MAKANDURA

SEED GARDEN

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Production of improved planting material for the national planting programme is an important function of the Coconut Research Institute. The Isolated Seed Garden at Ambakelle near Rajakadaluwa was established in 1955 to produce the improved varieties CRIC 60 and CRIC 65. CRIC 60 is the more desirable variety for the national replanting programme as it can withstand a variety of conditions. However, this seed garden is unable to produce this variety in required quantities. The CRI has since established two other seed gardens, namely Makandura Seed Garden and Maduru Oya Seed Garden to produce improved Tall x Tall material.

Planting of the Makandura Seed Garden, situated at Makandura in Gonawila in the Kurunegala district commenced in March, 1984 using high yielding material from the Isolated Seed Garden. The seed garden proper is of 85 ac in extent and is surrounded by 13 rows of Tall x Tall coconut barrier consisting of 59 ac. A total of 10,167 seedlings were planted from March, 1984 to July, 1985.

This seed garden is established in a part of Mahayaya Estate. The old coconut palms were uprooted before the new plantation was established. The annual rainfall in this area ranges from about 1,800 to 2,000 mm. The soil is generally clayey with an underlying lateritic pan at about 2.5 m depth. A reservoir has been constructed to provide irrigation water.

The planting programme at Makandura Seed Garden commenced in May, 1984. Field



Nos. 1,2 and their barrier areas were planted at 8 x 8 x 8m (26 x 26 x 26 ft) to have 74 palms per acre (180 palms/ha) while field Nos 3, 4 and its barrier area were planted at 7.6 x 7.6 x 7.6 m (25 x 25 x 25 ft) to have 80 palm/ac (200 palms/ha).

Planting of seedlings, application of fertilizer and the maintenance of seedlings were carried out as per CRI recommendations. However, the following are noteworthy:

- (a) Almost all the seedlings used were polybagged
- (b) The area was replanted, and not underplanted.
- (c) Most seedlings were provided with a semi-circular husk trench just outside the manure circle to conserve moisture during dry months.

First flowering was noticed in three plants in 1987, i.e., about $3\frac{1}{2}$ years after planting. By the end of 1988, over 450 young palms were in flower, and by July, 1989, over 1000 young palms (about 10% of the population) were in flower. The performance, therefore, is exceptionally good and is attributed to the management practices adopted. In particular, the use of polybagged seedlings, replanting and the use of husk trenches around seedling appear to be contributory factors for this performance.

The seed garden will commence the issue of seednuts in 1990, and the entire seed garden is expected to come into production by 1991.