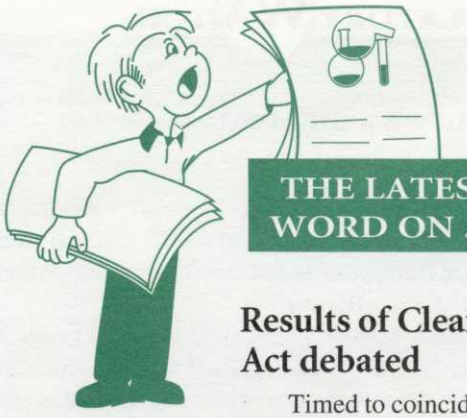

THE LATEST WORD ON . . .

Results of Clean Water Act debated

Timed to coincide with lobbying efforts related to debate on the re-authorization of the Clean Water Act, the Natural Resources Defense Council has released a book entitled, "The Clean Water Act: Twenty Years Later." The book notes that industrial pollution has been reduced substantially since the act was passed, but says that many problems remain. The new report already has drawn fire from various groups, including the Delaware Rural Water Association which criticized it for sensationalism and using "smoke-and-mirror statistical methods."

Landscaping has average home improvement value

A *Home Mechanix* magazine survey of the costs and values of various home improvements put landscaping "about in the middle of the pack for professionally done work", noting that homeowners who sell their renovated properties should be able to make back more than half of what they invested in labor and plant materials. The landscaping included planting 21 trees and shrubs, 1,000 ft.^{2} of grass seed, and installing a walkway with lighting.

The total cost given was $2,890 for professional work and $1,442 for do-it-yourself. In high cost regions of the country, the landscaping ranked #7 for professionally done work and #10 for do it yourself—out of 12 possible projects, which included everything from major kitchen remodeling to replacing the windows.

The report also pointed out that landscaping should fit the general pattern of the neighborhood, and noted that "nicely landscaped houses move faster in any housing market."

Endophytes don't aid drought tolerance

High endophyte levels in tall fescue varieties do not appear to enhance drought survivability, according to researchers at Texas A&M and North Carolina State Universities. In the testing three varieties of tall fescue, with and without high endophyte levels, were subjected to drought stress. In all measures of the effects— number of tillers, tiller survival, overall plant survival and recoverability, and net plant dry weight—there was no appreciable difference between the high and low endophyte samples.

Previous studies have shown that high endophyte levels do provide increased leaf and root insect resistence, enhanced growth characteristics, some enhanced disease resistance, and improved persistence under high heat conditions.

TGT's view: *Drought stress has such a negative effect on all plant systems. Apparently, the plants and their symbiotic partners, the endophytic fungi, are both dramatically affected.–CS*

Nitrogen volatilization studied

Researchers at the University of Iowa are looking at ways of reducing the volatilization of nitrogen from surface applied urea. Under greenhouse conditions, the loss of nitrogen due to volatization can be as high as 50% after only one week. The researchers focused Urease, a naturally occurring soil enzyme that breaks down urea into CO^2 and ammonia gas—the natural process that makes the fertilizer plant available. When a urease inhibitor was introduced, the nitrogen loss fell to as little as 20% under the same conditions. However, when this promising development was put out in field trials to confirm the green house results, the researchers found no difference in the amount of nitrogen lost—with or without the urease inhibitor.

TGT's view: *Despite the failure of the field test to confirm the results obtained in the greenhouse, this area of research may prove successful in slowing down the actual soil release characteristics of urea, the most common of all turf fertilizers. Polymer and sulfur coatings moderate which urea perticles are available to be released, but they do not control the actual release characteristics once the process* has begun. – CS ■

COMING ATTRACTIONS

FEBRUARY ISSUE

Future directions and soil microbes

Dr. Eric Nelson and Christopher Sann explore emerging new technologies and practices that will make dramatic changes in 21st century turf management.

In it we provide:

- OVERVIEWS OF KEY SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENTS,
- FUTURE DIRECTIONS IN ENVIRONMENTAL REGULATIONS,
- IMPACTS ON FIELD PRACTICES AND OFFICE PROCEDURES.

Plus Dr. Eric Nelson provides a guided tour of the unseen microscopic life in the soil, which plays a variety of important roles in the health of turfgrass plantings.