## TURFCOMMS



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

MORE ON SULFURIC ACID/UREA INJECTION: Not reported in the last issue of TurfComms was that many users were finding it very difficult to keep organic matter levels up in the soil. These low organic matter levels resulted in low levels of some minor elements and a poorly buffered soil. Some superintendents had used Agro-Lig, others had used Ringer products or Milorganite to assist in raising organic matter levels.

Gary Schinderle writes to me from Colorado about Leonardite, "an organic material occurring as an overburden in lignite coal deposits." He says several superintendents are very happy with it. I also see from a recently clipping that The Toro Company has bought into a leonardite-based technology company, Bio Huma Netics, Inc. Agro-Lig is a similar product. A representative of the Innova company also handed me on 9/24, material about the Humates they are now selling

Before you put a organic matter supplement on at the 20 to 40 pounds per thousand sq. ft. recommended you should look at any such product's clay and silt content. Innova claims theirs is free of silt and clay.

DIMENSION AN UPDATE: Got a call in March about the safety of Dimension (dithiopyr) on creeping bentgrass putting greens from a superintendent who had purchased it and planned to put it down. I couldn't tell him much more at that time than what was in my article in the January issue.

However, in the March issue of HortScience Shim and B.J. Johnson published on two years data of several herbicides on 'Penncross'.

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This work noted the safety of Dimension at one to three times label rate. They did emphasis the need to stick with only one application to avoid injury which should be expected from a second application in early summer. They also had good safety for trifluralin plus benefin and prodiamine at one to three times label rates applied in early March.

This work was done in Georgia on a turf being mowed at 4mm (0.158 inches or 5/32) maintained on a soil mix meeting USGA Green Section specifications. But, note again it was done on 'Penncross' not one of the new cultivars, another reason to be cautious when deciding to try a new cultivar. Most all the pesticide and management studies done on bentgrass putting green turf in the last 20 years have been done on 'Penncross'. Dr. Rossi reports in the Sept./Oct. '92, USGA Green Section RECORD, that "Older creeping bentgrass varieties(Cohansey, Seaside, South German mixture) and colonial bentgrasses are more sensitive and have been injured from dithiopyr applications, and grasses on non-amended, high-clay-content, poorly drained greens have also been injured."

Talked to two users of Dimension on bentgrass greens in late June, both were very happy. The superintendent in Oklahoma was more than happy he was definitely sold on the product. Excellent goose and common crab control and no root pruning. A third superintendent used it for Poa annua control with a late September application in Texas at the one quart/A rate. It further stressed out the bentgrass making things touch and go for a while.

Another user found he was getting a little goosegrass in mid-July and panicked. He went out an sprayed Dimension for the second time, and Acclaim on his bentgrass greens at label rate. He still has his job but portions of his greens were very questionable thru the summer. He did find out that this combination was awful effective at controlling U-3 bermudagrass on the edges of his greens. So maybe he has found a new bermudagrass control. Read below for more on bermudagrass control.

DON'T USE Dimension on TIFGREEN (328) bermudagrass putting greens IF: a) grass is less than two years old, b) mowing height is 3/16 or less, c) on sandy mix. This spring in South Texas when put on for crabgrass and goosegrass control it first was observed to rapidly remove the overseeded grasses where it was overlapped. Secondly, the Poa trivialis departed from these greens in about two weeks and the perennial ryegrass quickly followed. Thirdly, the 328 was severely stunted and when it did grow it did not peg down. Activated charcoal applications solved these two latter problems. Tifdwarf appears not to be adversely affected but the whole story is not in yet. Dimension will be available soon as a

granular. Beware it is even hotter as a granular. Stay tuned.

SOIL SAMPLING: Steve Harrer, supt. at Minnihaha C. C., Sioux Falls, SD., gave me a copy of the soil test results for samples from one of his greens that he broke into one inch increments. Thus he had a one inch sample, a sample for the second inch, etc. Many years before his predecessor Gene Reiter had begun a sand topdressing program. This is very evident as the cation exchange capacity of the top two inches is 7.3 and 6.2 respectively while the next four inches averages 16.7.

Another difference that separates the top two inches from the rest is available phosphorus. 31 and 12 ppm for the top two inches respectively and the bottom four average 105. If you took a three inch sample in this green the phosphorus reading would be 56. Thus whereas the three inch depth sample tells you that you have very adequate phosphorus a two inch sample gives you a reading of 21 ppm. The third and fourth inch are high in zinc, copper, and iron also which is probably associated with a period of relatively heavy Milorganite use.

Another example of what differences depth of sampling can give you is the zinc. A one or two inch soil sample tested for zinc would yield 3.2 ppm where as a three inch sample would show 10.2 ppm. In this case zinc is neither too low at 3.2 or too high at 28 ppm the high level in this soil found at the four inch depth. BUT WHAT ABOUT THE NUTRIENT LEVELS IN THE TOP INCH OF YOUR GREENS -- WHERE THE ROOTS WERE THIS SUMMER????

CONSULTANT CHARGES \$8000 FOR EIGHT INCH SAMPLES: I was relaying the gist of my talk given Kentucky superintendents about sampling only the surface inch of greens to a Nebraska superintendent I was visiting when he told me the following. It seems his club had hired a consultant to look at his greens. He had not requested it as he already gets the USGA Green Section Advisory Visit yearly. This new consultant came in and drew up a bunch of fancy conclusions based on samples he took that were two inches deeper than a farmer's plow depth and got a nice fat fee for this kind of consulting. I'm jealous of the size of the fee paid but I'd been ashamed to have taken it for that kind of work.

TEXAS A & M UNIVERSITY WILL PROMOTE PRAIRIE BUFFALOGRASS: I've sat on this article long enough - here goes. I found it a little hard to believe when I was down to College Station, TX in March but I was told by someone that should know that headline was a fact. At my request with a very delayed response time the University sent me a copy of their contract with the sod growers. Nothing in it concerning the above but, they conveniently or otherwise left out two additions to the contract. Who knows what they say? Also I have since had another confirmation of the above.

To PROMOTE a cultivar that many turf researchers would say was relatively untested before its release TAKES THE UNIVERSITY OUT OF SERVING THE PUBLIC, TO SERVING THEMSELVES AND INDUSTRY. We really do not yet know whether this is a good cultivar or not. Although I'll be quick to add that in the four of the five locations where I've seen it outside of plots it looked excellent for a buffalograss. However, in the exception it failed to establish after two years. This slightly acid sandy site was admittedly not a good location for a grass that appears to prefer slightly alkaline clay soils, but it does indicate one of this grass's weaknesses. Buffalograss's intolerance of shade also makes it a very poor choice for home lawns from my point of view. Can we also assume that Prairie having been selected because of its performance in Dallas will do poorly in more northern locations of the buffalograss range?

THE BIGGER QUESTION IS can we count any more on universities giving us honest, unbiased information as to what are the best cultivars for our needs? I've heard from one well known extension turf agronomist who feels this is becoming a problem. The President of the American Society for Horticultural Science, Dr. Thomas A. Fretz thinks this is a problem also. He wrote so in the ASHS Newsletter, Vol. 8(2) p.3, Feb. '92. I'll quote one sentence, "Public institutions must consider carefully the effects of patenting and licensing arrangements on the free exchange of information among scientist." Cultivar patenting has become big business for the universities. N.M. State U. just got \$102,187 in royalties writes Golf Course News for NuMex Sahara sold in the last year. Wonder what bermudagrass they think is best for your needs?

NORTH DAKOTA REED-SEDGE PEAT: I've now had two people tell me about this material being so fine that it is migrating downward in the mix and slowing down percolation rates. Found out this could also happen with a sphagnum peat if you tried too hard to clean out the few sticks in it by mechanical means. Watch it! All peats are not the same. The variability in peat may be as great as it is in sand.

COMPOSTING: If you have decided to get into this business as a side line or full time then I suggest you order and read ON-FARM COMPOSTING HANDBOOK edited by Robert Rynk and Published by Northeast Regional Agricultural Engineering Service, 186 pages. It can be purchased for \$15 from the publishers by sending check to 152 Riley-Robb Hall, Cooperative Extension, Ithaca, NY 14853-5701.

Don't be turned off by the On-Farm in the title. It contains good up to date basic information on composting of the typical "wastes" the average golf course superintendent or horticulturist will be dealing with.