

**MINISTRY OF AGRICULTURE, FORESTRY
&
FISHERIES**

PESTICIDE CLASSIFICATION

Marcus L Richards

CLASSIFICATION OF PESTICIDES

According to pest they control: (include photos of insects, nematodes weeds etc and explain what each define each category)

Herbicides used for killing weeds or herbs. e.g,
Gramoxone

- **Insecticides-** used for killing insects. e.g. **Sevin**
- **Fungicides-**used for killing fungi. e.g. **mankocide**
- **Nematicides-** used for killing nematode e.g. **Furadan**
- **Rodenticides-** use for killing rodents (rat, mice) e.g.
Klerat
- **Acaricides-** used for killing arachnids (mites) e.g **new
mectin**
- **Molluscocides-**used for killing Molluscs (snails, slugs)
e.g. **Slugit**

According to mode of action:

For Insecticides

- • **Contact** – kill only insects they are sprayed or dusted onto. e.g.
- • **Stomach acting-** kill only insects that eat plant parts sprayed with insecticide e.g. Dipel
- • **Systemic** – This type of insecticide is transported within the plant and kill insects when they suck sap or eat parts of the plant e.g.
- **Fumigant-** kill insects that inhale toxic vapours of the chemical e.g. phostoxin

According to mode of action

For Fungicides

- Contact (Protectant)- kill only fungi sprayed or dusted with the fungicide, or fungal spores, which come into contact with the fungicide. e.g. Kocide
- Systemic (Eradicant)- This type of fungicides is transported within the plant and kills fungi growing within tissue of the plant.

According to mode of action

For Herbicides

- **Pre-emergence** – a herbicide applied to the soil during the period after planting and before germination (usually 1-5 days after land preparation). e.g **Gesaprim**
- **Selective** – a herbicide that kills small weeds and seeds but leave the crop unharmed e.g **Gesagard**. N.B selective herbicides are specific for certain crops.
- **Post-emergence** – a herbicide applied to growing weeds after crop emergence or transplanting e.g Fusilade, Gramoxone, Round-up.

Contact- a herbicide that kill only soft green parts of weeds sprayed with the herbicide e.g Gramoxone.

Systemic- a herbicide that is absorbed into the plant after spraying, and is transported to other plant parts where it causes death e.g Round-up.

Non-selective- a herbicide that kills all plants sprayed. e.g Round-up.

According to formulation

- **Dust**- pesticide prepared as dry fine particles e.g Sevin 85 WP
- **Granules (G)**- Pesticides prepared as large dry particles e.g Furadan.
- **Wettable Powders (WP)**- consist of finely divided particles with other substances that enable the powder to be mixed with water to form a stable suspension e.g. kocide.
- **Emulsifiable concentrate (EC)**- a pesticide dissolved in an organic solvent to which an emulsifier is added to enable proper mixing.

- **Dry Bait-pesticide** mixed with edible products to form dry pellets, which are attractive to pests. e.g Klerat.
- **Smokes**- the pesticide is mixed with an oxidant and combustible material, which generates hot gas e.g, mosquito coil.

•**Others**

According to active compound (active ingredient)

- **Chlorinated hydrocarbon e.g Kelthane**
- **Organphosphates e.g Basudin**
- **Carbamate e.g Sevin**
- **Pyrethroids e.g Decis**
- **Others**

According to persistency

- **Persistent** – a pesticide that remains in the environment for a long time e.g Hyvar-x
- **Non-persistent**- a pesticide that remains in the environment for a very short time. e.g Dipel

THANK YOU