

Nanas Pada a pineapple variety from Dalat
By
Jaman Hj. Osman

Pada pineapple is the name given by the Department of Agriculture to a variety of pineapple popularly known as "Nanas Sawit" in Mukah and Dalat. The plant was first found by Encik Pada bin Isut growing amongst other pineapple plants in his farm located along Sungai Aba near Dalat. The whole fruit is almost evenly sweet, soft and juicy. Because of these characteristics Nanas Pada is very popular. Since then Encik Pada and his family have propagated more and now the planting had spread to not only in Dalat and Mukah but to other parts of Sarawak such as Miri and Kuching.

Pineapple (*Ananas comosus*) belongs to the family Bromeliaceae. The fruit is commonly eaten fresh as dessert. Very often it is made into jam and juice. Pineapple juice is popular as a refreshing drink.



Encik Pada bin Isut at his garden located along Sungai Aba, near to Dalat Town.

Sarawak Pineapples

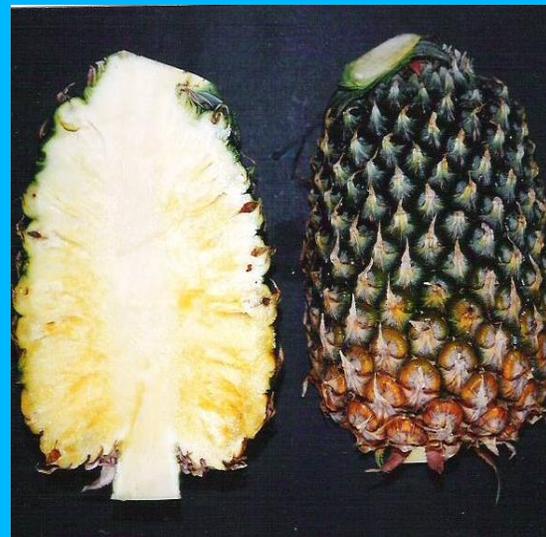
In Sarawak, pineapple is grown mainly in peat and muck soils along the flat coastal belt. The commercial pineapples belong mainly to two main groups; the smooth Cayenne and the spiny Mauritius. The so-called "Sarawak Pineapple" or Nanas Paun and its relatives belong to the former, while Nanas Sarikei the latter. Even as early as 1949 F.C.Cooke, invited to study the possibility of a pineapple canning industry in Sarawak, reported that he counted more than 20 different mutations of Nanas Paun based on both plant and fruit characteristics. While some may be variations due to habitat it is also possible that natural hybridization with the spiny Sarikei pineapple or spiny Mauritius group may occurred. Nanas Pada is probably a stable natural mutant.

Plant Characters

The mature plant has slender green leaves with dark red pigmentation along middle of the upper surface and silver grey on the lower surface. All the leaves are armed with sharp spines along both margins. The inflorescence, borne on a stout peduncle, is pink in colour and consist a 100-170 flowers. Bract leaves at the base of the inflorescence are red. The crown, green and conical, measures 10-15 cm long. No slip has been observed but 3-5 aerial suckers and 3-5 ground suckers are normally produced on each plant.



Young Inflorescence



Golden Yellow Flesh



Matured Fruit



Harvesting Index 3



50 % of fruit turn brownish yellow



100 % of fruit turn brownish yellow

Fruit Characters

Nanas Pasa fruit is almost cylindrical with medium sized prominently protruding eyes. On each eye the hard pointed remains of the stigma is quite distinct. Unripe fruits are dark green ripening to brownish yellow and finally to almost brownish red which is similar to the colour of ripened oil palm fruit bunch. This was why the local called it "Nanas Sawit".

Cultural Practices

Aerial or ground suckers are used as planting material. Suckers are planted in paired rows of 90 cm x 60 cm x 60 cm. For uniform fruit production, replanting is recommended after each season although one ratoon crop is acceptable.

On peat soil, the recommended fertilizer rate is 435 kg ammonium sulphate, 6 kg rock phosphate and 163 kg MOP (Muriate of Potash) per application per hectare. These are applied at 2, 5 and 8 months after transplanting. On mineral soil, the compound fertilizer 15:15:15 (N:P:K) is given at 860 kg per hectare per application at 2 and 5 months after transplanting. However, at 8 months the compound 12:12:17:2+TE (N:P:K:Mg+TE) at the same rate is used instead.

Foliar sprays containing 42gm copper sulphate, 42 gm zinc sulphate, 21 gm ferrous sulphate, 640 gm hydrated lime and 640 gm urea in 18 litres water are applied at 1 and again 4 months after transplanting for both peat and mineral soil plantings.

For simultaneous and uniform fruit production, pineapple plants normally induced to flower at 9-10 months after transplanting. Commercial preparations are available or a mixture of 300 ppm Ethrel and 3% urea can be sprayed at the rate of 40 ml per plant.

Although generally, in Sarawak, pineapple cultivation has been relatively free from major pest and diseases, mealy-bugs can cause considerable damage. Mealy-bugs are spread by ants and attack first the roots just below the soil surface. Infected plants appear weak and wilting, often reddish-yellow in colour. Dead and dying leaves should be removed and the plants treated at the base with chemicals such as white oil, dimethoate or acephate.

Harvesting and Eating Quality

Nanas Pada has been found to be very responsive to flower induction treatment. On average, after induction treatment the plant will flower in 30 days; fruits can be harvested after 125-130 days. The best time of harvesting the fruits are when 2-3 rows of eyes begin to turn brownish yellow. This is also the harvesting stage whereby the fruit had achieve excellent eating quality, very sweet and crunchy. The fruits are considered over ripen when 100 % of the skin turned brownish yellow. At this stage the flesh would be soggy and watery.

Fully ripened fruits weigh 1.5 kg – 2.5 kg with Total Soluble Solids (TSS) of 15-19%. From an investigation, on average, the fruits of Nanas Pada

planted on peat soil are slightly larger (2.3 kg) than when planted on mineral soil (1.5 kg). The fruit is best consumed within 3 days after harvest.