Here are some hints from superintendents for best maintaining velvet bentgrass

By DR. R. SKOGLEY

Although some variation existed among superintendents, the following practices of velvet bentgrass care were generally agreed upon:

• **Soil pH** — Keep, or develop, a pH of 5.0 to 5.5. Velvet performs well on acid soil while Poa annua does not — a natural method of Poa control. Use ammonium sulfate as a nitrogen source to reduce of maintain the pH level. Use gypsum (calcium sulfate) for a calcium supply.

• **Fertilizer program** — An exact program varies with the growing season but, generally, the seasonal nitrogen rate should not exceed three pounds per 100 sq. ft. Even less may be adequate. The first seasonal application should be made from early to late May, depending on regional location.

Velvet bentgrass is very winter hardy, goes into winter dormancy, and resumes spring growth, later than creeping bent. A nitrogen application should not exceed 1/2 lb. per 1000 sq. ft. per application and 1/4 lb. applications are suggested during the summer.

Natural organics are often used for summer feeding. It is suggested that phosphorus be avoided in fertilizers (except on sand) for regular maintenance. The occasional usage of minor and trace elements, alone, or with fungicide application, is suggested.

If growth is adequate but color enhancement is desired, iron sulfate may be applies at 1/2 to 1 ounce per 1000 sq. ft.

Duc to the tight knit nature of a healthy velvet bentgrass sward, occasional applications of water soluble, foliar fertilizers may enhance color and uniformity.

Aerification and top dressing — Velvet bentgrass attains great density through prolific tillering, extensive root production, and growth of short stolons.

Without a vigorous aerification and topdressing program, excessive thatch and surface softness will develop. These practices are particularly impor-tant on velvet greens.

Superintendents interviewed try to avoid aerification during the spring when Poa annua seed germination is most likely. Through aerification is recommended from late August into October while the grass is still making good top growth. Slice aerification, with an implement such as a "Ryan Mataway," set as deep as possible, and often run in two directions, is suggested. If the green surface is particularly compacted, core aerification may also be performed.

Aerification is followed by topdressing. Because of the density of velvet greens it is difficult to incorporate more than 1/4 yard of dressing per application. Light spiking will also aid in developing lateral stolon growth and repair traffic and play damage. Topdressing materials ranged from straight sand to sand-soil mixes. At least one successful superintendent adds 80 pounds of kiln-dried, hardwood sawdust to each yard of topdressing.

For successful thatch control, recommended management includes monthly verticutting followed by light topdressing. It has been suggested that mowing be skipped the day before these operations. Topdressing should be matted and watered in well.

Irrigation — Velvet bentgrass is drought tolerant and requires less water than creeping bents. It is less serious to under-water than to over-water. Through watering every three days may be adequate, yet one successful superintendent stated that he watered from 5 to 15 minutes daily, depending on season and winds.

Heavier soils require less water than do sands. Velvet bentgrass does not perform well on wet soils.

Mowing — Velvet will tolerate very close mowing. Beautiful velvet greens inspected in New England have been known from 3/32 to 5/32 inch. The higher cut should prove a healthier height.

Fungicides — Velvet bentgrass, properly grown, is the most disease resistant of all bents. Still, velvet bentgrass can be susceptible to Copper Spot (*Gloeocerospora sorghi*), a disease rarely seen in creeping bentgrass. A preventative program, encompassing a contact-systemic, applied on a two- to three-week basis has provided excellent disease control in New England Protection against snow mold is suggested.

Green sizing — Because velvet bentgrass does not repair as well as creeping bentgrass, many courses have found that traffic and play recovery can be best managed on larger putting surfaces. Velvet bentgrass greens in excess of 6,000 square feet are not uncommon.