GREENKEEPING PROBLEMS

in

LEACH'S MAIL BAG

Arsenate on Fescue

Sir:

Have you ever experimented with arsenate of lead on fescue grass, especially Chewing's feecus?

Chewing's fescue?

We in the Northwest are in a district which is very favorable to fescue greens. Very good greens may be obtained with it very reasonably.

A. S. (Seattle).

Reply:

In the early days of my experimental work with lead arsenate, we had some very beautiful plats of Chewing's fescue growing in soil treated with very heavy doses of lead arsenate. Under the circumstances, I believe you will be entirely safe in treating this grass with arsenate of lead.

After satisfying ourselves that most grasses did well in arsenated soil, we discontinued the experimental work with many of these grasses, including fescues, simply because they are not used to any great extent in the East, their place having been usurped by the bent grasses.

B. R. Leach.

This Combination O. K.

Sir:

I have been using an application of sulphate of ammonia regularly on my greens once a month. This year I intend to experiment with arsenate of lead as a weed and worm eradicator. Would there be any danger in using both these chemicals on a green?

J. N. (New York).

Reply:

There will be no ill effects following the use of a combination of ammonium sul-

FRANK P. MACDONALD GOLF ARCHITECT

53 W. Jackson Blvd. Chicago, Ill.

Construction and Maintenance Supervision

The Lark

A Sprinkler Which Gives EVEN DISTRIBUTION

on any pressure

You will find the Lark an ideal sprinkler in every way. The far-throwing, slow-moving main stream is broken to prevent big drops which dig out the top dressing. Wind won't stop this sprinkler. A Lark is perfectly safe to set for an all-night run.

Try one 10 days at our expense. If you are not completely satisfied, return it to us,



The "Lark" Sprinkles Evenly

125 ft. on 50 lbs. pressure

100 ft. on 40 lbs. pressure

90 ft. on 35 lbs. pressure 80 ft. on 25 lbs. pressure

60 ft. on 15 lbs. pressure (Pressure readings at the sprinkler)

There is no other Sprinkler that gives such **even** coverage, from center to outside circumference regardless of pressure.

All parts brass, except the roller and the hose pipe.

L. R. NELSON MFG. CO.

Peoria, Ill.

"We are digging up these drains for the last time"



THERE is an answer to broken drains—a pipe that will not crack or break in spite of trucks, rollers, freezing water and heaving and swelling soils. Armco Perforated Iron Pipe cannot break because it is flexible. Put your drains down once and for all. Stop replacement annoyance and expense. Complete information on request. Write today.

Armco Culverts and drains are manufactured from the Armco Ingot Iron of The American Rolling Mill Company and always bear its brand.

Armco Culvert Mfrs. Association Middletown, Ohio

ARMCO

Perforated

PIPE

phate and lead arsenate on turf. The two chemicals are entirely compatible.

B. R. Leach.

Chickweed; Top-dressing

- (1) In using lead arsenate for weed control, how early would you start the treatment? One of our blue-grass and red-top greens has chickweed coming in pretty fast. How much should we apply per 1,000 sq. ft.? Would you recommend a second treatment; if so, how long after the first and how much?
- (2) We fertilize during the month of May with milorganite, 300 lbs. to each green, which average 5,000 sq. ft. Would you split up that amount into more than one application? If you recommend sulphate of ammonia in the spring, how much and when should it be put on?
- (3) We have never had any manure to put on our greens until last summer, when I used some soil from a field I plowed the year before. I took some wild land, manured it, raised a crop of rye, plowed it under, sowed buckwheat and soy beans the last of June, and plowed them under also. What do you think of this way to fix up dirt for applying to greens?
- (4) Is it practical to change a bluegrass into bent gradually by the use of stolons each spring when top-dressing?
- (5) On a 5,000-sq. ft. green, what is a light top-dressing, a medium one, a heavy one? Would you clip greens close in the spring?

A. S. (Wisconsin).

Reply:

There is a decided difference of opinion in some of the matters you bring up, and my replies, in last analysis, are simply my personal opinions.

(1) For chickweed control, apply lead arsenate as soon as growth starts, 5 lbs. per 1,000 sq. ft. If, after three weeks, small spots of the weed still persist, give them an additional treatment with the chemical, but not the green as a whole.

(2) Put all the milorganite on the green in one application in early spring or late fall. During the cooler growing season 30 lbs. per 1,000 sq. ft. is a good application; half this amount during hot weather.

(3) Your method of preparing topdressing is O. K.; much better in my opinion than the compost pile method.

(4) George Davis of Louisville, Ky., told me that he had changed blue-grass greens to stolon bent by inserting stolons into the turf with a sharp spade or knife. It takes time and perseverance, but can be done. Am afraid covering of stolons with top-dressing would result in the runners drying out.

(5) A light top-dressing is ½ cu. yd. per 5,000 sq. ft., which covers green 1/32 in. deep; a medium top-dressing is 1 cu. yd. per 5,000 sq. ft., which covers green 1/16 in. deep; a heavy top-dressing is 2 cu. yds. per 5,000 sq. ft., which covers green ½ in. deep. Clip the grass close from the time growth starts in the spring. Top-dress lightly as growth slows in the fall.

B. R. Leach.

Aiding Faulty Greens

SIF:

We have 18 bent greens, last year being our first year of play. All year we were bothered with small brown-patch, the worst coming at the close of the season. The turf looks very bad at this time, and I am wondering if our top-dressing last year—good black dirt, peat and sand—was the cause. We fertilized with sulphate of ammonia.

The greens are temporary, to be used until our permanent course is completed, and were laid on clay soil with very little care taken in building. Would limestone help, and if so, in what proportions?

Do you suppose the brown-patch will be gone from the greens since they have been dormant all winter?

We are fertilizing our greens and fairways with milorganite, 800 lbs. to the acre on the fairways. What amount would you use on the greens?

B. F. H. (Indiana).

Reply:

Briefly, your problem is to thicken up the turf by encouraging the bent grass to spread. The fertilizer will do this providing the soil of the green and drainage are O. K. If the soil is hard and poor, the fertilizer may not show quick results. All the fertilizers in the world will not remedy insufficient care in the building of a green.

Discontinue the peat and use 10% rotted manure in the top-dressing. Apply 30 lbs. milorganite and 3 lbs. sulphate per 1,000 sq. ft. of green at once.

On May 15, would apply 50 lbs. ground



Why Modern Golf Courses Use Cast Iron Pipe

Genuine cast iron pipe gives a golf course absolute dependability in its water system. Cast iron does not rust. It lasts for centuries. Once laid it can be forgotten. A golf course properly should be a place of pleasure—not of trouble.

Clow-National Two-Inch pipe is furnished with several different types of joint. Ordinary laborers easily assemble it. The Prepoured Joint is ready to calk. The Flexible Flanged joint needs only bolting together.

A complete line of fittings is furnished for this pipe, and golf courses everywhere are using it. It is the most economical pipe system you can install.

Write for catalog and prices.

James B. Clow & Sons, Chicago, Illinois. National Cast Iron Pipe Company, Birmingham, Alabama.

Foundries:
Esymingham, Ala.; Newcomerstown and
Coshocton, Ohio
Sales offices:

Chicago, New York City, Philadelphia, Boston, Pittiburgh, Milmaukee, Detroit, Mismeapolis, Salt Lake City, San Francisco, Lot Angeles, Dallas, Kanzas City Golf Courses

Playgrounds

Aviation Fields

THE DORR PACKARD CONSTRUCTION CO. RHINELANDER, WIS.

Experienced

Efficient

Economical

limestone (not hydrated lime) per 1,000 sq. ft. of green, mixed with the top; dressing. Also, apply 3 lbs. ground limestone per 1,000 sq. ft. with every top-dressing thereafter. The lime should hold the brown-patch during the coming season; but if the lime is not applied, the disease will return as soon as weather conditions are favorable.

B. R. Leach.

K. O. Punch for Grasshoppers in This Bait

GRASSHOPPERS, cut worms or army worms, if they become abundant enough on golf courses to be injurious, may be controlled by using a poison bran mash bait made as follows:

The bran and poison should be mixed together quite thoroughly while dry. The oranges or lemons should be grated or ground quite thoroughly and with the two quarts of molasses mixed in about 1½ or 2 gallons of water. The bran with poison mixed into it should then be wet with the water containing syrup and oranges or lemons. After thoroughly mixing the liquid and bran the mixture should not be quite wet enough to squeeze water out of the bran when held tight in the hand. It should be just wet enough so as to be crumbly when sown broadcast.

In controlling grasshoppers the poison bran bait should be sown broadcast lightly but evenly so that the 20 to 25 pounds will cover from 4 to 6 acres of ground. The poison bait should be sown at the time of day when the grasshoppers are noticed doing the most feeding. If it is hot and dry, this may be early in the morning or late in the evening. If the weather is not so hot it will be nearer the middle of the day—Clyde C. Hamilton, N. J. Agricultural Experiment Station.

What's the Policy on Delinquents?

FROM the central states the treasurer of a certain golf club writes Golfdom asking what policy most clubs have in force with respect to handling delinquent accounts. About the only reply we were

LECCO—a sane ration for starving turf

A golf green is one of the most intensively cultivated of all crops. Only by luck does the old-fashioned compost pile give it the balanced diet that it needs to keep it luxuriant and healthy. LECCO, the golf turf fertilizer developed after long years of research by the distinguished turf authority, gives fine grasses the sustenance they need without a weakening stimulation. It goes further and lasts longer.

For a certainty of results, proper speed of development, and healthy disease resistant stamina, LECCO application is used and endorsed by an army of successful greenkeepers. Naturally it's displacing the expensive and uncertain antiquated compost pile with its worry of weeds and brown-patch peril.

THESE PRIZE PRODUCTS HAVE CARRIER QUALITY, TOO

COCOOS CREEPING BENT SEED.... Lyman Carrier developed this seed as the greens-maker that is sweeping the country because of its magnificent production of putting surface. There is only one genuine Lyman Carrier Cocoos.

WASHINGTON CREEPING BENT STOLONS... Lyman Carrier was the originator of this strain. In his own model nursery its purity is carefully preserved, free from weeds, and shipped to the clubs that want the moderated prized strain the majority of good clubs have.

CARRIER SUARAMETER PROBUCTS

LYMAN CARRIER '- Granger, Indiana