

Appendix I:

List of Pesticides with High, Moderate, and Least Toxicity to *Apis cerana*

Group 1: Highly Toxic Pesticides

Carbaryl 50% WP
Carbophenothion 20 EC
Cypermethrin 10 EC
Decamethrin 20 EC
Dichlorvos 100 EC
Dimethoate 30 EC
DDVP 100 EC
Monocrotophos 36 WSC
Oxydemeton-methyl 25 EC
Parathion
Phosphamidon 100 EC
Phorate
Permethrin 25 EC
Quinalphos 25 EC
Sumithion 50 EC
Thiometon 25 EC

Malathion 50 EC
Methyl demeton
Monocrotophos 40 EC
Trichlorfan 50 EC
Diazinon 20 EC
Ethyl parathion 46%
Fenitrothion 100 EC
50 EC
Fenthion 100 EC
Formothion 25 EC
Gamma BHC 20%
Lindane
Metacid 50 EC
Metasystox 50 EC
25 EC
Mevinphos
Methyl Parathion 50 EC
Dithane M-45 75 WP
Foltaf 80 WP
Difolitan 50 WP
Hexacap 50 WP
Bavistin 50 WP

Group 2: Moderately Toxic Pesticides

BHC 50 per cent
Carbyl 50 WP
DDT 50 per cent
Dieldrin
Endrin
Hinosan 50 EC
Heptachlor 10 WP

Group 3: Relatively Non-toxic Pesticides

Endosulfan 35 EC
Menazon 70 DP
Phosalone 35 EC

Appendix II:

Safe Pesticide Use for Human Beings

1. General

- i. Pesticides should be applied only when it is really necessary.
- ii. Instructions given on the label of the pesticide container should be read carefully and followed accordingly.

2. Reducing the Incidence of Pesticide Poisoning in Human Beings

- i. Protective clothing such as a hat, long sleeved shirt, long trousers, face mask, goggles, and rubber or neoprene gloves and shoes should be worn while handling pesticides.
- ii. When handling and applying pesticides, one should not eat, drink, or smoke. After applying pesticides, hands and face should be washed thoroughly with soap.
- iii. Children should never be allowed to apply/use pesticides. Pesticides should not be kept within the reach of children.

Appendix II

- iv. Leaking and defective equipment should never be used.
- v. Dust or powdered pesticides should not be applied on windy days because these can blow back on to the person applying them.
- vi. Contact with recently sprayed crops should be avoided.
- vii. If pesticide contamination does occur, one should change the clothing and thoroughly wash the contaminated area of the skin with soap as soon as possible.
- viii. Pesticide containers should not be washed in ponds, streams, or other water sources. Waste pesticides and their containers should be carefully disposed of in a way that will not endanger people and other living beings.
- ix. Empty pesticide containers should not be used for any other purpose, such as for food, water, or as cooking pots, because it is not possible to clean them thoroughly enough to render them safe.
- x. Pesticides should always be kept in their original labelled containers and should never be poured into drinking bottles.
- xi. Before harvesting the crops, the recommended safety intervals should be observed.