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## I N S E C T I C I D E S

Insecticides affect all life on earth. Back in the 1900's natural methods of controlling certain types of insects were used. This was primarily done with sulphate and pyrethrum (taken from the dried center of certain flowers, mainly chrysanthemums). Nicotine from tobacco and rotene (from a legume plant of East India) were also used. These were a mild form of insecticide, yet did a very good job. After World War II, man began to use synthetic insecticides which delivered a much faster kill. In 1965 alone man used 900,000,000 pounds of these deadly synthetic (chemical) insecticides.

A form of arsenic was the first chemical insecticide. As insects became immuned and the kill lessened, more deadly poisons were introduced and became available on the open market. These fall into two main groups: 1) chlorinated hydrocarbons, of which DDT is one. 2) organic phosphorus. DDT was put on the market in the early 1940's. A German chemist developed it in 1939 and won a Nobel prize for this "great" achievement.

DDT has been used widely on every crop we grow. It is taken into the blood stream from the foods we eat, the liquids we drink and the air we breathe. This is done in most cases in quantities as small as 1/10 of 1 part per million, and soon builds up to 15 parts per million. This poison is stored up in the fatty tissue of the body and as it continues to build, causes a degenerative disease of the liver and other body organs. Tests show that men who work in DDT plants have accumulated as high as 648 parts per million. It is easy to understand why they are short-lived. DDT has infected our grain crops, hay crops, poultry and live-stock feeds--even the milk we drink daily.

Then came chlordane, a little more deadly. In a 25 parts per million solution, one drop on the skin will cause poisoning and sometimes immediate death. Heptachlor came next, soon followed by epoxide, which is four times stronger than chlordane.

Next came the hydrocarbons. They included deldrin, aldrin, and endrin. In solution they are 40 times more powerful than DDT. These are the insecticides that do such a fine job of killing birds, fish, and other wildlife.

The thions are being pushed as some of the best insecticides now available. Malathion and parathion are the most popular. One drop of parathion on the skin brings sudden death.

There is little wonder that our soil is dying, most of the life killed by poisons.

A visit with a bio-chemist who works for a large chemical company proved quite revealing. He mentioned that we had almost reached the limit concerning the effectiveness of poisons to kill insects. He said that over the years, the strength of the poisons has had to be increased to be effective. The insecticides developed would kill all but a few of the insects. Those not destroyed began to multiply at a much more rapid pace than before because there was no competition and more food. He went on to state there was only one stronger poison that could be used, and at only one-half part per million. If the solution were made any stronger, it would kill humans as quickly as insects. He did not say this, but it is easy to conclude that if for no other reason, man would be completely destroyed from insecticide or insect infestation in the near future.

The insects are only trying to do the job for which they were created--to destroy weak and sickly plants. Insecticides cause insects of necessity to mutate and become stronger in order to do their job. The poisons from insecticides are left in the soil which destroys soil life. The weakened soil produces weak and sickly plants which summon more insects, more and stronger insecticides are applied, and the drastic cycle continues.

Many people go right on ignoring facts and closing their eyes to them. "Educated society" has no solution.

ANSWER AVAILABLE

Healthy, living soil produces healthy plants with a built-in insect repellent. Certain spray or dust can be used while the soil is being enriched. We have found KMP (Diatomaceous Earth Insecticide) to be effective as a dry dust or mixed with water as a spray. The items mentioned earlier are quite helpful. Much can also be accomplished by introducing a natural enemy to the insects that are trying to be eradicated. (Rachel Carson's book, Silent Spring, offers helpful guidelines.)

Diatomaceous earth is not poisonous in any way. In fact, we use it in our livestock and poultry mineral. Neither will insects killed by KMP harm birds when the insect is eaten. Well, if it is not harmful to warm-blooded animals, and it doesn't poison the insect, just how does it work?

To understand the lethal effect on insects, we must first know a little about the insect. Most insects' shelter consists of a hard shell. Around the joints and spiracles insects secrete a liquid. What the KMP does is dehydrate the insect. It absorbs the moisture around the insect's joints, and demobilizes the insect. Being unable to move around to obtain food the insect dies. When the KMP is put under a microscope it looks like tiny pieces of glass. With this quality it cuts and severs the insect's skeleton shell. Once the shell is broken, liquid leaks out. With loss of only 10% of its liquid, an insect will die. Therefore, the insect is killed in two ways without poisoning it.

Another advantage of harmless insecticides over chemical insecticides is that insects cannot build a resistance to it. You will not have to add a stronger dose each time.

Diatomaceous earth does kill almost any kind of insect. There are some it does not. Don't conclude that KMP is a solution to all problems. Don't deem it as a panacea. Man did not create this element, he merely discovered it.

KMP works best when applied as a dust -- administered through an electro-static duster. "Perma Guard" is also a diatomaceous earth product and may be attainable in your area.

Through natural methods we can better keep God's agricultural laws. Remember, God has the power to rebuke the devourer.

"And I will rebuke the devourer for your sakes, and he shall not destroy the fruits of your ground, neither shall your vine cast her fruit before the time in the field, saith the Lord of Host" (Mal. 3:11).

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