## HINTS ON BROWNPATCH CONTROL

Early Morning Watering. The water washes the dew and the guttated water from the blades of grass and returns the dissolved nutrients to the soil to be used by the plants. This helps to dry the green more quickly for mowing and for the early players. Disease is discouraged by removing moisture and nutrients from the grass. (USGA Bulletin, May, 1933).

Water Management. Just enough water to keep the grass healthy is good management for brownpatch control. Watering sufficiently to keep a clay green soft enough to hold poorly hit shots is a sure way to weaken the grass and make it more susceptible to disease. Keep the greens on the dry side and make the shots hold by aerifying the soil.

Hydrated Lime. When brownpatch hits, it is because excessive moisture and high temperatures have joined hands in the right combination. To spray more water (with a fungicide) on the green when there is too much there already is a good way to invite more trouble. Hydrated lime dusted on dry at 3 to 5 pounds to 1,000 square feet helps to dry the surface and has been very successful in checking brownpatch when spray treatments did no good. (Note: Any treatment will be more effective if the soil has been well aerated).

RESISTANT GRASSES. One does not go out overnight and change the grass on any green. A change to the better grasses that are more resistant to brownpatch takes time and merits a well-planned program.

THE RIGHT FUNGICIDE. Two excellent fungicides for brownpatch are Tersan and mercuric chloride (bichloride of mercury). Tersan is safer but some mercury is needed occasionally when it seems that Tersan is losing its effectiveness. A preventive program is preferred because brownpatch can hit faster than

some people can act. It is better to lock the stable door before the horse is gone.

GOOD AIR DRAINAGE. Where trees and shrubs pocket a green to stagnate the air, the best "fungicide" is an ax or a saw. Plants need air to live. Putting green grasses have only ¼ inch of leaves in the air; trees have 40 to 50 feet of leaves in the air. Give the grass at least a fighting chance to breathe.

Good Soil Drainage. We've preached subdrainage and surface drainage until we are blue in the face, but some don't read or come to our meetings. A healthy plant doesn't readily become diseased. A layer of clay or sand in the green to stop air and water circulation is a sure way to produce a weak, shallow-rooted turf that is easy pickings for brownpatch or anything else. If you can't rebuild the green, the least you can do is to aerify and get roots down 4 or 5 inches.

GOOD MANAGEMENT. Matted grass which sheds water like a duck's back is an invitation to overwater because the water all slides off. Many greens are ruined because they have too much grass on them. A green that becomes scuffed and rough around the cup after a few rounds is a matted green. Brushes and mowers are made to remove excess grass so you don't have a "thatched roof."

VIGILANCE. Few real greenkeepers sleep well during brownpatch season. When they "smell" brownpatch, they watch the barometer, the thermometer, the humidity and the other courses in their vicinity. Their wives get fretful and the children don't eat well. The man who brings his greens through a bad summer with no damage from brownpatch has earned his year's salary. The secret is vigilance and knowing how to treat the greens before they get brownpatch. Prevention is better than cure.