

# Comoro Islands

---

## Genebank

No genebank affiliated to COGENT.  
A seed garden conserving two Dwarf varieties exists in Moheli Island.

---

## Contact

Country not member of COGENT  
Dr Youssoufa Mohamed Ali  
Directeur national du  
Projet développement des cultures vivrières et  
appui semencier (DECVAS)  
Ministère de la production, de la pêche et de  
l'environnement  
BP 1406 Moroni, Comoro Islands  
Tel: +269-736688 Fax: +269-730500

---

The Comoro archipelago lies between Madagascar and the African continent. It is divided into an independent nation, the Union of the Comoros (including Grande Comore, Anjouan and Mohéli), and the island of Mayotte, a *de facto* French Overseas Community. Comoros islands are located in the Mozambique Channel, north-west of Madagascar and face Mozambique. The four volcanic islands cover a total area of 2236 km<sup>2</sup>.

In 1971, across the whole archipelago, a coconut produced on average 46 fruits per year distributed as follows: 15 were locally consumed by people, 17 were eaten by the rats, 14 were exported in the form of copra (Delorme 1973). In the Comoros, rats live at the top of the coconut palms. Their control consists of ringing the coconuts with a plastic or sheet cylinder fixed around the trunk so that rats slip on this surface and are unable to climb the tree. Poisoned soft foods are also used. Nowadays, coconut products are no longer exported but are locally consumed.

Although there is no coconut collection in the Comoros, a seed garden was planted in the 80's in Moheli Island, with Malayan Red and Yellow Dwarfs. This seed garden was used to produce hybrids PB121 and PB123 with the West African Tall as male parent (Bourdeix et al. 2005). In the 80's, development projects tried to popularize hybrid varieties but their success was compromised by farmers being wary of these new varieties. Experimental field studies comparing Comoro Moheli Tall (CMT) and hybrids started gathering data only at the end of the project. Thus, on the experimental field in Moheli, CMT produced only 24 nuts per tree whereas the hybrid PB121 produced a cumulative yield of 154 nuts per tree, both at 6 years old.

The agricultural sector consists of subsistence micro-farming, with a high level of domestic consumption and farming for export. One of the main challenges for Comorian agriculture is to increase the competitiveness of its products at the consumer level, notably through an intensification of production and a rationalization of distribution channels. This has been one of the objectives of many agricultural development projects and plans, among them the more recent EU project for staple food development and seed support (DECVAS—Développement des cultures vivrières et appui semencier) and the World Bank's pilot programme for agricultural services (Salmon 2003).

## References

- Delorme M. 1973. The Coconut palm in the Comoros islands. *Oléagineux* 28:341-346.
- Salmon JM. 2003. Case Study: The Indian Ocean Islands. In: *Turning Losses into Gains: SIDS and Multilateral Trade Liberalisation in Agriculture*, edited by UNCTAD. UNCTAD/DITC/TNCD/2003/1. New York and Geneva: United Nations Conference on Trade and Development. pp. 127-169.
- Bourdeix R, Konan JL, N'Cho YP. 2005. *Coconut. A guide to traditional and improved varieties*. Editions Diversiflora, Montpellier, France.

## Comoro Moheli Tall (CMT)

*Bourdeix R, Youssoufa MA, Roumain de la Touche YR*

### Conservation

Comoro Moheli Tall (CMT) coconuts are mainly found in the Comoros Islands but, until 2002, there was no recorded coconut germplasm bank in this archipelago. The only other country where CMT can be found is Côte d'Ivoire, where 350 CMT palms planted in 1972 still thrive.

### History

The Comoros archipelago is located in the Indian Ocean, between the African coast and Madagascar. Moheli, from which the CMT was collected, has an area of 290 km<sup>2</sup> and is the smallest of the four islands. Molecular studies show that CMT is distinguished from Indian and African coconuts by its greater diversity due to genes originating from another region. Towards the sixth century, sailors coming from Southeast Asia probably arrived in the area with coconut seeds in their boats.

### Identification

The main characteristic of CMT is its widened stem, forming a broad bulb at the base. The stems of the bigger palms exceed 80 cm in diameter at 20 cm from the ground, so a circumference of more than 250 cm. In average, the Tall varieties recorded in the Coconut Genetic Resources Database have a diameter of 53 cm at 20 cm from the ground level.

### Yield and production

In Côte d'Ivoire, CMT starts flowering about 75 months or more than six years after field planting. Fruits of the CMT are very variable in shape and composition. In Moheli, there is a great diversity inside each farmer's field, but relatively few differences from one field to another. On average, the total weight of the mature fruit is 1283g, and the nut weighs 796g including 402g of meat.

### Other information

In the 1980s, CMT was evaluated with hybrid varieties in experimental fields in Moheli. The hybrid PB121 produced a cumulative yield of 154 nuts per tree on the sixth year, while CMT produced only 24 nuts. However, hybrid PB121 had some deficiencies. According to farmers, the roofs made from the hybrid's braided palms are less durable than those made with CMT leaves. The hybrid is also less resistant to the cyclonic winds. Four varieties are now proposed to the farmers: the selected CMT, the hybrid between the Malayan Yellow Dwarf and CMT, the hybrid PB121 and Dwarf coconut palms for the gardens.

### References

Delorme M. 1973. The Coconut palm in the Comoros islands. *Oléagineux* 28:341-346.

Bourdeix R, Konan JL, N'Cho YP. 2005. Coconut. A guide to traditional and improved varieties. Editions Diversiflora, Montpellier, France.

# Comoro Moheli Tall (CMT)

