Pilipog Green Dwarf (PILD) in the Philippines

Rivera RL, Santos GA, Emmanuel EE, Rivera SM

Conservation

Pilipog Green Dwarf (PILD) is conserved at the Philippine Coconut Authority Zamboanga Research Centre (PCA-ZRC) in San Ramon, Zamboanga City and at the Coconut Breeding Trials Unit in Mambusao, Capiz; and in farmers' plantations in Barangay Bitaugan, Antiquiera, Bohol, Philippines.

History

Pilipog Green Dwarf is an age-old farmer's variety that is found sporadically in the many islands of the Philippines. Its exact origin is unknown but it is presumed to have evolved from a local Green Dwarf variety called Coconiño, which by now has probably evolved to a number of geographical variants like Dajili or Dahili (found in the Zamboanga Peninsula, Island of Mindanao), Guimaras Green Dwarf (found in Guimaras Island in Western Visayas), and others.

Identification

Pilipog Green Dwarf is readily recognizable through the pinkish colour of its female flowers, root tips, and the base of shoots of newly germinated fruits. It is strictly autogamous and shows very good uniformity in all morphological traits. Its fruits are characteristically small, round and smooth skinned. The stem is thin with closely spaced leaf scars. Its fronds are short and drooping with thin leaflets that are borne on a spherical crown. Except for its numerous small fruits, PILD appears to be a good variety. However, its small nuts are produce a meagre amount of copra (<150g per nut).

Yield and production

If grown in a suitable environment (good soil and at least 1600 mm of rain), this variety could be an excellent nut yielder, producing more than 130 fruits per palm per year. In addition, due to its shorter fronds and a smaller canopy, planting density could reach up to >200 palms per ha. Hence, it could yield up to 30 000 nuts per ha per year or 2.7 tons copra per ha per year. While the variety is a superior nut producer, it is not a popular planting material for commercial use due to its small fruits. More or less eight fruits are required to make a kilogramme of copra. Whole fruit weight is 747g, consisting of 258g husk, 105g shell and 252g meat.

Other information

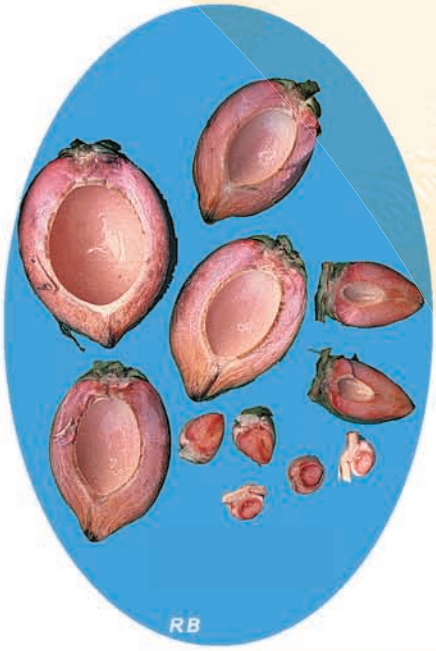
PILD has shown moderate tolerance to leaf spot diseases caused by *Pestalozzia palmarum* and *Helminthosporium* sp. as well moderate tolerance to the attack of mites *Oligonychus velascoi* Rimando. Although the variety requires highly suitable environment to express its superior nut yielding trait, it has been observed that it perform fairly well even in drier climate but with a lower nut yield and a more fragile stand. Like most coconut varieties, it cannot withstand long exposure to waterlogged conditions. The uniform, small size and round shaped fruits of this variety could be used in making shell craft novelty and handicrafts.

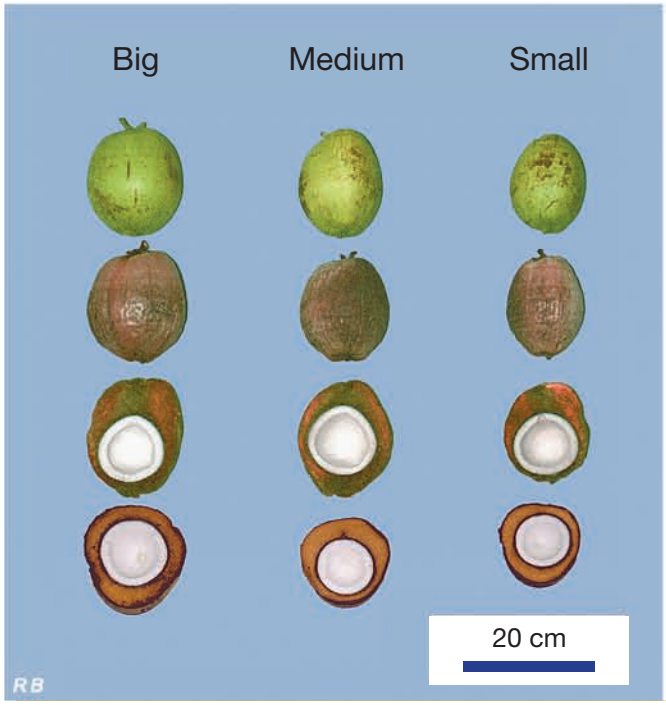
Reference

Santos GA, de la Cruz BV, Baylon GB, Rivera SM, Rivera RL. 1993. Collection and evaluation of coconut cultivars and conservation of genetic resources. Annual Report 1993. Philippine Coconut Authority-ARB, Diliman, Quezon City, Philippines.


RB


RB


RB


Big
Medium
Small
20 cm
RB


RB

San Ramon Tall (SNRT)

Ratnambal MJ, Kumaran PM, Bashkara Rao EVV, Pillai RV

Conservation

San Ramon Tall (SNRT) is conserved at the Central Plantation Crops Research Institute at Kasaragod (Kerala) and at the research stations in Aliyarnagar and Veppankulam (Tamil Nadu), Jagadalpur (Madhya Pradesh), Konark (Orissa), Mondouri (West Bengal) and Ratnagiri (Maharashtra), India. It is also conserved at the Zamboanga Research Centre in the Philippines.

History

San Ramon Tall variety was introduced to India in 1955. According to Ohler (1984), SNRT is the second most common variety of the Philippines and it is also found in several countries in the South and Southeast Asia and the Pacific. Copeland (1931) and Alzina (1931) reported San Ramon as a very high yielding type with large nuts nearly twice as large as the ordinary. This variety was exported to Sri Lanka in 1959 and planted in VietNam in 1987.

Identification

The palm grows to about 8-10 m with 40 leaves in the crown. The stem girth at 1 m from the ground level is 91 cm. There are 24 leaf scars measured from 1 to 2 m above ground level. The palm starts flowering 7-8 years after planting and produces 12-13 inflorescences per year. The inflorescence is somewhat long (126 cm) with short strong petiole. The palms are indirectly self-pollinating as there is inter-spadix overlapping even though there is no intra-spadix overlapping. The inter-spadix overlapping lasts for 4 days in about 66% of the inflorescences. Fruits are very big and oval shaped. The colour may be either green or brown. The husk is thin while the kernel is thick. The nut inside is flat bottomed with a pointed posterior.

Yield and production

Fruiting starts 9.5 to 10 years after planting. It produces 54 nuts per palm in Kasaragod; 39 in Aliyarnagar; 31 in Veppankulam and 30 in Konark. In the Philippines, the average number of fruits per palm is 79. The copra content is 285g in Kasaragod; 264g in Konark; 182g in Mondouri; and 225g in Veppankulam. In the Philippines, the copra content as reported by Santos and Rivera (1998) is 298g per nut. In Kasaragod, oil content is 68% while in Philippines, it is 63.5%.

Other information

Due to its high copra and oil yields, San Ramon Tall can be cultivated in large scale. In India, SNRT has been crossed with GBGD (SNRT x GBGD) for Dwarf x Tall hybrids; it has also been crossed with LCT (LCT x SNRT) and SSG (SSG x SNRT) for Tall x Dwarf hybrids. It is tolerant to leaf rot disease and to root (wilt) disease of Kerala.

References

Alzina FI. 1931. On the palms which are called Cocos and their great usefulness. Philippine Agriculturist 7:435.

Ratnambal MJ, Nair MK, Muralidharan K, Kumaran PM, Bhaskara Rao EVV, Pillai RV. 1995. Coconut Descriptor Part I, CPCRI, Kasaragod, Kerala, India.

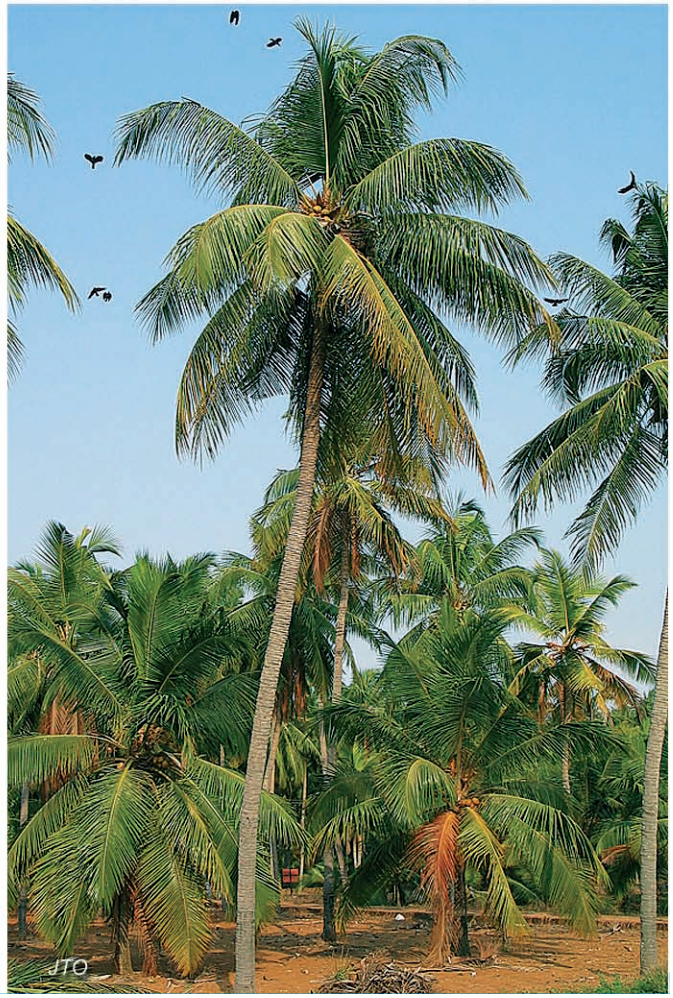
Santos GA, Rivera RL. 1998. Coconut breeding programme of the Philippines. In: Batugal PA, Ramanatha Rao V, editors. Coconut Breeding. IPGRI-APO, Serdang, Malaysia. pp. 42-56.


JTO


JTO


JTO


Big
Medium
Small
20 cm
JTO


JTO