Q: Please settle a dispute for me. I thought snow mold was just a cosmetic, short-lived problem and not really dangerous to the turf. A fellow lawn care operator said it can actually kill the grass plants. Who is right?

A: Snow molds first appear as thick, cottony fungal threads covering patches of turf, usually conspicuous when snow is melting.

There are two common types of snow mold and, unfortunately, not all recommended fungicides will control both. If fungicides are to be used effectively, it is necessary to correctly identify the causal organism.

Gray snow mold is caused by the fungus Typhula itoana and related species. A snow cover is necessary for the development of gray snow mold and a deep, prolonged snow on unfrozen soil is ideal. The optimum temperature for infection is between 30° and 45° F and the fungus is inactive above 65° F.

Gray snow mold appears in midwinter in lawns and other turf areas as roughly circular, bleached brown to straw-colored areas up to two feet in diameter. The infected grass may be matted together and have gray-to-black mold growth around the border. This is most often observed at the edge of receding or melting snow.

Another distinguishing characteristic of gray snow mold is the presence of hardened black fungal bodies (sclerotia) imbedded in the leaves and crown of infected plants.

Pink snow mold, caused by the fungus Fusarium nivale, is common in areas where prolonged periods of wet, cool weather occur from autumn to mid or late spring. Unlike gray snow mold, this disease does not require a snow cover for development. Conditions favoring pink snow mold include high humidity and temperatures of 32° to 60°F.

Pink snow mold appears as roughly circular patches usually smaller than gray snow mold. In cool, wet weather the bleached brown patches of matted leaves may be covered with a dense, whitish-pink mold growth at the borders.

The injury from both gray and pink snow mold is usually superficial, affecting merely the top leaves. However, the grass may be completely destroyed, particularly in poorly drained pockets or ravines having a deep snow cover, or when the snow is compacted.

Snow molds can be culturally controlled by avoiding succulent turf growth in late fall, by mowing at the recommended height as long as the grass continues to grow in the fall, and by limiting snow cover and compaction.

Raking out the matted, diseased areas in early spring will allow the crown to develop new tillers. Chemical controls are not effective in the spring but should be applied as the diseases appear in late fall or winter.

Q: A customer of mine called about discoloration and cracks in the bark of his four-year-old crab apple tree. How can the cracking be kept to a minimum?

A: Frost cracks are long, vertical separations of the bark and wood that may split open each winter. These cracks usually occur on the south or southwest side of young trees with smooth, thin bark. Sunscald causes areas of discolored, dead bark to form on the trunk or major limbs and usually occurs when a series of hot winter days is followed by a sharp drop in temperature.

Trees especially susceptible to frost cracks and sunscald include ash, beech, cherry, crab apple, elm, linden, London plane, Japanese and red maple, oak, plum, poplar, sycamore, walnut and willow.

Frost cracks and sunscald are best avoided by planting susceptible trees in protected, shaded locations. Wrapping the trunk with strips of burlap, white cloth or sisalkraft paper will offer some protection. A common and often effective practice is to apply a coat of heat-reflecting whitewash or tie small boards upright on the south side of the trunk.

VEGETATION MANAGEMENT is a free problem solving service for any residential, industrial, municipal, or golf course landscaping topic. Write your questions for VEGETATION MANAGEMENT on the postpaid reader question card in this issue.