Organic Pesticides Vs Chemical Pesticides

The agricultural sector has increasingly leaned toward chemical pesticide usage. Pests can be broadly categorized into two groups: sucking pests such as aphids, leafhoppers, whiteflies, thrips, beetles, and mites, and chewing pests like caterpillars.

Organic pesticides offer a sustainable alternative. Neem trees, for instance, yield neem oil, a potent tool in pest control. This oil effectively smolders and eliminates pests, showcasing its long-term efficacy. Bacillus thuringiensis, a biopesticide, proves safe for the environment while efficiently controlling caterpillars. Another innovative approach involves the use of nuclear polyhedrosis virus, which is introduced into plants. When a caterpillar bites the plant, it becomes a carrier, ultimately eliminating other caterpillars. Remarkably, some ingredients found in these pesticides, such as garlic, onions, neem, chili, marigold, pokeweed (phytolacca), and tomato leaves, are commonly found in our kitchens.

Chemical pesticides, on the other hand, are divided into four categories based on toxicity: bright red (extremely toxic), bright yellow (highly toxic), bright blue (moderately toxic), and bright green (slightly toxic). Unfortunately, they pose risks to both plants and those applying them.

Types of Chemical Pesticides:

1. **Spinosad:** This chemical pesticide is environmentally friendly and offers benefits to both plants and humans.
2. **Flubendiamide:** Effective against all types of caterpillars, it also maintains environmental safety standards. When handling chemical pesticides, always

ensure proper safety attire.

Pesticide Cycle

When chemical pesticides are applied, some are absorbed by the plant, some runoff enters water bodies, and some evaporates into the atmosphere. Eventually, these chemicals settle into the soil, where rainwater can transport them back into the environment. This cycle results in pollution, affecting our health and harming beneficial insects.

Beneficial Insects

Beneficial insects, including ladybugs, honeybees, praying mantises, spiders, and centipedes, contribute significantly to pest control, devouring approximately 80% of harmful insects.

Benefits of Organic Food

Embracing organic foods can help prevent cancer, reduce soil and water pollution, boost the immune system, counter premature aging, lower the risk of heart disease, and ensure a safe and healthy world for future generations. In summary, an organic lifestyle embodies an ideal approach to living, benefiting both individuals and the planet.