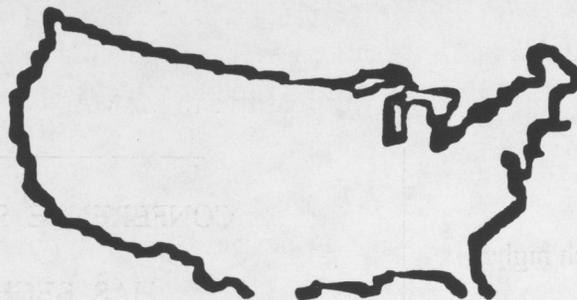


# TURFCOMMS



V. 7, I. 5

Nov. 6, '93

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

**HYDROJECT - MORE:** I have talked to quite a few more users since the last issue of this newsletter. It appears that the Hydroject even without wetting agents injected will control localized dry spots if used three or four times through the summer. Also that "Wetting Fork" put out by superintendent Jerry Lemmons of Old Hickory C.C., Hermitage, TN does a good job. That "Wetting Fork" may be expensive but, it sure isn't a big investment when compared to a Hydroject.

**ALGAECIDES:** As usual I had many calls for algaecides this summer. I had just added Consan 20 to my Fore and hydrated lime recommendations when I encountered a new one at the Oklahoma Turf Conference Show. Has anybody used Algaen-X put out by Grace Sierra? It has an interesting label. First, it is a mixture of many different N-alkyl dimethyl benzyl ammonium chlorides. Secondly, it has on the label "Avoid application to turf areas actively grazed by waterfowl." which makes it sound like a Canadian geese killer to me. So I guess you can't use it if you have any of those on your course. Thirdly, they have toad stools and fairy ring control on the label along with dollar spot, fusarium blight, leaf spot, brown patch, fading-out, pythium blight and rust. Fourthly, **DO NOT MIX ALGAEN-X WITH IRON-BASED MICRONUTRIENTS, DYE PRODUCTS OR OTHER ANIONIC MATERIALS.** And up to there I thought we had the perfect fungicide. From the chemistry I have the feeling this stuff might burn creeping bentgrass on a hot July day if used at too high a rate. Any comments out there???

**WHO WANTS A TURF ADVISORY VISIT NEXT YEAR???????????**  
Please give me a call.

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OKLAHOMA TURF CONFERENCE: Didn't get there till 11 A. M. of Wednesday but learned a lot. Dr. Ned Tisserat, a pathologist from KS State U., discussed Zoysia Patch and Spring Dead Spot (SDS).

SDS - Dr. Tisserat pointed out that several root pathogenic fungi have been shown to cause the disease and that the causal organism appears to differ in different regions of the country and world. The fungi appear to colonize the root systems in late summer and are active into the fall. These infected roots are then easily killed by cold. Cultivars that are the most resistant to cold appear to be the most resistant to SDS. He rates Midiron, Midfield and Midlawn as having a fair amount of resistance. With Midway, Guymon and Vamont being somewhat less resistant, and Arizona common and U-3 being very sensitive. He noted that young plants appear to be more resistant than plants two to four years old and that stands 30 or more years old seem to out grow the disease.

He notes that the new fungicides Lynx and Eagle give control if applied in late summer but need to be watered in with 1/2 to one inch of water. September applications in Kansas are better than October applications. For cultural control he urges growers to keep thatch under control by using less than four pounds of nitrogen/M/year. He suggests the use of potassium chloride and ammonium sulfate for fertilizations. The latter in Kansas because of its acidifying nature. He points out that fertilizations after September increase this disease as a problem.

Zoysia Patch, he prefers the name Large Patch for this disease caused by a strain of Rhizoctonia solani. The strain that does the damage is different than the one that attacks tall fescue or creeping bentgrass. This spring and fall disease of Zoysia looks and acts like the brown patch of creeping bentgrass except it attacks in cool cloudy spring and fall weather. It clobbers Meyer fairways in the St. Louis and Kansas City areas some years. The fungi only kills the shoots.

The patches have a light orange color. It is much more severe at 1/2 inch than at one and 1/2 inches. Lesions often can be seen on the sheaths.

Dr. Tisserat suggest improving drainage as a cultural control. He notes that preemerge herbicides have no effect on the severity of the disease. He recommends that you not fertilize when the disease is active and to use urea for your nitrogen source after spring greenup. In the fall preventative applications of fungicides such as Lynx and Prostar do help. Chipco 26019 at 6 to 8 oz./M with Banner at 4 oz./M also are helpful, BUT can you afford them on fairways?

While on the subject of zoysia he said that if you find a lot of yellowing in zoysia suspect nematode damage.

Dr. Richard Couch, an aquatic management specialist from Oral Roberts Univ. noted that Aquazine (Simazine) is no longer labeled for aquatic use. He said a new aquatic herbicide, Sonar (fluridone), is selling like hot cakes in Florida.

Dr. Nick Christians of Iowa State Univ. talked on Micronutrient effects on Bentgrass Greens. He noted that he has seen magnesium deficient bentgrass on greens when pH Cation Exchange Capacity (CEC) were both low. Calcium deficiencies where the young leaves are reddish brown and manganese deficiency which is similar to iron deficiency - the veins remain green along with the tip of the leaf. The leaves will droop.

He noted that if you are using effluent to watch boron; even 1 to 2 ppm is too much. He went over the zinc data which was published a while back showing that even amounts up to 4000 ppm caused no more than a slight discoloration. He did note that there is some data to suggest that bermudagrass might be less tolerant of zinc.

One of the most interesting talks to me was the one given by John Zupancic President of Soil Quest. Mr. Zupancic is an agronomist with a lot

of experience in soil testing. Soil Quest is a line of fertilizers, some with a composted cow manure base and one interesting potassium material that is sunflower hull ash.

He showed some data from Dodge City C.C., KS that showed potassium in the tissue ranging between 1.5 to 2.6% even though up to 13 pounds of potassium had been put on/M. He also saw only a little increase in potassium in the soil with large amounts of potassium applied. He did point out reasons why that should not discourage you from applying potassium.

But most interesting of all was his data showing how easy it was for a little rain to leach potassium out a column filled with a topdressing sand. The equivalent of a one inch rainfall removed 85 % of the potassium in the top inch from a potassium sulfate application; 60 % from the sunflower ash material his company sells; and only 24 % from a resin coated potassium source. He showed data from a succession of four more one inch increments. When he got done with five inches of water there was only 2% of the potassium left from potassium sulfate, 22 % from the sunflower ash and 67 % from the resin coated material.

If you live in the southern half of the U.S. where three and four inch downpours are not that uncommon the resin coated potassium source should pay for itself on greens real quick. Although a normal sand topdressed putting green would have a lot more CECs in the top inch due to accumulated organic matter it does point out the ease with which soluble potassium is leached from the root zone. Also indicated is the need to apply light frequent applications of potassium during the summer months especially after heavy thunderstorms.

Dr. Richard Schmidt of Virginia Polytech and State Univ. recommended fall fertilization of bermudagrass and noted that some of the other turf extension specialist did also, emphasizing potassium but putting on nitrogen too. He

showed some old data on Coastal bermudagrass that gave increased survival with increased nitrogen as long as potassium is increased with it. The advantages to fall fertilizer applications were slightly longer and improved fall color and more rapid spring recovery. He suggested that the last fall application should be 30 days before the first frost.

He also told us that chelated iron applied with and without cytokinins improved winter recovery with the combination giving the best results.

Dr. Ned Tisserat the plant pathologist from Kansas State Univ. then gave a talk entitled Factors Contributing to Bentgrass Decline. And my first note was his comment that after severe summer flooding at Manhattan C.C., Manhattan, KS in fairways that were bermudagrass, zoysia, and perennial ryegrass only the bermudagrass survived. (Ed. comment - very typical in the center of the U.S. this summer).

Cool Season Brown Patch - he noted that Cohansy was very sensitive. Also that Prostar, Lynx, Bayleton and Eagle controlled it.

He then went on to everyone's old friend, Pythium. He pointed out that there were many species of Pythium that attack bentgrass in both cool and warm weather. With the cool weather Pythium being a root rot. He noted that for control of this disease your fungicides must go on preventative. He suggested Koban, Aliette at 4 oz. with Mancozeb at 6 to 8 oz./M, or Subdue with Mancozeb. I got the impression he felt a Koban drench might be slightly better than the two combinations. He went on to say that he has not been able to show that nematodes are associated with this disease.

He also noted that one should not compare results from two different pathology laboratories on nematode counts because strikingly different methods are used by different labs.

Dr. Coleman Ward, the turf extension specialist from Auburn Univ. and now probably one of the most experienced southern turf research and extension persons, spoke first on Winter Overseeding for Fairways and Tees. As I spend a lot of time trying to discourage golf courses from this practice you must consider your editor's interpretation of his talk biased.

He first suggested two economical alternatives to overseeding fairways. The first was the spraying of dormant fairways with iron (specifically he suggested Ferron). As he pointed out this will darken the fairway and show precisely where it is. This practice also reduces glare which is sometimes a problem with dormant fairways. The second suggestion would save money and labor also and it was to drop seed with perennial ryegrass a five foot border only around the fairway in the rough. In both cases all those players that move the ball about only in the fairway would now know where it was. And both ideas would make the course play a little easier for those that had not been on the course before.

Dr. Ward is adamantly opposed to split seeding, i.e. seeding some of the seed one day and then waiting 2 or 3 weeks to seed the rest. He also noted that bermudagrass (Ed. I assume not under overseeded conditions) would increase the stored carbohydrates in the stolons and rhizomes from 20 to 40% from early Nov. into Dec. even though it appeared to be dormant.

His recipe for a good overseeding fairways and tees (ED. where winter kill is not a problem) is to:

- Scalp
- Vertical mow
- Brush, sweep or vacuum
- Remove
- Drop seed
- Apply fertilizer
- Sand topdress
- Begin mowing at least 3/16 inch higher than scalped at height

For the spring transition he prefers increasing the nitrogen level, lowering the mowing height and using a "nudge" herbicide. His example of a "nudge" herbicide was Kerb. This is a material that will remove or thin cool season grasses from bermudagrass without injury to the bermuda.

He had some data to indicate that vertical mowing in March and April on straight bermudagrass may delay greenup by four to six weeks. From that viewpoint and with the knowledge that a verticut can not tell the difference between a bermudagrass blade and a ryegrass blade he does not recommend vertical mowing during spring transition.

Dr. Ward next talked about goosegrass control. Iloxan and oxadiazon were his two favorites. He mentioned that Iloxan had been developed in 1974 and released first as Hoelon. It is an excellent but, very selective contact herbicide. It controls goosegrass in bermudagrass only. It will also remove overseeding grasses. Dr. Ward points out that it can be used on bermuda greens at 0.75 lb./A (one quart of the 3E formulation). He urges users for best results to apply at least 40 gallons of spray/A. If you wish to kill mature goosegrass he suggests you first scalp, wait four days and then spray at the one and 1/2 lb./A rate. He notes that it is safe on newly sprigged Tifway(419). Regardless of what you are using it on he suggests not mowing for 36 hours. Remember though this herbicide gives zero control of common crabgrass and many other weeds you might want to get rid of. He also claims that Pennncross will tolerate 0.35 lb./A and that this herbicide can be used to control carpetgrass in bermudagrass. One of my closing notes was that Dimension is weak on goosegrass and that zoysia under high nitrogen levels was sensitive to MSMA.

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CONFERENCE SEASON

HAS BEGUN