

Introduction:

Pest management in natural farming is a holistic (whole-farm) approach that largely depends on the ecological processes and biodiversity in the agroecosystem. Prevention of pests from reaching economically damaging levels without causing risk to the environment is the goal to every farming activity. In order to successfully manage of pest in natural farming, few of organic pesticides were developed.

1. Neemastra

Neemastra is an organic pesticide which contained neem extracts that helpful in controlling wide range of insect pests. Neem leaves have amazing pesticidal properties. They also act as fungicide as well as have anti-bacterial properties. Moreover, neem also acts as a fertilizer and also improves the fertility of the soil. It is useful against sucking pests and mealy bugs, rice weevils, caterpillars, etc.

Preparation procedure:

Take 100 litre of water in a drum. Add 5 litres of local cow urine and 5 kg local cow dung (only indigenous cow) into it. Make sure that there is no lump in cow's dung. Crush using sil-over 5 kgs of neem leaves with thin stem or neem seeds powder and add it into the water. Stir this solution twice a day by a stick for at least 1 minute at the time. The wooden stick should be rotated in the mixture according to clockwise direction, so that positive energy spreads in the mixture. Cover the tank with a jute sack or poly net. The tank should be in shadow and the tank should not be directly exposed to sunlight or rain water. Allow the mixture to ferment for 48 hours. Filter this by cloth and use after 48 hours. Use this for foliar spray in one acre. The mixture should be sprayed on plants. Do not mix the water in the mixture, sprinkle the same mixture. The mixture can be stored for 6 months. Used the mixture either periodically once every month in the form of foliar spray or whenever your plant or crop gets infested with pest during early morning or evening.

2. Bramhastra

Bramhastra is a natural pesticide used to control against large and small insects such as borer, pod borer, and fruit borer and all the sucking pests.

Preparation procedure:

Take a pot. Crush 3 kg neem leaves in 10 litre of cow urine. Crush 2 kg custard apple leaf, 2 kg papaya leaf, 2 kg pomegranate leaves, 2 kg guava leaves in water and add to the above mixture. Add 2 kg of lantana leaves and 2 Kg white dhatura leaf pulp into it if available. If dhatura leaf is not available mango leaves can be used.

Mix all the ingredients and boil the mixture for 5 times at some interval till it becomes half. Keep the boiled mixture for 24 hours for fermentation. Filter this by cloth. This can be stored in bottles for 6 months.

Spay the bramhastra mixture @ 20 ml per litre of water. Repeated the sprayed for every week if the

infestation is severe or repeat every month to protect from insect infestation and for excellent result in pest prevention and plant growth.

3. Agniastra

A complete organic pesticide prepared with the Indian traditional methodology. It acts as a manure for the soil and plants and it can remove all kind of insects pests like leaf roller, stem borer, fruit borer, pod borer, white worm, leaf worm, etc. and also increase the richness of the soil. Moreover it acts as an enricher for greenery of the plant, can be use for vegetables, fruits, flowers and other agriculture crops.

Preparation procedure:

Take a pot. Add 10 litres local cow urine in it. Then add 1 kg tobacco by crushing it in the urine. Crush 500 gram of green chilli and add it in urine. Crush 500 gram garlic and add it in the urine. Add 5 kg neem leaves pulp. Then boil this solution well 5 times continuously.

Let this solution to ferment for 24 hours. Filter this by cloth.

Spray once in four days gap for first and second application and later spray once in a week. Best time for application of Agni-Astra is either in early morning hours or evening hours. 1 litre of agniastra can be mixed with 50 litres of water and it can be sprayed on the crops. Do not mix any other chemicals with Agni-Astra.

All the mixtures have fermentation process running hence some fizz on opening the bottle can be expected. Be careful while opening the bottle, so that the fizz does not spill over. It is recommended to wait for 30 minutes before opening, if the bottle has been subjected to any shaking movement.

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INSECT PEST MANAGEMENT METHOD IN NATURAL FARMING



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