

## Natural pesticide from Jatropha, Pongamia, Annona Squamosa Seed and Bacteria

An indigenous and native wisdom approach to prevent pest attack has been developed by a local farmer in Andhra Pradesh, India. He has been successfully using this method in his Sugarcane, Banana, Grape, cotton, vegetable farms.

### *PREPARATION OF THE NATURAL PESTICIDE:*

250 kilograms each of Jatropha seeds, neem seeds, Annona Squamosa seeds (Custard Apple) and Pongamia seeds are crushed into a powder. In this 1000 kg powder is mixed D Compost bacteria. It should remain for a month. For this mixture is added one kg of B bacteria. This mixture is further kept for a month. Afterwards one kilogram of Jaggery (product from Sugarcane) is mixed in 200 litres of water. From the mixture prepared earlier 20 kg was taken and mixed with jaggery water. This has to be kept for 10 days. This liquid has to be filtered. Now the natural pesticide is ready for use. Now 10 litres of the natural pesticide liquid is mixed with another 10 litres of water and sprayed on the crop. The operation has to be carried out at intervals of 7 days. For vegetables 4 times and for crops like cotton and grape 5 times this natural pesticide has to be sprayed. When the natural pesticide is sprayed on the leaves, the pests won't touch them. The Farmer has been practicing this method for over two years with excellent results. This method will keep the environment free from chemical pesticides.

### *ECONOMICS OF THE NATURAL PESTICIDE:*

D compost bacteria, B bacteria packets are available at Biofertiliser shops at a cost of 2 US \$ per packet. One kg of mixed seed powder cost 20 US cents. This natural pesticide is quite cheap compared to chemical pesticides besides pollution -free.

In my Monograph as well as in my note on Rural Industrialisation - Leaf to Root Approach, I have advocated natural pesticide from Annona seed oil.

Another innovative method adopted by rural farmers is:

In the Groundnut (peanut) crop RED HAIRY CATER PILLER is a menace. This comes into open during nights and eats away the leaves. Local people put CALOTROPIS leaves in bulk at various places in the field. The red hairy caterpillar after eating Calotropis leaves further regeneration of the insect is arrested. Perhaps the latex in the calotropis leaves is responsible for this. Calotropis is a care-free growth plant which is available everywhere. It is also used as green manure.

Yet another method employed is burning rubber tyres near the field in the night. The moth of Red hairy caterpillar gets attracted to the light and falls in the fire.

Also to cure Foot and Mouth disease in the cattle, local people mix the juice of Annona Squamosa leaves with Turmeric powder and put it on the wound. This is an age old practice prevailing in the rural areas.

Thorough research on these traditional methods will help to isolate the pigments which can be utilized naturally.

In the early days people used to put goat and sheep skin in mud and put calotropis leaves for three days to remove the hair. The latex in the calotropis helps to remove the hair from the skin of goats and sheep. Central Leather Research Institute, Chennai, India carried out extensive studies on this method and they isolated the active ingredient and patented it. Now this chemical is widely used to remove the hair in sheep and goat skin.

Dr.A.Jagadeesh

Convener

Nayudamma Centre for Development Alternatives

2/210 First Floor

Nawabpet

NELLORE 524 002

Andhra Pradesh

INDIA

E -mail: a\_jagadeesh2@yahoo.com