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MOSSES, LIVERWORTS, ALGAE AND LICHENS ON LAWNS AND STRUCTURES

Moses, liverworts, algae and lichens are primitive plants, which lack vascular tissue. These plants, which are very common in the natural environment, can sometimes cause problems in turf and on man-made structures.

Mosses are small (up to a few inches tall), non-flowering, green plants that often grow in moist, shaded soil. They may form dense mats that prevent the growth of grasses in a lawn. Mosses can also grow on patios, driveways, roofs and other surfaces, especially if these areas are humid. They make surfaces slippery and unsightly, and on cedar shake roofs, a build up of moss may hasten decay by trapping water on or between the shakes.

Liverworts are similar to mosses, but usually grow as simple ribbons or sheets of leafy material. They may grow in moist, shaded areas of a lawn, causing similar problems to mosses.

Algae are very simple green plants without roots, stems, leaves or flowers. Most algae live in water, but occasionally, algae are found on moist soil, where they appear as a thin grey or black crust on the soil surface. Patches of algae in a lawn can prevent the movement of water and air into the soil and prevent the growth of grasses. Algal growth on tennis courts or walkways can make them slippery. The presence of algae on benches, walls and sub-irrigation mats of greenhouses can cause a build up of shore flies and fungus gnats.

Lichens are associations between algae and fungi in which both organisms benefit. They grow as dry crusts or wrinkled sheets in a variety of colours, and may occur on rocks, wood, or other hard surfaces. They get water and nutrients from the air, not from the surface they grow on. Like mosses, lichens can make surfaces slippery and unsightly, and they may hasten decay of wood by trapping water.

CONTROL IN LAWNS

The presence of mosses, liverworts, or algae in a lawn is an indication of poor growing conditions for the grass, such as poor drainage, low light, low fertility, compaction or acidity. The best control is to improve growing conditions as follows:

Light - If the lawn is heavily shaded, consider pruning trees to increase light. If this is not practical, some grass species or other ground covers are available which are shade tolerant.

Drainage & Compaction – Re-contour poorly drained areas so water runs off better. Drainage will be improved and compaction reduced by aerating or slicing the soil.

Fertility and Acidity - A nutrient analysis done by an accredited laboratory will determine if the soil is too acidic or low in nutrition, and will recommend what to add.

The only chemical registered for control of moss, liverworts and algae in turfgrass is Safer's De-

Moss biodegradable soap. Follow label instructions for use of this soap. Use of this product should kill the moss, liverworts or algae that are present, but the problem will recur if the underlying causes are not corrected.

Following any of the above treatments, vigorously rake the grass to remove the moss, liverworts or algae crust. Reseed bare patches with a suitable variety of turfgrass.

CONTROL ON STRUCTURES

For control of algae in greenhouses, spray one of the following on the affected surfaces. Do not apply these to plants.

1. Safer's De-Moss biodegradable soap - see label instructions

2. 10% sodium hypochlorite solution (commercial chlorine bleach). Add 1 part hypochlorite to 9 parts water. Wear a respirator when spraying. Immediately after spraying, close the greenhouse for 3-4 days, then ventilate.

After the algae dies, it may be necessary to remove the dead material with a scraper or high-pressure water hose.

Use Safer's De-Moss biodegradable soap for effective control of mosses, liverworts, lichens and algae on woodwork, patios, driveways, tennis courts, etc.; this should not harm or stain surfaces. It should be rinsed from desirable plants in case of overspray.

Using shakes that have been pressure-treated with wood preservative can prevent moss and lichen growth on cedar shake roofs. If these haven't been used, and moss or lichen appears, Safer's De-Moss biodegradable soap is recommended. Follow label instructions for use.

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