

Leach Answers Some Greenkeeping Queries

Poa Annua Control

Sir: What is the latest information on the control of *Poa annua* by means of lead arsenate? Last spring, early, we applied lead arsenate to a green heavily infested with *Poa annua*, but cannot see that it reduced the weed to any great extent.

I. I. (N. Y.).

Answer

The question of controlling *Poa annua* by means of lead arsenate has agitated the greenkeeping profession ever since I announced the results of my experiments with lead arsenate in 1926. We do know that lead arsenate has not consistently controlled *Poa annua* as it has controlled chickweed.

When a chemical will control a given weed in one instance and fail to do so in another, it is fairly obvious that some angle of the problem is not entirely understood. Consequently, some greenkeepers are unwittingly applying the lead under conditions propitious for *Poa annua* control while others are unintentionally doing the exact opposite.

Under the circumstances, I have studied this question for the past three years, have inspected numerous greens all over the east and have closely questioned greenkeepers wherever good or bad *Poa annua* control resulted following the applications of lead arsenate.

I have come to the conclusion that the time of application of the chemical is the governing factor in obtaining success or failure. I make this assertion because, as is generally known, *Poa annua* makes its rankest growth in the cool months of the spring and fall and disappears from the green during the hot summer months except in shaded areas. In other words, *Poa annua* is an annual, and the seed, which ripens in latest spring, lays over in the soil until the cool fall months render the soil suitable for the seed to germinate.

In view of these conditions, and where it is desired to keep *Poa annua* out of a given green, I would apply 5 pounds of lead arsenate in the late summer or early

fall just before the cool nights cause *Poa annua* to begin to germinate. The exact time can best be determined by the greenkeeper, who is familiar with his local conditions and climate.

On the contrary, it would seem advisable for those wishing to control worms, grubs or chickweed on *Poa annua* greens to avoid the application of the arsenate during this period of germination and to rather apply the lead arsenate when the *Poa annua* is in full and lusty growth.

In other words, lead arsenate does not seem to affect *Poa annua* grass, but does seem to check the germination of the seed.

B. R. Leach.

Spring Arsenating

Sir: I recently read an article in regard to "forking" the ground of greens before applying arsenate of lead in the spring. Do you consider this important? And if so, would not the spike roller be better?

The grubs were very bad the past season, as were also angle worms later.

Have arsenated greens this fall. What time and what quantity of lead would be best for spring treatment?

W. Q. (Ohio).

Answer

Sir: With regard to forking or spike rolling the ground in connection with the application of lead arsenate, would say that I think the spike roller would be the best. It is not necessary or desirable to work the lead into the soil to a greater depth than one inch, and a shallow spike roller would in all probability be of considerable assistance in the case of heavy, tight clay soils.

As regards the amount of arsenate to apply to the greens this spring, I would be governed by the amount applied last fall and also as to whether the fall application seemed to check the grubs and worms. In cases of severe grub and worm infestation, it is best to apply 5 pounds per 1,000 square feet of turf at once and in one application. This dose will usually check the trouble with the possible exception of