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Lawns, gardens can be kept healthy without pesticides



Pesticides are the second most frequent cause of poisoning in children, according to "Healthy Homes, Healthy Kids." Pesticide is a general term that includes insecticides, fungicides, herbicides, rodenticides — chemicals designed to kill living things.

Every year, we spend some \$3 billion to purchase over 65 million pounds of pesticides for our lawns and gardens. In the process, we expose ourselves, our children and our pets to these deadly chemicals.

2,4-D is an example of a common herbicide that can cause nervous system damage in humans if it is absorbed through the skin. Captan, Methoxychlor and Diazinon are just as poisonous. These chemicals are especially dangerous to children, who are more susceptible because of their immature detoxification systems and small body size. Pesticides can also poison birds and animals that happen to eat insects or plants laced with these toxins.

There are several options for dealing with lawn and garden pests without using pesticides. Here are a few:

- Keep your grass 2½ to 3 inches tall. This will allow the grass to block the light needed for weeds to grow and helps the soil retain moisture. Grass that is cut short will have shallower roots and will be more susceptible to disease.

- Try to attract natural predators of pests. Ladybugs, birds, spiders and praying mantises all feed on garden pests. You can attract some of these creatures by planting sunflowers and wild Queen Anne's lace.

- Plant pest-resistant grass. Many special grass varieties that resist attack by pests are now available.

- The EPA suggests that you use companion planting to reduce pests in the garden. "Some plants possess the natural ability to repel certain insects. Companion planting is the practice of strategically placing insect-repelling plants next to crops that will benefit from their natural properties," according to EPA literature.

"For example, planting garlic among vegetables helps fend off Japanese beetles, aphids, the vegetable weevil and spider mites; basil planted near tomatoes repels tomato hornworms; and marigolds interplanted with cucumbers "discourages cucumber beetles."

- Use physical barriers to keep insects away from seedlings and plants. Cardboard fashioned into a ring around a plant and set below the soil can protect it from root maggots, cutworms and other burrowing insects.

- Use "safe" pesticides. Liquid Ivory soap can be used to control aphids and red spider mites. Several insecti-

cidal soaps are available from plant dealers. You can also create a nicotine insecticide by soaking cigarette butts in water. Nicotine will kill aphids and caterpillars but not beneficial insects such as hoverflies and ladybugs.

- Keep your soil healthy. Plants grown in healthy soil are better able to resist pests and diseases.

- Use organic fertilizers such as compost, manure and bone meal to add nutrients to your soil. Organic fertilizers release their nutrients more slowly than inorganic fertilizers.

- Rotate where you plant your vegetables every year. Every fall, many insects lay their eggs in the soil. After these eggs hatch in spring, the young insects must find the type of plant that their species feeds on. If insects have farther to go until they find a suitable plant, there is a greater chance that they will be eaten by predators.

- Perhaps the best advice for pesticide-free lawn care is to adopt a more relaxed attitude. Learn to accept the occasional weed and pest.

For more information consult: "Healthy Homes, Healthy Kids," by Joyce M. Schoemaker and Charity Y. Vital; "Save Our Planet" by Diane MacEachern; and "Blueprint for a Green Planet" by John Seymour and Herbert Girardet. You can request information on pesticides and pesticide-free gardening from the United States Environmental Protection Agency, Office of Pesticide Programs, Washington, D.C., 20460.

If you have a suggestion for a column, a gripe, a success story or whatever, write it down and send it to me, care of the Columbia Daily Tribune, PO Box 798, Columbia, Mo., 65205.