

**PEST AND DISEASES MANAGEMENT**  
**WITH**  
**AVAILABLE RESOURCES**  
**OF**  
**FARMERS**

## **BIJAMRITA**

- \* Cow dung - 5 kg
- \* Cow urine - 5 lit
- \* Cow milk - 1 lit
- \* Lime - 250 gm
- \* Water - 10 lit
- \* Mix all the ingredients and keep it overnight

## **How to treat with Bijamrita**

- o Sprinkle Bijamrita on the seeds of any crop, rinse seeds well by hand, dry in shade before sowing.
- o Treat vegetative part, like cuttings, Tuber, Rhizome, corms / bulbs, etc by dipping (5-10 minutes).
- o Dip the roots of seedlings for few minutes before transplanting.
- o Leguminous seeds, viz. cowpea, beans, pea, etc. should be soaked for few seconds.

## **PANCHAGVYA KRISHI**

- ❑ Panchagvya is special bio-enhancer prepared from 5 cow products - dung, urine, milk, curd and ghee.
- ❑ These are incubated in wide mouth container along with sugarcane juice, toddy and ripe banana.
- ❑ Panchagvya is used for seed / seedling / plant part treatment.
- ❑ It is also sprayed as foliar spray.
- ❑ It can be mixed with irrigation water @ 50 lit / ha.

# Ingredients for preparation of Panchagvya

Sl. No.	Ingredients	Quantity
1	Fresh cow dung	1 kg
2	Fresh cow dung slurry	4 kg
3	Cow's urine	3 litres
4	Cow's milk	3 litres
5	Cow's curd	3 litres
6	Cow's ghee	3 kg
7	Sugarcane Juice*	3 litres
8	Tender coconut water**	3 litres
9	Banana ripe *	12
10	Toddy (if available)	2 litres

## What makes *Panchagvya* to be accepted

- ✓ Protection against pest and diseases
- ✓ Yield increase
- ✓ Growth tolerance
- ✓ Nutrient supplement
- ✓ Improvement in quality of produce

## **Application**

3 - 4 percent solution has been found effective and can be used for –

1. Seed / Seedlings treatment
2. Seed storage
3. Spraying on the foliage of different crops

**Some examples  
of  
Organic Pesticides**



## **Sucking Pests**

- o Take an earthen pot
- o Fill 15 litres of cow butter milk
- o Incorporate a small piece of copper
- o Burry the pot for 21 days in ground by covering up to neck
- o Take 10 lit. slurry-dilute to 200 litres
- o Spray on 1 acre
- o Effective for control of sucking pests & viruses

# Chewing Pests

- ❖ Take an earthen pot
- ❖ Fill 15 liters of cow urine
- ❖ Incorporate 1 kg chopped levels of Neem, Caliotropis, Ipomea,
- ❖ Burry the pot for 7 days in ground by closing neck
- ❖ Take 10 liters slurry - dilute to 200 liters - Spray on one acre area.

## Hard Pests

- Take an earthen Pot
- Fill with 15 liters of cow urine
- Incorporate the following after chopping
- One kg each of Caliotropis, Pongamia, Ipomea leaves, Green chillies, ½ kg of garlic and Neem seed kernel
- Burry the pot 7-10 days by closing its mouth
- Take 10 liters slurry dilute to 200 liters and spray on 1 acre
- Very effective for control of hard pests - like hopper, mealy bug and mites etc.

# PEST AND DISEASE MANAGEMENT

- o Encourage proper habitual management.
- o Adopt appropriate crop rotation including trap crops.
- o Prefer local seeds and regionally adopted conventional varieties.
- o Cow urine and butter milk are potent sources for protection.
- o Local herbs viz: Neem, Castor, pongamia, Lantana, Calotropis, Nettle, Kalmegh, chilies, garlic, drumstick, bacl etc. after proper decomposition are quite effective in management.
- o Initial experience will be required for different crops and pests.

**PRINCIPLES  
OF  
ORGANIC AGRICULTURE**

## **Principle of HEALTH**

Organic Agriculture should sustain and enhance the health of soil, Plant, animal, human and planet as one and indivisible.

## **Principle of ECOLOGY**

Organic Agriculture should be based on living ecological systems and cycles, work with them, emulate them and help sustain them.

## **Principle of FAIRNESS**

Organic Agriculture should build on relationship that ensure fairness with regard to the common environment and life opportunities.



## **Principle of CARE**

Organic Agriculture should be managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment.

# NUTRIENT MANAGEMENT

- ❖ Grow legumes a cover / inter / green manure or as mulch material
- ❖ Apply 3-5 ton / ha for close spaced and 20-25 kg / tree enrich compost
- ❖ Mulch the interspaces
- ❖ Drench with Bio-enhancers viz. Amritpani, CPP+BD-500 / vermiwash
- ❖ Spray Bio-enhancers viz. Jeevamrita / Panchagvya / Vermiwash.

# USE OF SANJIVAK

## Preparation & use :

- Mix 100-200 kg cow dung + 100 Lit cow urine + 500 lit in closed drum
- Ferment for 10 days
- Dilute 20 times & sprinkle in one acre either as soil spray or along with soil water
- Use as soil application either by sprinkling or by applying through irrigation water
- Three application are needed –
  - i. Before sowing
  - ii. Twenty days after sowing and
  - iii. 45 days after sowing.