

Env. Costs of Garden Chemicals



Discussions of garden chemicals tend to provoke controversy and extreme positions (even arguments among normally calm gardeners!). Lots of people are committed to both sides of the debate: some argue that garden chemicals are completely safe, others argue that they're extremely harmful. In between are people who just aren't sure, and those who may prefer not to use chemicals but who encounter garden problems for which they see no other alternative.

Happily, alternatives do exist. After all, people were gardening long before garden chemicals hit the market. As well, new organic pest-control products become available every year. For every garden problem, there's an organic solution. While it's true that some organic methods of weed and pest control take more time and effort than a quick chemical fix, you can be absolutely certain that you're not harming the environment when you garden organically.

We're calling on Canadians to minimize the impact of using chemical products by reducing or eliminating their use.

Chemical Concerns

Chemical pesticides, herbicides and fungicides are engineered to kill--that's their purpose. Some are broad-spectrum poisons, which kill a wide range of living organisms, others are targeted to specific species. Often, when we're focused on a particular problem in the garden--weeds, for example--we can lose sight of the other effects garden chemicals might have. Some chemicals, for example, leach into the soil and groundwater, leaving toxic residues. Others may affect non-target species: the chemicals we use to control an unwanted pest may also kill butterflies, for example.

In nature, you can't tinker with one small piece of the puzzle without having an impact--sometimes positive, sometimes negative--on many other areas--often without realizing it. That's a potentially alarming responsibility for each of us to shoulder, but it's a basic ecological fact. And it's also what makes the ecological web of connections between all life forms so fascinating and intricate!

Did you know...

- That in 1992, Canadians spent \$78 million on chemical herbicides, insecticides and pesticides for the garden?
- That close to two and a half million Canadian households use chemical pesticides?
- That according to the U.S. Environmental Protection Agency, a government organization, approximately 95% of the pesticides used on residential lawns are considered probable or possible carcinogens?
- That according to one National Cancer Institute study, children are as much as six times more likely to get childhood leukemia when pesticides are used in the home and garden?
- That there's an obvious health risk to storing and using toxic chemicals: in 1993, 140,000 pesticide exposures, 93% of which involved home use, were reported to poison control centres in the U.S. Approximately 25% of these people exposed to chemicals exhibited symptoms of pesticide poisoning. More than half of these reported cases involved children under the age of six?

Given this responsibility, doesn't the cautious route make most sense? By gardening organically, you'll never need to worry that your garden practices may be harmful. You'll be working with nature, and learning about those intricate connections that support all living things.

"Upwards of 50 million kilograms of herbicides, insecticides, and fungicides are used in Canada each year. Some of these pesticides contain chemicals considered to have hormone-disrupting effects, including at least 850 different pesticide products that are registered for household use."

World Wildlife Fund

"The International Agency for Research on Cancer has reviewed the potential carcinogenicity of a wide range of insecticides, fungicides, herbicides, and other pesticide-type compounds. The Agency noted that of the 56 chemicals evaluated, only 1 had sufficient human data, 2 had limited human data, and the remainder had either insufficient or no human data available."

Canadian Network of Toxicology Centres

Working With Nature

There's a certain degree of irony in the fact that many common garden practices actually create pest, weed and disease problems in the first place. Cutting the grass too low, for example, encourages weeds to grow. And frequent, shallow lawn waterings stress the lawn, making it less drought tolerant and more sensitive to pest attack.

Common exotic plants in the garden, too, need more coddling and are more vulnerable to pests and diseases because these plants are not adapted to the natural conditions. Native plants, on the other hand, are adapted to the environment (and thus tend to be hardier in the garden, requiring no chemical maintenance).

Follow nature's lead by gardening with native plants, and you won't need to use chemicals.

Adding Up the Numbers

It was Margaret Mead who said, "Never doubt that a small group of committed citizens can change the world. Indeed, it is the only thing that ever has."

If you're wondering how your one garden can make a positive difference, consider this: according to Statistics Canada, over 7 1/2 million Canadian households have a yard, lawn or garden. If each household were to garden organically, what a huge difference that would make! Seven and a half million organic, environmentally healthy landscapes in our cities, towns and rural areas...

Did you know...

- That at least 99% of the bugs and insect species we encounter in the garden are actually beneficial to the garden: they pollinate plants, eat other bugs, and provide food for birds?
- That since the 1950s, the number of insects known to be resistant to insecticides has grown from under 10 to approximately 450?