The best thing to do is have the soil analyzed.

Potassium plays a vital role in plant nutrition, and deserves more attention in many fertility programs.

Research continues to demonstrate the importance of maintaining high potassium levels throughout the growing season. Potassium is recognized for enhancing turf tolerance to various environmental and biological stresses, including cold, traffic, disease and drought tolerance.

A nitrogen to potassium ratio of 3:2 has generally been considered desirable. However, higher potassium ratios to nitrogen, such as 1:1 or 1:2 have improved stress tolerance in some investigations, even when soil tests indicate potassium levels are adequate.

Watch for rapid change. Potassium is highly water soluble and subject to rapid leaching both within the leaf tissues and in soils with low cation exchange capacities. Potassium deficiencies can occur just a few days following a fertilization especially on intensely-managed, irrigated turf growing in sandy soils.

Light, frequent potassium applications with slow-release carriers helps to reduce potassium leaching in these situations.

Soil tests revealing The best way to know a soil pH, overall nutrient status and soluble salt content is to have the soil analyzed. Most state universities have soil testing laboratories and provide this service at a reasonable cost. Commercial testing labs are also available. Several soil pH and leaf tissue test kits can be purchased for immediate on-site readings.

There are many choices for the turf manager developing a spring fertility strategy. The challenge is to select one that best suits the turf's needs in your management program.

—Dr. Roberts is an extension specialist in turf science at the University of New Hampshire.

Learn to identify snow molds

by Joe Rimelspach

As snow and ice melt away and spring weather arrives, home owners will have many questions about the condition of their lawns and how to help them recover from the harsh winter weather. Many lawns will see symptoms of snow mold.

These fungi commonly grow where there is snow cover or during cool, wet periods of winter and spring. All cool-season grasses are susceptible, and many bentgrasses are highly susceptible. The two diseases may occur together or individually, usually extensively on lush turf with wet, unfrozen soil and snow cover.

Symptoms—Patches (more or less circular) may be a whitish-tan straw color from 1 inch to 3 feet in diameter, though they are usually 3 to 12 inches in diameter. Leaves are matted together and the patch appears sunken. When the patches are wet, they appear slimy; when dry, the texture is more like a crust of dead leaves.

During some periods, pink snow mold may have a slight pinkish color on the outer edge of the patch. Gray snow mold can be positively identified by the presence of sclerotia (small seed-like structures) % to % inch in diameter. Sclerotia are dark reddish-brown to black and found on leaves of diseased plants.

Management—To minimize damage:

1) Rake damaged turfgrass to let light and air into the crowns to encourage growth and recovery.

2) If the lawn is tall and has a lot of dead leaves, mow it short one time to remove dead grass and rake it away.

If areas are dead, renovation will be needed. Check the crowns or plants for life. Living crowns will be white and have a moist, healthy appearance. If you don’t know about possible re-growth, take a section of damaged turf and try to grow it indoors to see if new leaves develop.

Spring applications may accelerate turf recovery. Follow all label instructions.

For gray snow molds—pentachloronitrobenzen (PCNB) or iprodione + chlorothalonil;

For pink snow molds—PCNB, iprodione, vinclozolin or thiophanate-methyl.

—The author is turfgrass extension pathologist at Ohio State University. He has more than 20 years experience with the lawn and landscape industry in the Midwest.