RESEARCH UPDATE

Field days: a valuable information source

by J.R. Hall III, Virginia Tech



The author confers with an attendee at a recent Virginia Tech Field Day in Blacksburg.

Most state universities conduct annual turfgrass field days at their research stations to inform turfgrass professionals of current research results. In many cases, written summaries are provided which are invaluable to professionals wanting to stay on the cutting edge. Virginia Tech's fall 1988 Turfgrass Field Day program provided participants with an 86-page booklet filled with preliminary results of ongoing research. Much of it could help professionals produce higher quality turf in 1989.

Variety performance

Tall fescues performing particularly well in the transition zone are Arid, Jaguar, Apache, Bonanza, Rebel, Mustang, Adventure, Olympia and Finelawn 5GL. All of these are performing significantly better than Kentucky 31 tall fescue.

Fineleaf fescue cultivars performing particularly well in full sun trials are SR 3000, Aurora, Scaldis, Biljart, Spartan, Bighorn, Waldina, Longfellow, Reliant and Flyer.

Kentucky bluegrasses showing real strength in the transition zone climate are Blacksburg, Midnight, Princeton 104, Lofts 1757, Bristol, Asset, Eclipse, A-34, Challenger, BA73-540, America, Trenton and Estate.

These annual observations of quality data are helpful in selecting varieties. However, it is always advisable to contact your local university cooperative extension service before making the final decision. Other factors such as seed quality, certified seed availability, long term potential to produce quality, resistance to pests and heat, drought and shade tolerance may also be important factors to consider.

Establishment enhancement

Extremely important work by Drs. J.M. Goatley and R.E. Schmidt is showing exciting responses on seedling creeping bentgrass and Kentucky bluegrass. Six-week growth measurements on seedling bentgrass is showing more than a doubling in leaf number, lateral buds per plant, and shoot dry weight per plant with the application of 1 oz. of propiconazole (Banner) per 1000 sq.ft. This same treatment on seedling Kentucky bluegrass more than doubled the number of leaves per plant and lateral buds per plant, while more than tripling shoot and root dry weight. This work bears close watching as the researchers continue to refine the conditions

necessary to produce consistent results. Obviously this work will have significant impact on sod production as well as speed of establishment in general turf situations.

Weed control

Extensive work by S.W. Bingham, W.J. Chism and R.L. Shaver on pre-emergence herbicides indicates good crabgrass control is possible with several of the commercially-available materials. Pendimethalin, prodiamine, oxadiazon and benefin + trifluralin showed excellent control in the 1988 studies.

J.L. and J.G. Vollmer and S.W. Bingham reported on studies evaluating annual bluegrass control in Bermudagrass using October and February applied herbicides. They reported that the best combination of consistent annual bluegrass control and least Bermudagrass phytotoxicity was provided by either the fall application of Princep or Kerb. The soil mobility of Kerb was noted as it moved an average of two to five feet out of the plots following a heavy rainfall six days after the application.

Houston B. Couch reported on standard and candidate fungicide trials for red thread and dollar spot control. Excellent red thread control was provided with experimental fungicides RH-3486 and SDS 66608, however they were not significantly better than several commercially available materials. SDS 66608 also provided very good dollar spot control.

Disease control

Other research in the field day booklet included studies examining:

- Senescence on Kentucky bluegrass
- Effect of fall applied nitrogen on Bermudagrass cold tolerance
- Effect of Aquagro and Scott's TGR on Poa annua inflorescence suppression
- Municipal solid waste for turfgrass production
- Use of gypsum to correct soil sodium problems
 - Broadleaf weed control
 - Growth regulators

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ED. NOTE: A limited number of copies of this field day report are available free of charge upon request. Address requests to: J.R. Hall III, Agronomy Dept., Virginia Tech, Blacksburg, Va. 24060.