

When lead arsenate loses its toxicity to grubs, worms and weeds it becomes *inert* just like so much sand or cinders and does not affect the grass one way or the other.

B. R. L.

O. K. on These Bermuda Greens

I think our course right now affords the finest example of the use of arsenic of lead and its non-use that you can imagine. The greens are as near perfect as Bermuda greens can be, while the fairways, where arsenate of lead was not used, are in a sad state. Some of them look like they had been literally plowed up. (By June beetle, I presume.—B. R. L.)

W. G. J.
(North Carolina.)

Question

Sir:

Here, at southwest Florida, we have a new 18-hole golf course with carpet grass (seeded) fairways and Bermuda Grass (sprigged) greens. In about ten days we plan to top-dress heavily and sow Italian Rye and Red Top in our greens.

Last year the putting greens of the old nine-hole course were in bad shape. The grass (we kept Bermuda Grass putting surfaces throughout the winter) began to die out—in spots and in strips—we dug up parts of the affected areas, and searched thoroughly for grubs. Quite often we would find as many as three or four white grubs, very often none, in sods one foot square and six inches deep. Samples sent away to State Experimental Station were reported as infected with something "similar to brown patch" and copper lime dust was prescribed. This treatment gave a measure of control, but only for a few days at a time, and finally the copper poisoned the soil and then the winter season, for which the course is pointed, was over.

Now, about ten days ago what was probably the same trouble reoccurred. Some sand was applied without any appreciable effect, and then copper lime dust was applied, and when the writer arrived from his summer job three days ago the affected area looked healthy enough. The affected area was a band about four feet wide, stretching across the green. On this area, as well as on other putting surfaces, there are sandy piles this morning, of about a good tablespoon in quantity. These have the appearance of casts, although the soil is so sandy that there is little form to them. Also digging did not reveal any worms or crickets.

Under the circumstances we have just about made up our mind to apply arsenate of lead when the trouble reoccurs. Of course if we are guessing wrong we are giving the trouble a head start, and that is why we would like your opinion in the matter.

Does arsenate of lead have any virtue as



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a brown patch preventative or control? How will it affect the Italian Rye and Red Top putting greens? Would the lime of the copper lime dust have a harmful affect on Italian Rye and Red Top?

(P. S.—This summer, on the creeping bent greens that I installed in northern New York five years ago, I used arsenate of lead with perfect success in control of worms.) Sincerely,

T. H. P.
 (Fla.)

Answer

Sir:

Your difficulty can probably be narrowed down to one of three things, viz:

1. If your turf dying out is due to white grubs (not June beetle grubs) the grass will be loose in the dead areas for the simple reason that grass injury and death by white grubs is caused by their eating and cutting the roots just below the surface. Pull on the grass in these dead spots. If it comes up readily and examination shows that the roots have been cut then your trouble is white grubs and I suggest you give the turf a treatment with arsenate of lead, five pounds per thousand square feet of surface.

2. From what you say toward the end of your second paragraph it may be June beetle. These grubs throw up casts as you describe, but you would not find the grubs by shallow digging because they spend the daytime in burrows a foot or more below the surface. They do not eat the grass roots but destroy the grass by their burrowing and tunneling. These can also be cleaned up by the use of arsenate of lead.

3. The trouble may be caused by fungus in which event I would apply consistently any of the standard mercury brown patch preventatives. I would not use the copper lime dust. It has, in the long run, a decidedly unsatisfactory action on soil resulting in toxicity to the grass.

Arsenate of lead has no virtue as a brown patch control or preventative. I have successfully grown Italian rye and red top in arsenated soil.

B. R. L.

AS a means of encouraging members to bring their whole families to the club for evening meals, one manager hit on the subtle scheme of offering a special 'surprise' dessert for the children. This dish consisted of a scoop of ice-cream, a small slice of cake, or cookies, and, at one side, wrapped in gayly colored paper, some small toy or favor costing not over a penny or so, but of tremendous appeal to the youngsters.

These favors were mainly purchased from the local dime store and consisted of inch-long china dolls, lead-soldiers, and the like.