



## Pesticides - What You Need to Know

- Many lawn care pesticides are associated with some risk to human health and the environment. It is illegal to claim that any pesticide is safe, even when used as directed. Studies link exposure to certain lawn care pesticides with an increased risk of asthma, several types of cancer, nervous and immune system damage, reproductive problems, birth defects and disruption of the endocrine system.
- Lawn care pesticides present special risks for children who spend much of their time playing outdoors. A National Cancer Institute report states that children are at risk for brain and other childhood cancers and six times more likely to develop leukemia when exposed to common lawn pesticides.
- Repeated use of the same class of pesticides increases pesticide resistance among insects. Ultimately, a once-effective product can no longer control the resistant population.
- Regular pesticide use kills microorganisms in the soil and weakens plants so that they are vulnerable to pest infestation and disease. Pesticides can also sicken or kill non-target species, such as beneficial insects, birds, fish and aquatic organisms, and even family pets.
- Many lawn care pesticides remain toxic long after the "24 hour" re-entry recommendation. Breakdown products (metabolites) of pesticides may be even more toxic than the original active ingredients. Inerts (undisclosed ingredients or "trade secrets") can also be highly toxic and can comprise up to 99% of the pesticide product.
- Pesticide runoff and drift pollutes ground and surface waters which threatens the safety of our drinking water supplies.

**Safe and effective alternatives to pesticides are widely available at lawn and garden centers.**

Information obtained from: Environmental Protection Agency Office of Prevention, Pesticides and Toxic Substances; Journal of the National Cancer Institute; United States General Accounting Office; Office of NY State Attorney General; United States Federal Code; National Institute of Environmental Health Sciences Journal.

# Organic Lawn Care Program

**Feed The Soil** – One of the best things you can do for your soil is to rake one-half inch of compost into your lawn each spring and fall. To speed up this soil building process you may want to add microbial inoculants. These “good” bacteria and fungi support beneficial microbes that are essential to growing healthy turf. An annual soil test will identify the need for other soil amendments, such as rock dust or lime.

**Feed The Grass** – Leave grass clippings on the lawn. They provide nitrogen and reduce the amount of fertilizer needed by about one half. If you want to give your lawn an extra boost in the spring, choose a low nitrogen water insoluble organic fertilizer. You can also enhance grass seed mixtures with the new varieties of low growing clover which fix nitrogen in the soil.

**Re-seed Annually** – A thick turf is one of the best ways to control weeds. Seed in late summer or early fall with a mixture of indigenous grasses. Core or slice aeration of the soil before seeding will improve germination and alleviate compaction. A mixture of compost and grass seed is the best solution for filling in bare spots.

**Mow High** – Cut grass at 3-3.5 inches, allowing it to shade its roots, conserve moisture and keep out weeds. High mowing is a better method for controlling crabgrass than herbicides. Keep blades sharp so they do not tear the grass, making it vulnerable to disease. Rotate mowing patterns.

**Water Less, But Longer** – Once-a-week watering in the early morning for several hours is the preferred method. Take into consideration rainfall and the type of soil you have. Sandy soils need more water than clay-based soils.

**Control Those Weeds** – If you really don't like dandelions, dig them out! You can also use an organic corn gluten product that prevents weed seeds from germinating. It must be applied to established (not newly seeded) lawns early in the spring for several years to control problem areas. For spot weed control on driveways and walkways, use a vinegar or vinegar/botanical oil combination product.

**Control Pests Without Chemicals** – Common pests (grubs, sod webworms, chinch bugs) can be controlled with applications of beneficial nematodes. Milky spore powder and *Bacillus Thuringiensis galleriae* (BTg) are effective controls for Japanese and other beetle grubs. Most fungal diseases can be prevented with proper watering techniques or several light applications of compost or liquid compost tea. Beneficial organisms in healthy soil will out-compete unwanted pests.



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