

Baybay Tall (BAYT) in the Philippines

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Conservation

Baybay Tall (BAYT) is conserved at the Leyte State University (LSU) in Baybay, Leyte; Philippine Coconut Authority–Zamboanga Research Centre (PCA-ZRC) in San Ramon, Zamboanga City; and at the Coconut Breeding Trials Unit (CBTU) in Mambusao, Capiz in Panay Island, Philippines.

History

The Baybay Tall palms planted at the field genebank at the PCA-ZRC were sourced from a plantation block of Tall palms in Baybay, Leyte in 1975. The original Tall palms, now known as BAYT were introduced to Baybay, Leyte from the Southern Tagalog Region in the mid 1950s.

Identification

Baybay Tall variety is homogeneous and very leafy. It is characterized by high copra weight per nut, thin husk, bunches with short peduncles, fruits often trapped between the petioles of the leaves, and with very robust and thick stem. Its other known name is Laguna Tall (LAGT). The main characteristic of BAYT is its widened stem, forming a broad bulb at the base. The stem is the bigger recorded in the Coconut Genetic Resources Database, with 91 cm in diameter at 20 cm from the ground, so a circumference of 285 cm. In average, the Tall varieties recorded in the CGRD have a diameter of 53 cm at 20 cm from the ground level.

Yield and production

Baybay Tall is known for its relatively high meat weight and uniform stand. On the average, whole nut weight is 1464g; husk weight, 383g; shell weight, 245g and meat weight, 490g. BAYT palms yielded an average of 108 fruits per palm per year, 14 567 fruits per ha, 33.3 kg of copra per palm, and average copra of 4.5 tons per ha.

Other information

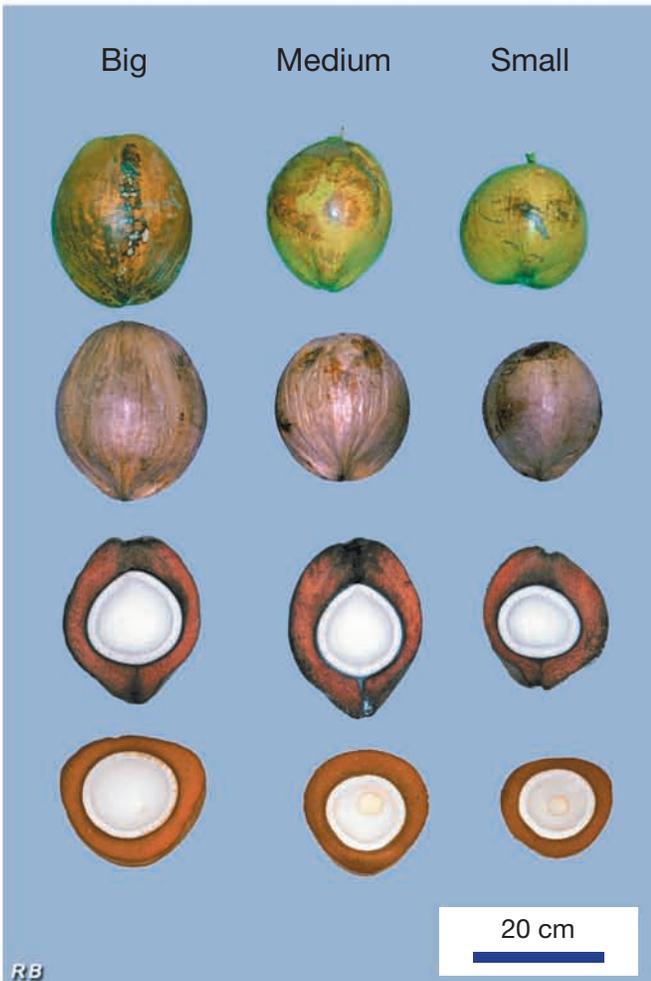
BAYT was introduced in Vanuatu and based on field observations, hybrids with BAYT show recognizable tolerance to the viral coconut foliar decay disease. BAYT has also shown resistance to leaf spot diseases caused by *Pestalozzia palmarum* and *Helminthosporium* sp. but is considered as the most suitable host for mites *Oligonychus velascoi* Rimando.

This Tall variety is a class of its own, having the distinction as the most economically productive Tall population with 4.7 tons copra per ha per year. BAYT is highly recommended for the national coconut planting and replanting program of the Philippines. The use of local hybrids and BAYT proved to be a more profitable investment than the use of MAWA and other local Tall. BAYT produced higher and stable nut production and comparable copra recovery, which contributed to its higher profitability. This variety was used as parent for mass production of hybrids, with Malayan Red, and Tacunan and Catigan Green Dwarfs as mother palms, e.g. PCA 15-3 (MRD x BAYT), PCA 15-15 (CATD x BAYT) and TACD x BAYT. BAYT is also one of the progenitors of the first synthetic variety of coconut.

References

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Baybay Tall (BAYT)



Catigan Green Dwarf (CATD)

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Conservation

Catigan Green Dwarf (CATD) is preserved in 10 accessions (total of 1798 palms) in the coconut collections of Côte d'Ivoire, Ghana, Malaysia, Philippines, Tanzania and VietNam.

History

Catigan Green Dwarf is also known as the 'Rabara' or 'Bilaka' in the Philippines, its country of origin. Its stem, which is quite sturdy for a Dwarf, is slightly wider at the base. It grows quite rapidly for a Dwarf type: in the Philippines, it was over 7 m tall at 18 years of age. In Côte d'Ivoire, growth was slower, exceeding 1.5 m in height (measured from the ground to the base of the first living frond) nine years after planting. In Vanuatu, this Dwarf has proven to be particularly resistant to cyclones.

Identification

The inflorescence has a long peduncle, which can snap before ripeness if the bunches are very heavy. Young fruits are round and bright green and have three ridges at the tip of the fruit. When ripe, the ridges are receded, leaving a pointed nipple that is highly characteristic of the variety. Fruit characteristics vary depending on growing conditions. In Côte d'Ivoire, on sandy soils, the fruit only weighs 820g on average. In the Philippines, Vanuatu and VietNam, the fruit is heavier, at 1127, 1166 and 1236g, respectively. The fruits contain a substantial proportion of husk. Over a hundred Dwarf coconut varieties are conserved in the collections of research organizations. The Catigan Green Dwarf can be easily distinguished from several other Green Dwarf varieties described in this catalogue. It is among the Dwarfs that have a thick stem widening at the base, such as the Tacunan and Niu Leka Green Dwarfs. It can be distinguished from the Tacunan Green Dwarf, which also originates from the Philippines, by the existence of a pointed nipple on the tip of the fruit. Moreover, the inflorescence of the CATD is of a more conventional shape than that of the Tacunan Green Dwarf, which has an unusual cone shape. The CATD produces larger fruits than the Thailand and Pilipog Green Dwarfs. It produces rounder fruits than the Brazilian, Sri Lanka and Niu Leka Green Dwarfs.

Yield and production

The CATD starts bearing four years after planting. A mature palm produces around 14 bunches and 70 fruits per palm per year under the conditions at the Marc Delorme Research Station in Côte d'Ivoire. In the Philippines, it produces 16 bunches and 74 fruits per palm per year.

Other information

With its large fruits and robust stature, the Catigan Green Dwarf has captivated many researchers. In the Philippines, it has been crossed with various Talls and with the Malayan Red Dwarf. The Philippine Coconut Authority has undertaken large-scale production of hybrid seednuts. The hybrid between the CATD and the Laguna Tall has been disseminated under the varietal reference 'PCA 15-1'. In Côte d'Ivoire, this Dwarf has been crossed with various Dwarfs and Talls; the performance of these progenies remains mediocre. The Catigan Green Dwarf displays a degree of heterogeneity in its yields, which is also found in its progenies. Work doubtless remains to be done in fixing the best genotypic characteristics of CATD.

References

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Catigan Green Dwarf (CATD)



Kinabalan Green Dwarf (KIND)

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Conservation

According to the 2002 CGRD database, Kinabalan Green Dwarf (KIND) is preserved in three accessions (total of 1798 palms) in the coconut collections of Côte d'Ivoire and the Philippines.

History

This variety was first discovered by PCA researchers in Malita, Davao del Sur. Outright collection resulted in the field planting in September 1977 of 117 seedlings at Block 11B covering an effective area of 0.65 ha at the PCAs genebank in Zamboanga. A duplicate collection of this variety was established at the Coconut Breeding trials Unit in Mambusao, Capiz, Panay Island. It was sent from the Philippines to Côte d'Ivoire in 1980.

Identification

Kinabalan Green Dwarf has an average girth size of 143 cm at 20 cm above the ground and 83 cm at 1.5 m from the ground. It shows closely spaced leaf scars having an average of 32 cm length of the 11 leaf scars. Crown overall appearance is spherical. The petiole colour maybe yellow-green or yellow-green-brown and fruit colour is green. Fruit shape both in polar and equatorial view maybe oblong or round. Husked nut shape is either flat to almost round.

Yield and production

KIND variety has higher copra per nut (243.6g) but lower nuts per palm (82) than most Dwarf varieties in ZRC. Overall, it produces 3.5 tons average copra per ha at the age of 10-27 years. Number of female flower is 29 with female flower distribution of 38 in an inflorescence. Fruit set ranges from 50 to 80 nuts per palm. In terms of whole nut weight, it has an average weight of 1102g; 323g husk weight, 167g shell weight, 392g meat weight and 0.45 Fruit Quality Value (FQV). Copra per nut sometimes exceeds 300g. It has an average of 1.2 cm endosperm thickness.

Other information

KIND appears to grow well in areas with distinct dry and wet conditions. Majority of the palms survived the El Niño phenomenon without irrigation indicating some possibilities of possessing genes for drought tolerance. No observations have been made on the performance of this variety in areas with low temperature and water logging conditions.

References

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Kinabalan Green Dwarf (KIND)

