Moss in the lawn is a major problem in the Lower Mainland, especially during the rainy winter months. Moss takeover is a result of a series of garden problems. Identifying and solving these problems promptly will discourage moss growth in the future.

Moss spores and plants exist naturally in the garden in a harmonious balance with grass. Moss only becomes a problem when the lawn can no longer compete with it. A weakened or stressed lawn can be due to a number of causes.

- Low or unbalanced soil fertility
- Compacted or wet soils
- Heavy shade
- Acidic soil
- A thick thatch layer (thatch is a layer of dead grass that has not decomposed; it inhibits water, air and fertilizer penetration into the root area)

These problems can be corrected culturally and chemically.

**Cultural Control**

Maintain a good fertilizing and watering routine. For the first feeding, a well-balanced lawn food, such as GARDEN WORKS 14-4-8, is best applied in late March or early April (depending on weather conditions). Later in the summer, a higher-nitrogen fertilizer, such as GARDEN WORKS 23-3-23, can be applied to stimulate green growth. Keep in mind that while fertilizing is important, you should not over fertilize your lawn. During dry periods, less frequent but longer periods of watering will produce deeper and healthier roots.

Amend compacted or wet soils. Lawn roots thrive in healthy soil that drains well and has ample organic matter. Poor soil will not drain well and this encourages moss growth. To correct compacted soil, aeration is recommended. Aeration is the removal of soil plugs; this allows air to penetrate directly to the root zone. The added oxygen encourages soil microbes to break down organic matter, such as thatch. The holes also allow water to penetrate more easily. In severe situations, you may have to regrate the area or install drainage tiles.

Thin the tree canopy to let in more light or sow shade-tolerant lawn seeds. In some areas you may decide to replace the lawn with shade-tolerant ground covers, such as vinca and ivy.

Raise the pH of your soil. Acidic soil does not allow the lawn to take up key nutrients that it needs to grow well. Have your soil tested before applying lime to correct the problem. There are two types of lime: dolomite lime and hydrated lime. Hydrated lime lowers the soil pH very quickly and may burn the lawn. This lime is best used when setting up a new vegetable garden. For lawns, we recommend dolomite lime (Imasco’s Soil Sweetener for drop spreaders or Agrico’s Easy Spread for broadcast spreaders). After application, make sure the lime is watered in.

Keep the thatch layer less than 1 inch (2.5 cm) deep. Thatch problem is the result of over fertilizing and leaving long grass clippings on the lawn after mowing. If the thatch is more than 1 inch (2.5 cm) thick, it hampers water penetration to the root zone.

For a spot thatch problem, rake the area with a stiff lawn rake and remove the thatch. For large areas, use a dethatcher (usually rented) to spare your back. You can also purchase dethatcher spring attachments that fasten to the blades of a power lawn mower. Aerating also helps. Dethatching should be done in early spring or early fall so that the lawn has a chance to recuperate before weed seeds germinate.

To avoid thatching problems, do not over fertilize with nitrogen and do not leave the lawn unmown too long.

For severe moss problems, chemical moss control should be considered. See the following page for directions.
**Chemical Control**

This method quickly knocks down the moss and helps you regain control of the lawn.

The best way to eliminate moss chemically is to use products containing ferrous sulphate. Many products on the market contain this active ingredient in differing concentrations. Some moss killers are also mixed with fertilizers. These come in dry form like a conventional fertilizer or in a container that attaches to a garden hose.

**GARDEN WORKS 14-4-8 with moss control combination** (premixed bag) will kill the moss and encourage strong lawn growth to take over the bald spots (an application of moss killer/fertilizer mix should be applied in mid-spring or early fall). Make sure to follow the directions on the label closely. Also, take care while spreading near pavement and the house to avoid staining the cement.

The lawn should stay dry for approximately forty-eight hours after applying the moss killer, then a thorough watering is required. In seven to ten days the moss will begin to turn black, at which time you should hand-rake or dethatch your lawn. This will allow the grass to grow again in areas previously covered by moss. If bare or thin patches result from moss removal, reseed the area with a grass seed mixture containing a high percentage of perennial rye grass seed. A thick, healthy lawn does not allow room for moss to become established.