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LAWN PESTICIDES

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Recently, the use of lawn pesticides and chemicals has grown enormously with home owners and golf course management in hope of attaining "the perfect turf." However, the negative effects that are associated with attaining ones "dream turf" is primarily caused by the direct use of pesticides and chemicals. The chemical pesticide industry fails to address these issues and has made every effort to keep this information from the public.

Herbicides and pesticides are not a natural way to achieve a beautiful lawn, contrary to what lawn care companies would like people to believe. They are broad-spectrum biocides, and by their very nature can harm organisms other than the targeted species (Dieglman, 1996). Pesticide industries make false claims by stating that their chemicals are heavily diluted, failing to mention that toxins are still extremely dangerous in small amounts. Other false claims include companies like ChemLawn which state that a child would have to ingest ten cups of treated grass clippings to equal the toxicity of one aspirin. In fact, the real danger is not from grazing the lawn. Most poisonings come from inhaling pesticide residues or absorbing them through the skin (Begley, 1988). These chemicals include wartime defoliants such as Agent Orange, nerve-gas type pesticides, and artificial hormones (Dieglman, 1996). In some instances, pesticides like DDT, which remain active for many years, accumulate in our bodies and are released at potentially toxic levels. In women, lifetime exposures to such chemicals are released in the breast milk of her firstborn child (International Joint Commission, 1990).

Pesticides drift and settle during application where they can easily reach houses and people. Pesticides do harm by being absorbed on the skin, where they are able to attack the central nervous system and other essential organs. Symptoms of pesticide poisoning are often deceptively misdiagnosed as flu or allergies. Other problems associated with the use of chemicals include headaches, nausea, fever, breathing difficulties, high blood pressure, and temporary paralysis. The National Academy of Sciences reports that at least one out of seven people are significantly harmed by pesticide exposure each year (American Defender Network, 1989). Unfortunately, due to the high costs of inspection, tests for pesticide poisoning are rarely performed.

Within the last ten years, the lack of awareness and false guidelines about the toxicity of pesticides has contributed to many tragic events. In 1988, Karen James, a Michigan postal worker, was walking past one of ChemLawn's "fertilizer" trucks when a hose ruptured

and she was drenched with chemicals. She was told by the ChemLawn employee not to worry because only fertilizers were in the spray and she would be fine. However, soon after she became seriously ill, with symptoms that include diarrhea, vomiting, and fatigue. When her doctor called ChemLawn to find out what chemicals she was exposed to, he was told that they do not use chemicals. But later tests on Karen revealed high levels of Dursban, a toxic pesticide, which forced ChemLawn to admit that they had been lying (Dieglman, 1996).

According to the Environmental Protection Agency (EPA), 95% of the pesticides used on residential lawns are possible or probable carcinogens (American Cancer Society, 1991). Triazine herbicides like Aztrazine, 2,4-D, and organophosphate insecticides, all which have uses in lawn chemicals, have recently been shown to have a definite link with non-Hodgkin's Lymphoma according to studies by the National Cancer Society. A University of Iowa study of golf course superintendents also found abnormally high rates of death due to cancer of the brain, large intestine, and prostate (Davidson, 1994). Just recently, former Navy Lieutenant George Prior developed a fever, headache, and nausea after playing on a golf course treated with Daconil. Over the next few weeks, his condition worsened and he developed toxic epidermal necrolysis, which causes skin to fall off in sheets and massive organ failure (Begley, 1988).

Even the claim that pesticides entail beautiful lawns is extremely misleading. Chemicals do their harm by adding salt to the soil, thus, killing off beneficial nitrogen-fixing microorganisms that provide necessary nutrients for grass (Polk, 1990). Using pesticides to create a quick fix for lawns just brings about additional problems. Synthetic fertilizers kill earthworms and other organisms that aerate soil, causing it to compact and kill grass plants. Inorganic nitrogen-based fertilizers also promote the sprouting of weeds (Begley, 1988). Over time, pesticides can actually help the pests they target by also killing off their predators. This destroys the natural species balance and contributes to false, unbalanced, representations of specific lawn habitats.

In order to solve the ongoing problems associated with pesticides, proper legislation to protect the public must be vigorously enforced. The use of chemicals are not necessary for lawn use and bring about serious ecological and human health risks that outweigh its intended results. Alternative strategies must be developed which will bring about better results on the environment. Long lasting solutions, which require less time, are definitely the best place to start.

References

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