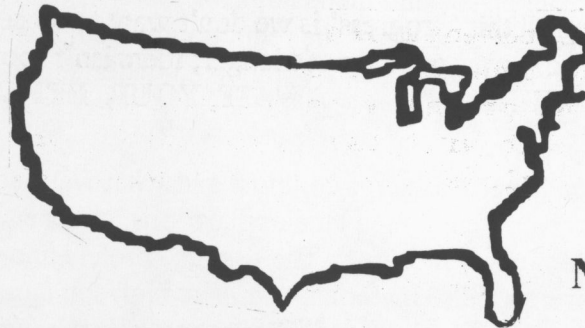


TurfComms



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

Contributions of Genetics and Genomics to Human Nutrition – Colloquium 2:
(continuation of last article in last issue, from ASHS Conf.)

He pointed out that during this time we have increased the carotenoids and anthocyanins in our fruits and vegetables but that this has not been because of nutrient desires, but, because brighter colored fruits and vegetables sell better.

A third speaker noted that when they breed tomatoes for increased levels of calcium they found an added benefit: increased shelf life. A fourth speaker spoke of the funding changes for research that he has noted from 1. before the 1990s when it was plant breeder driven, 2. after 1990 it was industry driven and, 3. now it is consumer driven.

Development of Composting Technology for a Better Environment and Horticulture – Workshop 12: I had not read professional compost literature or been to a session on the subject for many years. This afternoon session helped me reorganize my thoughts on the subject. When I had gone to a big conference in Ohio, at least 10 years ago composting had really become big business. That apparently has changed, with most of the big operations shut down.

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Mixed waste composting by cities has in many places come to a halt. One of the problems associated with this type operation was the amount of uncompostable materials that would get into the starting material. One needs to realize that if one percent of the starting material was uncompostable plastic and metals this one percent would end up being close to 10% of the final product because of the reduction by composting of the rest of it. Thus the municipality was trying to sell back a composted material that had enough trash in it to look bad.

One researcher spoke of the three general uses for compost and what was acceptable for each use. The three general uses were: cultivated land applications, mulches, and substrate or potting media for the nursery industry. The first use prefers and can use relatively young composts and prefers those materials that have high soil aggregating properties, high organic matter levels, and a high nutrient content. Such young composts are often high in viable weed seeds. While those to be used as potting media need to be mature composts, high in fiber, very stable, with good hydraulic conductivity, low salt levels, and hopefully, disease suppression properties.

The next speaker got more specific about what nursery growers wanted in a compost for their soil mixes. It must be consistent from one batch to the next, easy to mix, and cost effective. Growers in general have backed away from composts because they have not been consistent.

The next to last speaker discussed observations he had made on composting in Africa and S.E. Asia. Here one of the main reasons is to reduce fertilizer costs, another is waste disposal including human wastes. Rice hulls are a very common material to include in the compost. First, because they are very common waste product in the area; secondly they are a good stable additive that can be used to loosen up less stable organic wastes.

Dr. Zinati of Rutgers talked last on use of compost to reduce diseases. She mentioned that low C:N ratio composts such as sewage sludge, tended to enhance Fusarium wilt. While high C:N ratio composts, such as bark suppresses Fusarium diseases. That high saline composts tend to enhance Pythium and Phytophthora. Composts that had pHs lower than 5.0 inhibited beneficial bacteria. Where soil borne rots are a problem, incorporating composts several months before planting is often beneficial.

Orn./Landscape and Turf – Weed Control and Pest Management - Oral Session 39
Having a lot of interest in weed control I decided this short session was of more interest to me than others. The first talk was titled **Selection and Evaluation of Perennial Groundcovers for Weed Suppression in Home Landscapes**. The research was done at Ithaca, NY and on Long Island, NY. If you are interested in using ground covers less than 12 inches in height and wish to pick the best adapted and live in the Northeast, you might write the author for more information. Ms. Jennifer Allaire, Dept. of Hort., Cornell Univ., Ithaca, NY 14853.

She found the following species meet her criteria of being weed suppressive: *Stachys byzantina* (lamb's ear), *Dianthus deltoids* 'Brilliant' (maiden pinks), *Dianthus myrtinervius* (pinks), *Petrorhagia saxifrage* (tunic flower), *Mentha x piperita* (peppermint), and *Cerastium tomentosum* var. *columnae* 'silberteppich' (snow-in-summer),

Fall-applied Paraquat Affects Spring Growth of Narcissus – To my way of thinking the title would be more correct if it read **Summer-applied**. Applications were made in July and August. Dr. Miller in this State of Washington research found that Paraquat applied at 0.87 kg ai/ha to half green foliage in late July or early August caused yellowing of foliage the next spring with some carry over to the second spring. There also was a reduction in flower height, flower number and average bulb weight.

On the last day I started off in **Workshop 20 – Current Trends in Medicinal Plants and Botanical supplements Research** – The first speaker was a company representative who spoke of the problems controlling the levels of desirable organic ingredients in medicinal plants when they go from harvesting in the wild to growing them commercially. There is more variation in levels in the wild but they have found that when cultivating them the weather prior to harvest has a large impact on levels of active ingredients.

Workshop 23 – Is Bigger Better: Challenges and Benefits Associated with Transplanting Large Trees - The first speaker noted that 2 to 8% of a trees roots are saved in a normal ball and burlap (B&B) operation. Also, that there was some data to show that small trees (<2inch caliper) outgrow large trees in a dozen years or so after transplanting. One Florida researcher has come up with the following rule of thumb for this, that helps calculate it for that area. The time required is longer as you go north. In fact it takes four years longer in the Chicago area. It takes one year for every inch in caliper (diameter) to regrow the roots in Florida. Therefore, a one inch diameter tree regrows its roots the first year after transplanting. A six inch diameter tree requires six years to regrow its roots. Until roots are regrown, a tree does not do much active growing of trunk diameter or of height.

A Cornell Univ. researcher working with the City of Ithaca, N.Y. had lots of interesting data. She had found that bare rooted trees planted there in the 2nd week in November generally outgrew bare root trees planted in the 2nd week in April. This is data the City and she had compiled since they went to bare root planting of trees in 1991. However, spring B&B trees did better than fall B&B trees. That *Ginko biloba* doesn't transplant well at all bare rooted. She noted that there were lots of species differences between what works best and what doesn't but, except for the Ginko, she did not give these.

She also has been dipping the roots of bare rooted trees in a solution of starch gels and water to coat the roots. This improves survival and may get differences in growth that last for two and three years.

A third researcher spoke of using pea gravel to heel in trees after digging either bare root or B&B. They would dig in spring, heel the trees in pea gravel, and then plant later in the summer. Trees heeled in pea gravel do need more frequent watering than those heeled in other materials but they develop roots very fast in the pea gravel and it mostly falls off when you pull the trees to plant them. B&B trees worked better than bare rooted using this method.

END of ASHS Conference

CALIFORNIA TURFGRASS CULTURE: The final paper issue arrived just the other day. Although I did not list this as one of my top four for golf course superintendents to read it certainly was an excellent publication. It reviewed California turfgrass research primarily. The last issue summed up recent **Zoysia** research. While much of zoysia research in the East and Texas has looked at this grass for its tolerance to heat and cold, and low height of cut, in the **Transition Zone**; California's emphasis has been on retaining color during the winter months.

Thus two of the things covered in this issue are development of two cultivars that keep their color well during mild California winters, and fertilization to encourage color retention through the winter months. Earlier research has typically found that color retention and cold hardiness are not usually found together. But, cold tolerance is not a need in most of California.

Also looked at were color retention during dry-down. Here Diamond, Palisades, Crowne, El Toro, and Cavalier looked very good; while Meyer was near the bottom. After two years of imposed drought Crowne, El Toro, and Palisades had very low percentages of weeds when compared to other cultivars. Again Meyer was in the bottom group.

All past issues of California Turfgrass Culture can be accessed at the UCR Turf Webside at <http://ucrturf.ucr.edu> or at <http://ohric.ucdavis.edu> I suggest you check these out when researching some particular turf problem. But, remember, California is a dry, sunny climate with mild winters and, along the coast, the summers are also relatively mild.

The Case for the Classic Course Ball: Golfdom, Oct. 2003 article suggesting we need to do something about the increased length the pros, and amateurs are hitting the golf ball either due to 'improvements' in clubs, balls, or golf course conditioning. Although the latter is not a big factor it shouldn't be ignored. This is not a new argument just grab a golf history book and you will see that it goes back to featheries being replaced by gutta percha balls, then these being replaced by three-piece balls, etc. Or in the clubs, wood shafts being replaced by steel, and then graphite, etc. Or fairways at 1.5 inches, dropping to ¾ inch, to ½ inch, and even to ¼ inch.

One good argument for stopping all this 'progress' is we don't want to close down these old classic golf courses as they no longer can be made longer; there isn't room for them to grow. **WHAT DO YOU THINK?????? I AWAIT YOUR REPLY!**