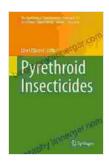
# Pyrethroid Insecticides: The Handbook of Environmental Chemistry Volume 92



### Pyrethroid Insecticides (The Handbook of Environmental Chemistry 92) by Helen Harden

★ ★ ★ ★ 5 out of 5

Language : English

File size : 10347 KB

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Pyrethroid insecticides are a class of synthetic chemicals that are widely used to control pests in agriculture, public health, and home and garden settings. They are effective against a broad range of insects, including mosquitoes, flies, cockroaches, and termites. Pyrethroids are relatively non-toxic to humans and other mammals, but they can be harmful to fish and other aquatic organisms.

Pyrethroid insecticides are typically applied as sprays or dusts. They can also be incorporated into baits or other formulations. Pyrethroids are rapidly absorbed by insects through their exoskeleton. Once inside the insect, pyrethroids disrupt the functioning of the nervous system, causing paralysis and death. In fish and other aquatic organisms, pyrethroids can cause a variety of adverse effects, including mortality, reproductive impairment, and developmental abnormalities.

The environmental fate of pyrethroid insecticides has been extensively studied. Pyrethroids are relatively persistent in the environment, with half-lives of several weeks to months in soil and water. Pyrethroids can also be transported long distances through the atmosphere. Pyrethroids have been detected in a wide range of environmental samples, including air, water, soil, sediment, and biota.

The human health effects of pyrethroid insecticides have also been studied extensively. Pyrethroids are generally considered to be relatively safe for humans and other mammals, with low acute toxicity. However, some studies have suggested that long-term exposure to pyrethroids may be associated with a variety of health effects, including cancer, reproductive impairment, and developmental toxicity. More research is needed to confirm these findings.

Pyrethroid insecticides are widely used and effective pesticides. However, they can also have a negative impact on the environment and human health. It is important to weigh the benefits and risks of pyrethroid use before making a decision about whether or not to use them.

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#### References

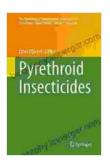
The following references were used in the preparation of this article:

- US Environmental Protection Agency. (2006). Pyrethroids. Retrieved from https://www.epa.gov/pesticides/pyrethroids
- World Health Organization. (2000). Pyrethroids. Retrieved from https://www.who.int/topics/pyrethroids/en/
- National Institute of Environmental Health Sciences. (2019).
   Pyrethroids. Retrieved from
   https://www.niehs.nih.gov/health/topics/agents/pyrethroids/index.cfm

A bottle of pyrethroid insecticide, a synthetic chemical used to control pests in agriculture, public health, and home and garden settings.

\*\*Image description:\*\*

A bottle of pyrethroid insecticide with a yellow label and a black cap. The bottle is sitting on a white background.



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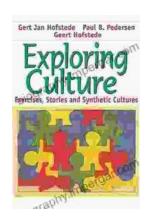
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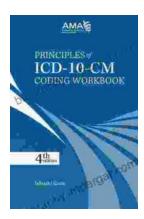
<sup>\*\*</sup>Alt attribute for the image of a bottle of pyrethroid insecticide:\*\*





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