

Improving Propagation and Management of Nipa Palm

Ecology and Distribution

Nipa palm is a tropical plant. Its optimum climate is sub-humid to humid. Nipa palm thrives only in a brackish water environment. It is rarely seen directly on the seashore. Optimum conditions for nipa growth are met when the base of the palm is regularly inundated by brackish water. For this reason, nipa palm occupies estuarine tidal floodplains of rivers. Typically, nipa palm grows independently in estuarine areas, but in some areas it grows mixed with other mangrove trees.

Nipa palm is abundant along the banks of the Pak Phanang river as well as canals, bay and in swampy lowlands in Nakhon Sri Thammarat, Thailand. Due to its thick horizontal stem which is buried underground and branches dichotomously, large colonies of nipa form scattered nature stands covering an area of approximately 3,200 hectares.

Propagation

Nipa grows very well in muddy area and swamps. It can be planted to restore abandoned shrimp farms where soil pH is less than 4.5 and with low soil nutrient. Planting nipa seeds initially in freshwater for 20 days would result to higher growth rate compared to the ones not exposed to freshwater. Growth is also faster if nipa is exposed to enough light. In the case of Pak Phanang, planting nipa in new areas would entail digging the soil at a depth of 50 cm and width of 30 cm to aid the growth of roots. Generative propagation is by seed (fruit) and vegetative propagation is through dichotomous branching of the rhizome. When utilized for sap production, very

dense natural nipa palm stands should be thinned and cleared of old leaf debris.

Prospects

Nipa palm has a good potential for roof, sugar, vinegar and alcohol production in Nakhon Sri Thammarat. The sugar is already available from the sap. Nipa palm can also be planted on lands that are unsuitable for other food crops. Tapping can be carried out all the year round, thus providing employment for people in the area.

Improving Nipa Production and Management

CORIN-Asia has taken the lead in recognizing the importance of conservation, management, and restoration of nipa forests to the local community so that productivity may be optimized and without destroying the Pak Phanang's ecosystem. CORIN-

Asia works with communities in improving local knowledge in nipa processing for livelihood development and provides more opportunities especially among women.

CORIN-Asia, in coordination with the local authority, the Tambon Administrative Organization (TAO), established a revolving community fund in 2006 to support nipa sugar production. CORIN-Asia also facilitated the Royal Irrigation Department (RID) and the TAO in managing the water gate operations. The gate operation is intended to reduce salinity of the saltwater for nipa growth.

A pilot project on stove improvement for nipa sugar production was also initiated by CORIN-Asia in Tambon Ka Nam Na. The improved stove design helped the households reduce labor costs and save energy by as much as 60%.



Nipa palms abound in estuarine areas of Pak Phanang.



CORIN-Asia has been instrumental in empowering communities of Pak Phanang through capacity building and adding value to nipa production.