway, according to the observations made in Tanzania, where the two varieties are available, PRD fronds do not droop as much as those of CRD (due to reflexed petioles). Peduncles are longer than other red or yellow Dwarfs but shorter than those of CRD. PRD is sensitive to *Pseudotheraptus wayi* and mite attacks. It is moderately tolerant to lethal disease of coconuts. This variety has been used for production of breeders' test materials aimed at breeding coconut palm materials resistant to lethal disease and drought tolerance mainly as seed parent with Rennell Island Tall (RIT), East African Tall (EAT) and Vanuatu Tall (VTT), as father palms.

References

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