



Sustainable Maintenance Tips Permitted Pesticides

Halifax Regional Municipality (HRM) recognizes that our natural surroundings must be sustainably maintained and managed to help ensure quality and healthy community living now and for the future. HRM is working toward creating an environmentally sustainable community. Part of this initiative involves reducing pesticide use in the Municipality through the establishment of the Pesticide By-law (P-800).

There are still a number of materials that can be used to control pest problems in the maintenance of our trees, shrubs, plants, flowers and lawns. **Administrative Order 23** provides a list of **Permitted Pesticides**. It is recommended you use any materials carefully and follow the manufacturers label instructions. Most of these materials can be purchased locally at lawn and garden centres, suppliers and retailers.

Products for Pest Control

The following provides a quick overview of the permitted pesticides listed in Administrative Order #23 and how these substances can be used:

Insecticidal soaps - Contact insecticide, miticide and fungicide, effective against soft bodied insects and mites such as aphids, thrips, white flies, spider mites, and the powdery mildew fungus. Formulation based on potassium salts and naturally occurring fatty acids (similar to soaps for face and hand washing).

Herbicidal soaps – Non-selective contact herbicide effective on some weeds, but not all. Similar formulation to insecticidal soap.

BT (Bacillus thuringiensis) - Insecticide that must be ingested by the larval stage of certain insect pests such as caterpillars, loopers, and garden cut worms. It is a naturally occurring soil-borne organism.

Nematodes - Tiny-worm like parasites of insects, plants or animals. A handful of soil will contain thousands of the microscopic worms. Certain species are effective against lawn and soil pests such as White Grub and European Crane Fly larvae.



Other biological control organisms - Includes organisms such as lady bug larvae which voraciously eat aphids and other pests.

Animal repellants - These include non toxic products that may be used to ward off cats and other creatures.

Rodenticides - These products are marketed by several companies and include specialized baits to control serious rat, mouse, and related rodent problems.

Injected Tree Treatments - This includes insecticides and fungicides that are in enclosed capsules or systems and injected directly into the bark of trees. Certain Dutch Elm Disease fungicides are injected directly through the bark.

Sticky media - These include flypaper traps and similar sticky substances that trap insect pests.

Borax - Boric acid powder is used to kill roaches, ants, fleas and silverfish. It is an odourless and non-staining powder.

Dormant and Horticultural Oils - These are often applied, during the off season, on plants, shrubs and small trees to control overwintering pests such as the scale insect and other insect egg masses by suffocating the pests. These are highly refined oils that are mixed with water for application.

Bordeaux mixture and other sulphur compounds - These materials are used on certain fungus problems on plants. It is a fungicide consisting of cupric sulphate and lime in water.

Lime sulphur - Sulphur is used as both a fungicide, miticide and insecticide. It helps control mites, certain insect eggs, and fungi such as powdery mildew, rust and brown spot. Lime sulphur is a mixture of lime and sulphur.

Ferric phosphate - This is a molluscicide used to control slugs and snails. It is an iron (ferric) and phosphate compound.

Pruning paint - Decorative treatments to coat tree wounds and pruning cuts. However, the application of paint on pruning cuts may actually hinder callous formation (natural sealing of the cut or wound).

Pheromone traps - Traps used to lure and then trap insect pests. They often contain synthetic and/ or natural chemicals resembling insect sex attractants placed inside the traps.

Pyrethrum (or pyrethrin) - These are contact insecticides used to control a number of different insect pests. Pyrethrins are natural insecticides produced by certain species of the chrysanthemum plant.

Diatomaceous earth - This is used as a contact (scarifying) insecticide. It is a naturally occurring substance comprised of the fossilized remains of diatoms. Diatoms are microscopic sized hard-shelled creatures found in both marine and fresh waters. Diatoms are covered in sharp spines that make them dangerous to exoskeletal insects, but not to animals with internal skeletons.

Acetic acid - is a clear, colourless liquid with a sharp vinegar smell. Typically vinegar is about 4-8% acetic acid. Acetic acid is marketed under various trade names as a non-selective weed and grass killer.

Corn Gluten Meal- This is used as a non selective pre-emergent weed seed inhibitor, especially for dandelions and smooth crabgrass in lawns. Corn gluten meal can also have significant nitrogen content and may be applied as an organic slow release fertilizer. Corn gluten meal is a by-product of the wet milling process of corn for starch.

Iron HEDTA (FeHEDTA) - is a deep red, odourless liquid compound, used on lawns to control weeds, algae and moss.

With a bit of planning and proper lawn management, the need for chemical pesticides can be greatly reduced, if not eliminated. Easing our dependency on chemical lawn additives is better for both human and environmental health and is a necessary step towards the attainable goal of sustainable gardening and landscape maintenance.



For more information on the Pesticide By-Law (P-800) including signage requirements, which products can still be used, alternatives to pesticides, sustainable maintenance practices, or to access details on our public awareness sessions, visit one of the HRM Customer Service Centres or log on to our website at www.halifax.ca. You can also call our representatives at 490-4000 or email us at Pestbylaw@halifax.ca.