

FIELD GUIDE FOR SPRAYERS



सत्यमेव जयते

**NATIONAL INSTITUTE OF PLANT HEALTH
MANAGEMENT**

Ministry of Agriculture & Farmers welfare,
Government of India

Rajendranagar, Hyderabad- 500030

Phone No. +91-40-24013346



रा व स्वा प्र सं
NIPHM

Pesticide

Chemical that is used to control pests.



Types of pesticides

- Insecticides, fungicides, herbicides, and many other words that end in “-cide”.



How do we know about the pesticide?



Trade name

Formulation

Active ingredient

Quantity & description

Precautions



SLIGHTLY
TOXIC



MODERATELY
TOXIC



HIGHLY
TOXIC



EXTREMELY
TOXIC

How to mix the formulation

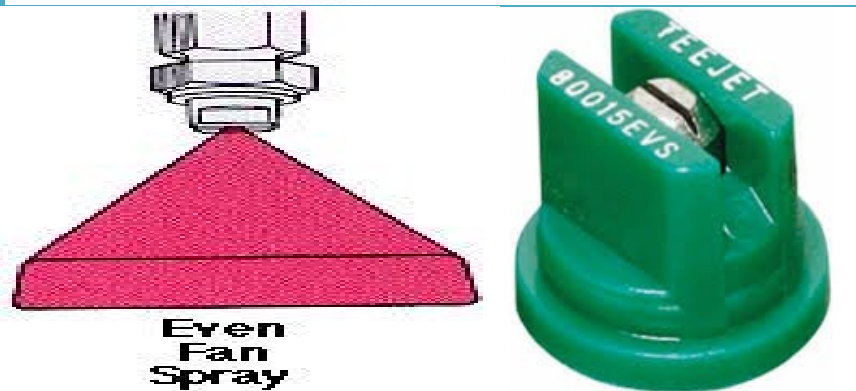
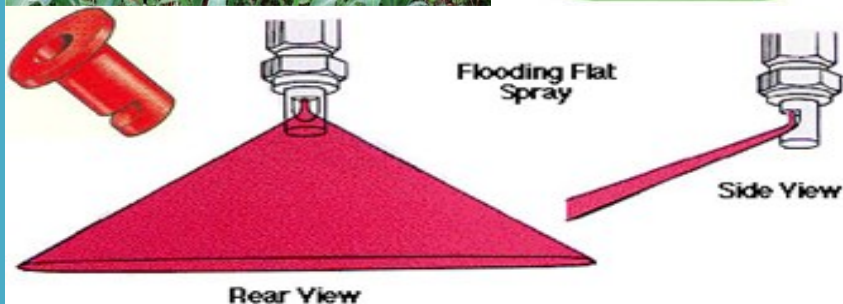


- Half fill the sprayer tank with clean water. Add the measured product.
- Rinse the measuring vessel and the product container, if it has been emptied, and pour the rinsing into the tank.
- Fit the tank lid and gently shake the sprayer, by rocking or use a stirrer to ensure thorough mixing.

- Remove the lid and top up the tank with water to the correct level. Ensure that the tank is not overfilled and is clean and dry before handling.
- Empty containers must be safely disposed of, in compliance with regulations.
- Wettable powders may best be pre -mixed ('creamed') with a little water before pouring into the sprayer tank.
- Only shake a product container if the label so.

Weedicide Application

- Flood jet and Flat Fan nozzles are used.



Fungicide application

- For fungicide application good penetration is required. Flood jet and Flat Fan nozzles are used.



Insecticide application

- Hollow cone nozzles are used



Information about sprayers



CLASSIFICATION OF SPRAYING TECHNIQUES

S. No	Spraying Technique	Volume (L/ha)	Droplet size (μ)
1.	High volume spraying	300 - 500	250 – 1000
2.	Low volume spraying	50 – 150	150 – 220
3.	Ultra low volume spraying	< 5	70 to 100

Application of chemical for crawling/ soil borne pest



Application of chemical for sucking leaf borne pests



Sprayers and nozzles used for the above problems



Field flying pest / airborne pest



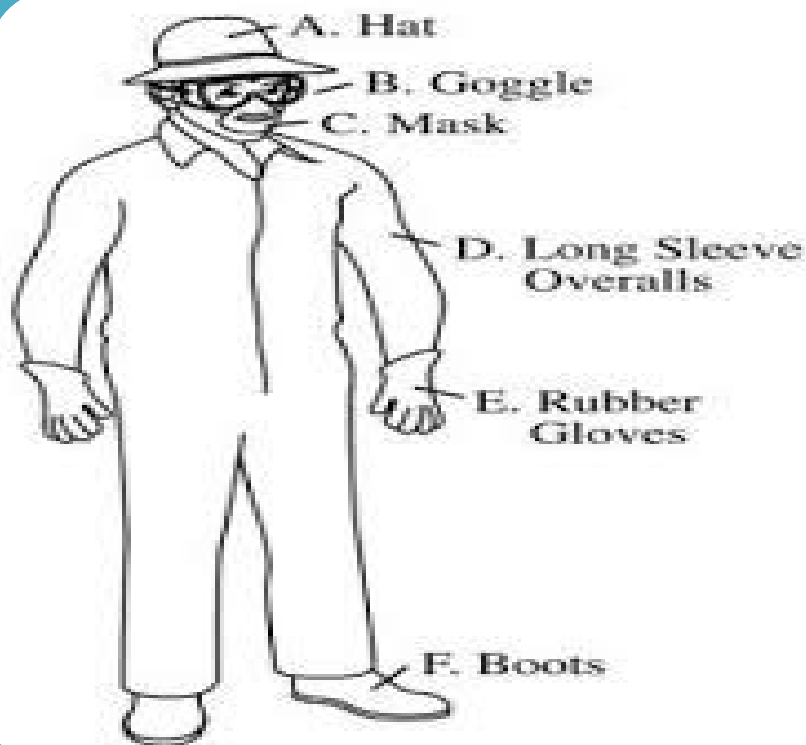
Mosquito/ locust and spatial application (migratory pests)



SAFETY

PRECAUTIONS

- Wash your hands and face often when working with pesticides.
- Keep soap and water with you whenever you are working.
- Protective clothing will retain pesticide residue after use.
- So Wash the gloves thoroughly before removing and then remove clothes and protective equipment with the gloves still on.
- Discard gloves in a plastic bag along with the rinsed pesticide container.
- Shower with lots of soap as soon as possible and before changing into clean clothes.





**Prepared under the guidance of
Mrs. V. USHA RANI, IAS,
DIRECTOR GENERAL**

Developed by

**Er. G. SHANKAR, Er. M. UDAYA BHANU,
Er. GOVIND KUMAR MAURYA and
Er. Sk. HANEEFA BEGUM**