

Tahitian Red Dwarf (TRD)

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Conservation

The Tahitian Red Dwarf (TRD) is quite widespread in the Pacific islands (Cook, Tahiti, Tonga and Samoa). However, it is not particularly well represented in international collections. Only one accession of this variety, comprising 73 living palms, according to the 2002 Coconut Genetic Resources Database, is conserved in the Ivorian collection in Africa.

History

This Red Dwarf comes from Tahiti and was introduced into Africa in the 1970s. In Tahiti, it is known as the ‘Haari Papua’ (literally ‘Papuan coconut’). Yet, Papua New Guinea is almost 6000 km from Tahiti on the other side of the Pacific Ocean. For several centuries, Polynesian or Melanesian sailors travelled across the Pacific Ocean bringing plants with them. This has contributed to considerable confusion on the exact origin of certain coconut varieties.

In Côte d’Ivoire, this Dwarf is the frailest of all coconut palms. Eight years after planting, its slender stem does not exceed a metre in height on average. Its growth is slower than the Brazilian Green Dwarf. Its very supple fronds with long leaflets give it a particular silhouette, by which this variety can be distinguished from the Malayan Dwarfs. TRD bunches are clusters of small fruits suspended at the end of a long peduncle. When young, these oval fruits are a deep orange red. When completely ripe, they have a small but clearly defined nipple. Inside the fruit, the nut is round; it sometimes becomes pointed at the distal end if the palm has suffered from drought. Ripe nuts contain little water. In Côte d’Ivoire, a ripe nut weighing an average of 200g contains 70g of meat and only 7g of water on the 6th to 7th year. However, the meat is rich in oil. Seednut germination is rather slow for a Dwarf.

Identification

The Tahitian Red Dwarf stands out among other Red Dwarfs; its colour is more intense than that of the Malayan or Cameroon Red Dwarfs. Moreover, it is the only coconut palm with red fruits, whose flowers, young fruits and root tips reveal a pink coloration of internal tissues (see oval photograph). The other Dwarf coconut displaying such a pink coloration is the Pilipog Green Dwarf from the Philippines. In Papua New Guinea and Vanuatu, Dwarf varieties exist that are just as red as the Tahiti, but they can be distinguished from the latter by their pointed fruits, which have a very prominent nipple, and no pink coloration of internal tissues.

Yield and production

In Côte d’Ivoire, the TRD starts flowering 53 months after planting, more than two years later than the Malayan Yellow Dwarf. When mature, its production remains low and does not exceed around 60 fruits per palm per year (30 fruits less than the Yellow Dwarf).

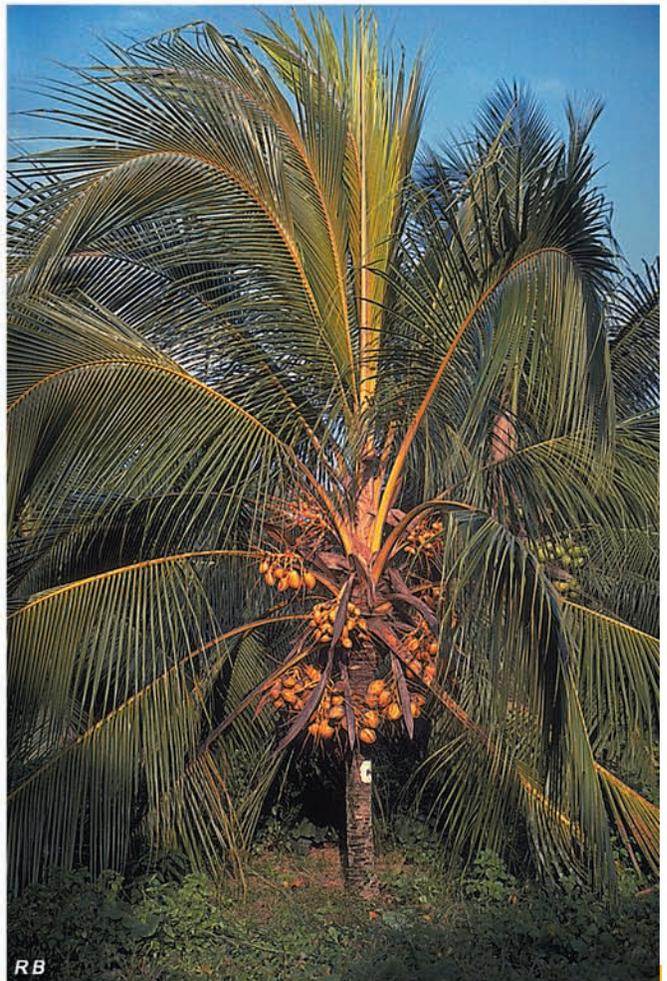
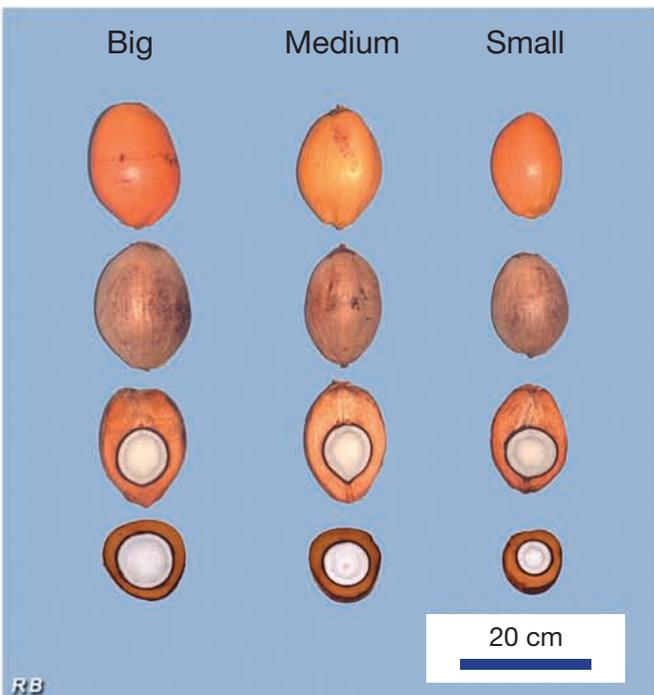
Other information

In Polynesia, this Dwarf is mostly used for decoration in gardens. Perhaps the function of the TRD resembles that of so-called ‘wedding’ coconut palms in the Tuvalu islands. When there are too many guests and not enough good big drinking nuts, these pretty little fruits available in large numbers are offered to the guests. As it flowers late and produces small yields, researchers have shown little interest in the TRD. Very little use has been made of it in varietal development programmes. However, in Côte d’Ivoire, it was crossed with four other varieties in 1993.

Reference

N’Cho YP, Le Saint JP, Sangare A. 1988. Les cocotiers Nains à Port Bouët (Côte d’Ivoire). III. Nain Brun Nouvelle-Guinée, Nain Vert Thaïlande, Nain Rouge Polynésie. *Oléagineux* 43:55-66.

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Tahitian Tall (TAT)

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Conservation

The Tahitian Tall (TAT) is also known as ‘Polynesia Tall No. 1’. According to the 2002 Coconut Genetic Resources Database, 11 accessions totalling more than 2200 living palms are conserved in eight countries. TAT was introduced into Côte d’Ivoire on several occasions in the 1960s, where it was reproduced and exported to Brazil, Indonesia, the Philippines and Tanzania. It is also present in India, Jamaica and Malaysia.

History

French Polynesia is made up of 118 islands and atolls strewn across more than 4 million km² of the eastern Pacific Ocean. It includes five archipelagos: the Austral Islands, the Marquesas Islands, the Tuamotu atolls, the Mangareva Islands and the Society Islands. It is in the last island group, on Tahiti, that this variety was collected. The Polynesians, who were great voyagers, took coconuts with them in their boats. Discoveries such as Lapita pottery, show that they were in Fiji around 2500 BC, in Tonga (1100 BC) and Samoa (1000 BC), then settled in the Marquesas (300 BC), in the Society Islands of which Tahiti is a member (600 AD), and lastly in New Zealand (800 AD). During his voyage on the Beagle, which led him as far as Tahiti in 1839, Charles Darwin wrote: “*After walking under a burning sun, I do not know anything more delicious than the milk of a young cocoa-nut*”.

Identification

When planted under good conditions, the Tahitian Tall becomes a large palm. It produces numerous fronds that are longer than those of African varieties, although they have the same number of narrower leaflets. The fruits vary in shape and colour, and sometimes have a distal nipple. Their weight varies from 1165g in the Philippines to 1291g in Côte d’Ivoire. The inner nut also varies in shape: slightly pointed at the end with the germination ‘eyes’ or oblong or virtually round. The meat is generally thick and weighs 429-460g. In Côte d’Ivoire, only the varieties originating from the Rennell islands and the Comoro islands produce a bole at the base as wide as that of the Polynesia Tall. Some fruits, of average size and excellent composition, have a surprisingly thin husk, less than 1 cm thick in some places.

Yield and production

In Côte d’Ivoire, TAT starts bearing early and well. On average, it flowers 62 months after planting and the adult palms produce 60 to 70 fruits per palm per year. Yields are better in the Philippines, with 84 fruits per palm.

Other information

TAT is susceptible to *Helminthosporium* leaf spot, a fungus that causes numerous small gray, dry spots on fronds. TAT is widely used in varietal development programmes worldwide. In Côte d’Ivoire, it has been crossed with 16 other varieties, of which 8 were Dwarfs and 8 were Talls. Crosses with Red and Yellow Malayan Dwarfs have given good yields, but have not been distributed to growers. However, in the Philippines, hybrids with Catigan Green and Malayan Red Dwarfs are currently recommended under the names PCA 15/6 and PCA 15/7.

Reference

de Nuce de Lamothe M, Wuidart W. 1979. Coconut varieties of Tall type at Port Bouët (Côte d’Ivoire). I. West African Tall, Mozambique Tall, Polynesia Tall, Malayan Tall. *Oléagineux* 34:339-349.

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