

STOP 15

Dr. James B. Beard

Fall Lawn Care. Proper turfgrass culture during the fall period can contribute greatly to achieving the maximum possible winter survival and early spring recovery. Fertilization in early September will enhance turfgrass growth during the cooler temperatures of the fall and insure maximum recovery from summer and thinning caused by heat, drought and diseases. Late fall fertilization, which stimulates growth of leaf tissues, should be avoided in order to minimize winter injury by low temperature, desiccation and snow mold diseases. Dormant fertilization after grass growth has ceased can be practiced safely without reducing winter hardiness and will stimulate earlier spring growth.

Dethatching of turfgrass areas is best practiced in late August or early September in order to permit sufficient time for recovery of the turf during the fall period. Mechanical removal of thatch involves vertical mowing. Whenever a thatch accumulation exceeds 1/2 inch on Kentucky bluegrass, steps should be taken to remove the dead accumulation of organic material in order to avoid increased disease incidence and reduced heat, drought and cold tolerance.

Leaves falling from deciduous trees during the late fall period should be immediately removed from turfgrass areas. This is particularly important for turfgrasses growing under shaded conditions since the falling leaves will expose the underlying turf to higher light intensities and result in increased shoot density and root growth. Leaves which are permitted to lay on the surface of the turf will screen out the available light and result in an even more thinning of the turf.

Several precautions can be taken to avoid winter injury. On areas where snow mold damage has been severe in the past, a preventative fungicide application can be made just prior to the first permanent snow fall. On sites where winter desiccation injury has been objectionable, steps should be taken to restrict moisture loss. These include (a) use of protective covers, (b) use of snow fence or the stacking of brush to encourage snow accumulation, and (c) the application of water during the winter period to replace excessive losses. Low temperature damage can be avoided by use of winter covers or the enhancement of a snow cover. However, the most important factor in minimizing low temperature damage to turfs is to insure good surface and internal drainage in order to avoid a high crown hydration level.

The cutting height during the late fall period and at the onset of dormancy should be comparable to that normally maintained on the turfgrass area. Excessively long leaf growth will result in increased snow mold activity whereas turfs which are cut extremely short will be subjected to greater low temperature injury. Closely mowed turfs will be less susceptible to leaf desiccation but there is no effect on the rate of desiccation of the important meristematic tissues of the crowns, rhizomes and stolons. Short mowing is best practiced in early spring prior to the initiation of growth, rather than in late fall. Short mowing in early spring will serve to remove excessive debris and trash and will also stimulate early spring green up.

STOP 16

Dr. Joseph M. Vargas

Turfgrass Disease Study: The most important disease in Michigan on Merion bluegrass is Fusarium blight. The disease usually occurs in lawns which are 2 years or more old. The disease is recognized by the typical "frog eye" spots which occur in the diseased turf. There are still many unanswered questions about this disease which we hope to solve in the near future.