

### Sour Butter Milk

Input needed: Butter milk 4-6 days old 3 lt, Water 100 lt  
Mix and spray on crops at weekly interval to check disease incidence. It is a good fungicide



### Sounthaster

Input needed: Dried ginger powder: 200 g, Milk: 5 lt,  
Water: 200 lt

#### Method of Preparation and Application:

Boil the 200 g dried ginger powder in 2 lt of water till it remain 1 lt. Separately boil milk and let it cool down. Mix both of these in 200 lt water. It is sufficient to spray in 1 acre to check leaf spots/ blights and other diseases in crops.



### Tobacco Decoction Preparation Method:

Nicotine in tobacco control the pests through contact and is use against whitefly and other sucking pests.

Input needed: Tobacco waste- 1 kg, Soap powder- 100 gm

### Method of Preparation and Application:

- Boil 1 kg Tobacco in 10 L of water for 30 minutes
- Add water regularly
- Cool the decoction and filter it through a thin cloth
- Add 100 L of water to the above decoction (1 acre) and apply in the evening time.



## PEST AND DISEASE MANAGEMENT IN NATURAL FARMING



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As in natural farming management use of synthetic chemicals are prohibited, the pest management is done by cultural or agronomic, mechanical, biological or by naturally accepted botanical extract. In natural farming mainly use Neem, cow urine, fermented curd water, dashparni extract, neem-cow urine extract, mix leaves extract and chilli-garlic extract etc. can be used in the management of pests.

**Neemastra:** Neemastra is used to prevent or cure diseases, and kill insects or larvae that eat plant foliage and suck plant sap. This also helps in controlling the reproduction of harmful insects. Neemastra is very easy to prepare and is an effective pest repellent and bio-insecticide for Natural Farming.

**Inputs needed:** 200 litre water, 2 kg cow dung, 10 litre cow urine, 10 kg fine paste of neem leaves along with short branches.

#### Preparation of Neemastra:

- Take 200 litre of water into a drum and add 10 litre of cow urine and 2 kg of cow dung.
- Add 10 kg of crushed neem leaves along with its short stems or branches.
- Stir all the above contents in clockwise direction with a thick wooden stick and cover the drum with a gunny bag.
- Prepare and keep Neemastra in shade to prevent sunlight and rainfall exposure.
- Stir the above solution every morning and evening in clockwise direction for one minute.
- After 48 hours, filter the solution and store it for use.



**Method of Application:** Use the above prepared and filtered Neemastra without dilution with water. Neemastra can be stored for use up to 6 months. Controls: All the sucking pests, jassids, aphids, white fly and small caterpillars are controlled by Neemastra.

**Brahmastra:** This is a natural insecticide prepared from leaves which have specific alkaloids to repel pests. It controls all sucking pests and hidden caterpillars that are present in pods and fruits.

**Inputs needed:** 20 litre Cow Urine, 2 kg Neem leaves along with short stems or branches, 2 kg Karanj leaves, 2 kg Custard Apple leaves, 2 kg Datura leaves, 2 kg Castor leaves, 2 kg Mango leaves and 2 kg Lantana leaves.



#### Preparation of Brahmastra:

- Take 20 litre of cow urine in a suitable vessel
- Add into it paste of any five leaves as described above in the ingredients .
- Boil the above contents on slow flame,
- Allow the above contents to cool for 48 hours in shade.
- Stir the contents in clockwise direction twice a day for one minute.
- After 48 hours, filter the solution and store it in earthen pot for future use .

- Brahmastra can be stored for six months. Method of Application: Use 6 litre of Brahmastra diluted with 200 litre of water as foliar spray on the standing crop in one acre field.

**Agniastra:** It is used to control all sucking pests and caterpillars.

**Inputs needed:** 20 litre cow urine, 2 kg neem leaves paste, 500 gm tobacco powder, 500 gm green chilli paste, 250 gm garlic paste.

#### Preparation of Agniastra:

- Take 20 litre cow urine in a suitable vessel.
- Add into it paste of 2 kg neem leaves, 500 gram tobacco powder, 500 gram green chilli paste, 250 gram garlic paste.
- Boil the above contents on slow flame
- Allow the above contents to cool for 48 hours in shade
- Stir the contents in clockwise direction twice a day for one minute
- Filter the solution and store it in earthen pot for future use
- Agniastra can be stored for three months

**Method of Application:** Use 6 litre of Agniastra diluted with 200 litre of water on standing crop in one acre field.



**Fungicide:** Fungicide prepared with cow milk and curd is found to be very effective in controlling the fungus.

#### Method of Preparation:

- Take 3 litre milk and prepare curd from it.
- Remove the creamy layer and leave for 3 to 5 days till the formation of a grey layer of fungus.
- Churn it well, mix it with water and spray on infected crops after filtering.