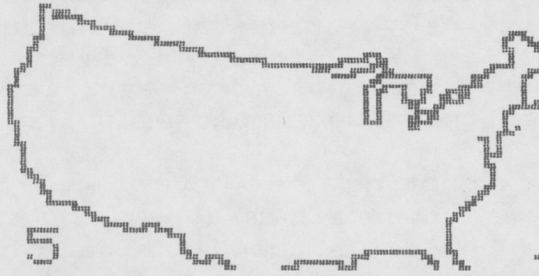


TURF COMMS



VOL. 2, ISSUE 5

JULY 1, 1986

PURPOSE: To pass on what we learn willingly and happily to others in the profession so as to improve turf conditions around the country.

ADDITIONAL COMMENTS ON MEYER ZOYSIA

The Kansas City area was revisited. All but one of the superintendents plans to stick with solid zoysia fairways. As one superintendent told his members in a newsletter. "I believe that zoysia grass is the best choice for turf on our fairways. Yes we have suffered a set back now, but if we grew bluegrass, rye or bent fairways the probability of losing turf could dramatically increase. There is no perfect grass."

You will find me in complete agreement - there is no perfect grass and zoysia is the best choice for Kansas City fairways. Year in and year out regardless of time of year zoysia will provide for the transition zone a better fairway playing surface than any other turf species.

This cultivar of Zoysia (Meyer) is not a strong, deep rooted turfgrass. One superintendent in Oklahoma found this weakness of Meyer a problem when using it on steep slopes for the purpose of reduced maintenance. He has ended up with greater than hoped for maintenance because golfers climbing up the slope are tearing the turf from the slope. This is two year old sod on a country club with a low number of rounds.

Meyer is definitely first to show moisture stress when compared to bermudagrass grown under the same conditions. It's weaker rooting makes it a poor candidate on tight soils, especially

TURFCOMMS is published at unpredictable intervals by the editor and publisher:

Douglas T. Hawes, Ph D
Certified Professional Agronomist
Specializing in Golf Course
Maintenance Consulting

2408 Roundrock Trail
Plano, Texas 75075
(214) 867-0176

Subscription cost is \$10. Send checks to Doug Hawes at the above address.

where sodium levels make the soil quite impervious. Under such conditions more frequent aerification is needed to grow the same quality zoysia turf as bermudagrass. Although, I have seen Meyer grown without aerification I have come to believe that it requires more aerification than common bermudagrass when grown on compacted soils.

The slower rooting of Meyer was evident at another course this summer where both Meyer and common bermudagrass sod were laid beside a new drainage ditch. Three weeks after laying in May high water had more tendency to rip out the zoysia than the bermudagrass sod.

END

POA EMBARKS - - - - HOPEFULLY

Research by Dr. Shearman at Nebraska and use by some of that areas superintendents indicates that Embark (mefluidide) has some definite herbicidal properties. A late fall application of Embark results in Poa annua embarking upon the voyage we all must take some day - a trip to the land of the dead.

The rates used are 1/16 to 3/8 pounds of active ingredient/acre. This is 4 ounces of the standard 2 lb./gal. formulation to a pint and a half per acre. The best control is at the higher rates. The most turf damage is also at the highest rate. Eight ounces has a very questionable safety on bentgrass greens. A pint is safe on healthy Kentucky bluegrass, perennial ryegrass and bentgrass at fairway height.

This use of Embark is still experimental, however the rate range discussed here is within the label range for the use of Embark on the desirable grasses. For those wishing to try this on bermudagrass, the label rate for growth retardation on common bermudagrass is 4 pints per acre. Therefore, I would assume Embark is quite safe on any of the bermudagrasses at 1 and 1/2 pints/per acre. But, this is not a guarantee of safety.

Embark however, has been used to suppress growth of Kentucky bluegrass in Meyer zoysia with complete safety and little suppression if any of the zoysia.

Poa annua sprayed in November appears to very, very, slowly fade away. In Nebraska they have obtained control at rates as low as 1/4 pint of the 2 pound per gallon formulation. The 1 and 1/2 pint rate has always given 100 percent kill. The cost is very low for amount required/A.

What is not currently known is whether these rates will result in death of *Poa annua* in areas where the winter climate is different than Nebraska.

You should apply Embark for this use sometime after the first hard frost. On non-bentgrass area you can include recommended rates of Trimec, 2,4-D, or other broadleaf herbicides. That is unless you are planning to incorporate a seeding program with your *Poa* control program.

Incorporation of a seeding program with the above Embark spraying is an excellent idea for cool season grass areas.. You may seed three days after spraying Embark.

You should be prepared to repeat the Embark application in late February or early March in the southern half of the United States as seed that germinate after the application are not controlled.

The use of Embark for the purpose of controlling *Poa annua* in warm season grasses has an additional advantage over many methods of control. Embark at 8 ounces of formulation is fairly safe on bentgrass putting greens. Therefore you should feel save using it right up to the edge of the green.

A little drift, a little tracking on by golfers, or movement by water should cause no more than a temporary slowing of growth for the bentgrass. An accidental direct spraying on the putting surface at the 1/2 pint rate will result in some temporary discoloration and Helminthosporium. The one pint/acre rate sprayed across a green by accident would however, result in some kill.

On bentgrass greens there is a very good chance of getting an attack of Helminthosporium from a 4 ounce application. Therefore, it is best to apply a preventative fungicide for this disease before spraying the Embark.

END

RUBIGAN USE ON PUTTING GREENS

from Kansas Grass Roots, April, 1986

After using Rubigan on our Greens for 2 years as a fungicide with the hope of suppression of *Poa annua* I decided to change my method of use.

For the first 2 years of use we would apply it in .5 oz applications starting about May 1 for 4 applications until we had 2 oz/1000 sq. ft. through the season.

While this program did help eliminate and retard the Poa annua I didn't feel we were accomplishing everything we needed to.

One of the problems with the program we were using was that the Poa annua would germinate and be aggressive in the fall. We were not using Bensulide because of overseeding with bentgrass seed at fall aerating time. While we could get some germination of the desirable bentgrass seed the Poa annua would be very competitive in the cool fall weather.

In 1985, we decided to adjust our program to discourage the germination and the flush of Poa growth in the fall. We started using Rubigan at .25 oz about May 15 as a fungicide. By July 15 we had accumulated 1 oz or 4 applications. On July 15, August 1 and August 15 we applied .5 oz per 1000 sq. ft. to bring our total applied to 2.5 oz. Right after Labor Day we aerated and topdressed the greens. We went back in and refilled the aerator holes with sand 3 to 4 days after our initial topdressing. After spreading the sand on this operation we seeded Pennncross bentgrass seed at the rate of 1/2 lb. / 1000 sq. ft. This was dragged into the holes with the sand. 3 weeks later we came back with another .5 oz of Rubigan per 1000 sq. ft.

In the spring of 1986 (March) we can see almost every aerator hole with a plug of healthy appearing bentgrass in them. It doesn't seem like the Rubigan had any adverse effect on the germination of the bentgrass while doing an excellent job of reducing the germination of the Poa annua.

I feel that this can be a very good way to introduce a more desirable species of bentgrass into old putting greens such as we have at Prairie Dunes CC. While Rubigan can be a good tool in the establishment of a desirable grass it cannot replace the need for good cultural practices to discourage the germination and growth of Poa annua.

Our plans for 1986 are to follow a similar program as described above. We hope to be able to establish more Pennncross bentgrass in our greens with a continuing decline of the Poa annua population.

Douglas Petersan
Prairie Dunes CC

Editor's note:

I have seen one good but somewhat scary control of Poa annua with Rubigan at another golf course and talked to a superintendent about his experience. I have asked the first superintendent to write up his experience. The second lost bentgrass on one green when it accidentally got sprayed twice. More next issue. END