

July and August are the months when browned areas are especially common on greens. Entire greens with a browned and unthrifty appearance are by no means unusual.

Browning of turf may be due to one or more of many causes, among them are:

- Brown-patch disease.
- Insufficient water.
- Unfavorable soil conditions.
- Poisons in the soil
- Burns with chemicals.
- Starvation—especially shortage of nitrogen.

Greenkeepers frequently fail to distinguish the various types of browning. Due to the publicity brown-patch has received in recent years, it is frequently taken for granted that all browned turf is "brown-patch."

The safest and most effective treatment so far known for brown-patch consists of an application of some mixture containing mercury. Mercury is an expensive chemical and all compounds containing it are relatively costly.

It is well to know whether brown-patch actually is responsible for the unthrifty appearance of turf before going to the expense of an indiscriminate application of some expensive mercury preparation. See THE BULLETIN, June, 1926.

Frequently we find a greenkeeper wasting some mercury compound on a browned green where all that is needed is a little more water each day.

Likewise these compounds are frequently wasted in attempting to check some browning which is due solely to some unfavorable soil condition or to poisons (copper for instance) collected in the soil. No amount of mercury will correct such conditions. Yet the greenkeeper who attempts it will usually be quick to express his opinion as to the ineffectiveness of these fungicides against "brown-patch."

Applications of mercury fungicides for brown-patch control are usually accompanied or followed with some fertilizer. This is a wise practice on greens that need fertilizer.

But don't be fooled! We have seen greens when the combination treatment of mercury compound and fertilizer (either home mixed or a much more expensive commercial mixture) have been applied with apparently remarkable results. In some cases the fertilizer alone would have given practically the same improvement for the greens were badly in need of nitrogen. In other cases a very small amount of the mercury compound would have been sufficient to check the slight attack of brown-patch and the fertilizer would do the rest.

Where you have browning due to brown-patch don't hesitate to use some mercury fungicide; but where the browning is due to some other cause, don't waste your money on these expensive chemicals.