

An IT farmer- Pioneer in Dates cultivation in Tiruppur district

Name: Mr. K. Manivannan.

Place: Manjapur.

Mobile no: 9789622244

Occupation: He is an IT employee in Robert Boss Engineering Company. His secondary occupation is agriculture. He visited many foreign countries where he was inspired to cultivate dates. In addition, he also supported by the Deputy Agricultural Officer, Pongalur for technical guidance.



Area under dates: 1.5 acres

Variety: There are more than 200 varieties in dates. He cultivates the variety named 'Burry'. He preferred this variety because of the berries can be eaten directly and also no necessity for processing of dates.

Saplings: He obtained saplings from K.G dates, Vanjipalayam. They imported the saplings from foreign countries too. They are the tissue culture derived saplings. The 2 ½ years old saplings were given to the farmer. Each saplings costs around Rs.3,500.

Type of soil: Red soil.

Planting: Pits of 3x3 ft were dug. About ½ feet is filled with soil. He then added a layer of neem cake, 50 kg FYM along with biofertilizers like *Azospirillum*, *Phosphobacteria* and biocontrol agents like *Trichoderma viride*, *Pseudomonas fluorescence*. The saplings are then planted in the centre of the pit and then the soil is filled upto the ground level.

Spacing: 25x25 ft

Fertilizer management: At the early stages (say 1-2 years) the plant is fertilized thrice per year while in the later stages it is reduced to two times per year. He used to apply a layer of neem cake, FYM- 30 kg, vermicompost- 5kg/ tree/ top dressing. No chemical fertilizer has been used.

Irrigation management: Drip irrigation is being practiced. Ring basins are made around the trees and the trees are irrigated twice a week. The drippers are laid 1 ft away from the stem region. The ring basins are covered with coconut leaves which acts as mulch thereby reducing the water losses. During rainy season, drainage facility is needed.

Weed management: The coconut leaves in the ring basins help to prevent the weed growth.

Flowering: Flowering is obtained in 2 ½ years. He transplanted his saplings in August, 2011. He could get the flowers in February, 2014. Generally, the male trees will flower in January while the female trees in February. This condition favours cross pollination. The night temperature should be around 15°C during February above which the flowering is affected.

Other intercultural operations:

Pollination: Immediately on the next of flowering, the flowers have to be pollinated. The pollens are collected from the male trees and mixed with wheat flour at the rate of 1g of pollen in 10 g of flour and then sprayed over the female flowers. Generally, the recommended ratio of female: male tree is 100: 2. The upper flowers are stronger than the lower ones. About 5- 6 flowers/ tree can be obtained.

Bending of inflorescence: The peduncle is bent and tied with the help of leaves. This facilitates easy intercultivation and harvesting. This is done on the third day after pollination.

Thinning: When the berries are of ber size, the berries are thinned to enhance the taste and quality of the fruits. Before thinning, there will be around 40- 60 berries and after thinning there should be around 20 berries/ inflorescence.

Removal of offshoots: It is another important intercultural operation. The plants start producing offshoots from 1 ½ years. About 15 offshoots will be produced by a plant throughout its lifespan. These offshoots should be periodically removed.



Bunch cover: When the berries start ripening, the bunch should be covered with a thick polythene sheet in order to prevent the damage caused by birds.



Plant protection:

Major pests: Rhinoceros beetle and Red Palm weevil

For the control of this, he applied neem cake but it was not effective. Then he planted 4 *Aloe vera* plants around each tree which was also not much effective. He installed 4 rhinolures in his field, which turned out successfully. For the effective control, he went for monocrotophos @ 50 ml in 10 litres of water which he gave twice a month.



Maturity index: The colour of the berries changes from green to yellow.

Harvest: The fruits are harvested during July - August. At the early stage, the matured berries are picked and in the later stage, the berries are picked in bunches.

Yield: Normal yield: 20 - 30 kg/ tree. But in his field, he could obtain an outstanding yield of around 40 - 50 kg/ tree. Economic yield can be obtained from fifth year onwards.

Price: Last year the price was around Rs.350/ kg. This, year he is expecting a higher price.

Gross return: Rs.14,000 - Rs.17,500/ tree/ year.

Marketing: His fruits are sold to K.G dates, Vanjipalayam from where he bought the saplings.





Tamilnadu Agricultural University- Coimbatore- 641 003

RAWE- Rural Agricultural Work Experience (0+6)

Pongalur block

“A Novel approach to conserve a Native breed”

Kangeyam is one of the internationally recognized draught breeds of Tamil Nadu known for its nutrition milk and hardiness in the field. The breed is a native of kangeyam tracts and is predominantly found in the districts of Erode, Karur, Namakkal, Coimbatore, Tirupur and Dindigul. The breed is considered as pride of Tamil Nadu.

But in the recent past, the population of this breed has been drastically decreasing, slowly pushing it towards its extinction. The prime reasons for the dwindling population are shrinking agricultural land, increasing farm mechanization, lack of awareness about the importance of conserving native breeds. The trend is highly alarming and if appropriate conservation measures are not undertaken, there is a chance of losing the breed forever. We need active initiatives both from the government and the people for conserving the pride of Tamil Nadu.

One such notable effort is being undertaken by Mr. Uthamaraj of Kondaripalayam village (Pongalur block). Currently he is involved in conserving 40 Kangeyam breeds which includes 24 Cows, 3 Bulls and 13 Calves. Basically a businessman by profession, Mr. Uthamaraj dreamt of conserving the Kangeyam breed right from his school days. This dream urged him to buy 24 cattle in 2009 from kannavaram cattle market. With his continuous effort, he took the number to 40 cattle by the year 2014. His strategy includes implementing the indigenous

techniques of conservation. He avoids artificial insemination and goes for natural service by the bulls, which he maintains. He feeds them the fodder, which he grows on his own farm. The fodder includes a mixture of Bajra Napier grass, Desmanthus and Hay made from the stalks of Sorghum and Maize grown as intercrop with coconut in an area of 35 acres using sprinkler irrigation. He maintains the cattle with the help of 16 permanent labours.

When enquired about the purpose he replied that the main purpose of his efforts is conservation. But in order to make the plan economically viable he is trying a novel technique. He collects urine by directing the cattle shed drain to a tank. He then adds a mixture containing 100 kg jaggery, 25 kg cowdung and 4 kg of groundnut flour to a tank full of cattle urine. He allows the suspension to ferment for a period of 4 days. After fermentation, he uses the solution for fertigation. He fills ¼th of the fertilizer tank with this solution and using drippers, he applies it to 2200 coconut trees. As for the cowdung, he puts it for composting and applying composted manure to the coconut trees. Doing these he has turned his farm self sustainable as he need not buy any manures and fertilizers from outside. Mr. Uthamaraj says that only the Kangeyam breed is suitable for this purpose and not the exotic and cross breeds which are popular among the farming community. Apart from providing the micro and macro nutrients, this method also gives the plant a certain degree of disease tolerance. At present, this method is practiced only by him in the area and wishes to popularize it among other farmers also for which he is seeking government's support. He hopes that gradually more and more farmers would come forward to assist him in the conservation programme and restore the former glory of the breed once again.

Farmer's mobile number: 9842215015

The cows







The bulls



Suspension tank



Fertilizer tank



