

HAZARDS AND SAFE HANDLING OF PESTICIDES

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Discussing pesticide safety, we refer to the hazards of pesticides to man. But pesticides may also be toxic to other non target organisms such as birds, fish, bees and to the environment as a whole.

When we deal with Hazards there is a distinction to be made between the terms "toxicity" and "hazard". Toxicity has been earlier defined as the degree to which a substance is injurious to a plant or animal. While hazard is defined as a function of two factors - toxicity and exposure time to a toxic substance. Eg., you could handle a sealed container of a very toxic pesticide without becoming ill, but if the container leaks while you are handling it, you might be exposed. Thus the combination of a toxic chemical and a leaking container creates a hazard. Thus the hazard of a chemical is a measure of risk to the user.

The following examples will indicate the hazards created in certain parts of the world.

- (1) Over 6,000 people in Iraq were admitted to hospitals with symptoms of food poisoning in 1971/73. More than 500 of them died. The cause contaminated bread which had been prepared from cereals treated with fungicide. (Reported by UNEP).
- (2) 2,700 field workers out of 7,500 engaged in Malaria control became poisoned in Pakistan in 1976 by using Malathion which contained an impurity product which is more toxic to humans. Five of them died (Reported by CORP).
- (3) Weedicide kills youth trying to repair a defective sprayer by sucking the delivery tube when the tank was full. (Reported by Ceylon Daily News 1981).
- (4) A farm labourer of the Agricultural Department in Pakistan sold an organochlorine insecticide to a man with head-lice problems in the family. Material was applied to the head. Four persons died. (Reported by Mr. ME. Tusneem).

Records from Sri Lanka. Collected from
Medical Department.

<u>Year.</u>	<u>No. Admitted to hospital.</u>	<u>No. of Deaths.</u>
1975	14,653	938
1976	13,775	964
1977	13,645	1042
1978	14,699	982
1979	11,372	1045
1980	11,911	1112

Out of the death cases 80% - 90% were suicidal cases.

There are three common ways in which a pesticide can enter the human body - (a). Dermally Eg: Skin (b). Orally Eg: Mouth. (c) Respiratory Eg: Inhalation through lungs.

Pesticides are manufactured intentionally to kill pests. They can also kill organisms that are not pests. If we use pesticides indiscriminately they are very dangerous to all living organisms including human beings.

It had been estimated recently that 500,000 people through out the world are killed or affected by insecticides poisoning every year, mainly because they are unaware of the risk involved in handling these chemicals. In short, pesticides can be dangerous and great care should be taken when handling them.

During the pest control operations such as spraying, dusting, fumigation, baiting and granule application some type of protective clothing must be worn. In the tropics it is uncomfortable to wear heavy protective clothing particularly under high humid conditions. It is very important to wear only the minimum amount of protective clothing necessary to do the job safely. As a general principle for tropical conditions, materials should be as light as possible and a basic requirement for all persons handling pesticides are light, durable, cotton fabric overalls.

Remember if YOU wear uncomfortable heavy protective clothing you will be uncomfortable pesticide user and an unsafe user."

General instructions before applying pesticide:

01. Recognise the pest and the damage it does.
02. Use pesticides only when really necessary.
03. Seek advice on the best method of control.
04. Use only recommended pesticides and if several are recommended, choose the one that is least harmful to man and the environment.
05. Select appropriate protective clothing.
06. Make sure that application equipment is in proper working order and properly calibrated.
07. Have plenty of soap and water available and clean change of clothing.
08. Never transfer pesticides to other containers, buy only what is required for the job.
09. Check whether you have selected the correct containers for mixing.
10. Warn neighbours of your spray programme.

When Mixing and Applying Pesticides:

01. Wear protective clothing.
02. Always read the label on pesticide container before using.
03. Avoid contamination pour liquids carefully without splashing. Do not allow powders to "puff up" into the face. Stand upwind, if contaminated wash immediately.

04. Do not mix pesticides by hand, use a small stick.
05. Never eat, drink or smoke while handling pesticides.
06. Mix pesticides in the correct quantities.
07. Keep children away from pesticides.
08. Never work alone when handling the most toxic pesticides.
09. Avoid inhaling toxic dust and vapours.
10. Do not apply pesticides if conditions are unsuitable.
11. Always apply pesticides across the wind.
12. Do not blow into clogged nozzels.

After Pesticide Applications:

01. Never leave unused pesticides in sprayers, always clean equipment properly.
02. Prevent persons entering treated areas until it is safe to do so.
03. Keep an accurate record of pesticides used.
04. Always dispose empty containers. So that they cannot harm humans, animals or valuable plants. Bury the bottles in soil, puncture metal containers.
05. Always store pesticides in original containers and keep them tightly closed.
06. After work wash yourself well and change to clean clothing also wash clothing each day after use.

Remember that it is impossible to clean pesticide containers well enough to make them safe for storing food, water, medicine or to use them as cooking utensils.

If symptoms of poisoning after careless handling or misuse of the product :-

01. Remove all contaminated clothing.
02. Take the patient to a doctor immediately along with the pesticide container used.

FRUIT CROPS ASSISTANCE SCHEME
Revision of Payments.

In terms of the authority received from S/A D. & R. by letter No.1/9/10/7 of 19.04.1984 the payments made under Fruit Crops Assistance Scheme are revised as follows :-

In doing so the current prices of the Planting Material have been taken into consideration. These payments should be made only in respect of planting done after 01.05.1984.

Payments should be made as before in respect of planting done prior to this date.

C R O P	Planting material Rs	1st Inst. Rs.	2nd Inst. Rs.	3rd Inst. Rs.	4th Inst. Rs.	Total
Lime	600.00	750.00	600.00	600.00	250.00	2800.00
Orange	1000.00	650.00	450.00	200.00	200.00	2500.00
Mango	600.00	450.00	350.00	175.00	175.00	1750.00
Avacado	1250.00	450.00	300.00	150.00	100.00	2250.00
Mangoos-tin.	240.00	450.00	450.00	430.00	430.00	2000.00