

Pesticide usage: Know before you act!

- ☞ Identify the pest correctly; use RiceXpert App. and Pocket dairies developed by ICAR-NRRI
- ☞ Monitor the crop and pest status and go for need based pesticide application
- ☞ Use pheromone traps for yellow stem borer and leaf folder monitoring
- ☞ Initiate the management process only if pest level reaches ETL
- ☞ Always consider alternatives before using pesticides
- ☞ Use only pesticides recommended by Central Insecticide Board and Registration committee
- ☞ While purchasing pesticides, read the pesticide label carefully
- ☞ Choose the form of pesticide best suited to your target site and the pest you want to control
- ☞ Do not purchase pesticides whose containers are leaking/loose/ unsealed
- ☞ Use recommended spray volume for a crop
- ☞ Apply the correct dosage
- ☞ Always consider pesticide dose per acre or hectare not per liter basis
- ☞ Use appropriate sprayer and nozzles
 - ✱ Insecticide- Hollow cone nozzle or Flat Fan nozzle
 - ✱ Fungicide- Flat Fan nozzle or Hollow cone nozzle
 - ✱ Herbicide- Flat fan nozzle or Flood jet nozzle
- ☞ Use clean water to avoid nozzle clogging and better efficacy of pesticides
- ☞ Do not blow/clean clogged nozzles with mouth. Instead use tooth brush tied with sprayer.
- ☞ Apply only to target crops identified on the label
- ☞ Avoid frequent and repeated application of similar pesticide
- ☞ Rotate the pesticide application with pesticides of different mode of action
- ☞ Do not use expired pesticides
- ☞ Do not mix pesticide without proper knowledge
- ☞ Never mix pesticides with fertilizers or micronutrients
- ☞ Thoroughly clean the sprayer after each spraying
- ☞ Do not stir liquids or scoop pesticide with bare hands
- ☞ Mix chemicals outside or in a well ventilated area
- ☞ Toxicity labels such as red, yellow, blue and green represents toxicity to human beings not to the target pests
- ☞ Spray operation should be conducted on cool and calm day (early morning or late evening)
- ☞ Avoid situations where the pesticide may drift from the application area and contaminate non-targets
- ☞ Do not spray pesticides against wind
- ☞ Never use left out spray solution after 24 hours of its preparation
- ☞ No activities like eating chewing and drinking should be carried out while spraying
- ☞ Do consider the impact of pesticide on environment
- ☞ Use the proper safety equipment and protective clothing (hand gloves, face masks, cap, apron, full trouser etc.)
- ☞ On observing poisoning symptoms give the first aid and approach the nearest physician for any emergency preferably with pesticide label
- ☞ Store the pesticides away from house premises
- ☞ Always keep pesticides in original containers only
- ☞ Do not use or store near heat or open flame
- ☞ Dispose the pesticide containers properly (Preferably bury in a pit)
- ☞ Maintain records of pesticide spraying activity
- ☞ Prevent entry of livestock and pet animals from the sprayed area for a minimum period
- ☞ Designate the sprayed area with proper signboard

Authors: Drs Basana Gowda G, Naveenkumar B Patil, Guruprasanna Pandi G, Raghu S, Prabhukarthikeyan SR, Annamalai M, Totan Adak, PC Rath and M Jena



ICAR-NATIONAL RICE RESEARCH INSTITUTE
CUTTACK 753 006, ODISHA

