



## **MarketWatch**



You might have been wondering, "where DID all the perennial ryegrass go?" and, "why is everyone running out of their varieties?" Well according to the Oregon Ryegrass Growers Seed Commission Assessment report, not only was July-Sept 2002 the highest quarter in at least the last five years, but the Oct-Dec quarter was up 10% over the previous year, making 2002 July-Dec shipments the best in three years. Annual and gulf usage were down about 8% between July and December 2002 (from 2001)- several factors, including droughty conditions in some areas of the South and carryover in dealers inventories as the season began, contributed to this. A couple other annual ryegrass facts to be aware of are: Most recent trades for June Gulf (railcars) were at \$16.50 for

June and \$17 July/August. Also, Fertilizer costs are increasing rapidly and growers will be hard pressed to "break even" at these prices. For the full report contact the Commission at 503-364-2944

## Characteristics

Anybody recently ask you about endophyte in turfgrasses? If not, someone will soon. To that end, here are some bits of information that might be useful in passing on. And in the process, maybe you'll learn something too!

What is endophyte? They are fungi that live in leaves and stems of grasses that provide a natural systemic pesticide against many pests including weevils, armyworms, billbugs, chinch bugs, cutworms, webworms, the every popular Japanese beetle, mites and more.

How is endophyte spread? Endophyte is only transmitted by seed. The fungi cannot infect other plants. However, it has been shown that a turf area containing only 40% endophyte infected plants will sufficiently control billbugs and sod webworm. And even though most of the fungi live above ground, some benefit has been shown in below ground deterrence to Japanese beetle grubs in tall fescue.

*"The competitive ability of* endophyte containing grasses could substantially contribute to the reduction in weed invasion and establishment in golf course fairways and lawns"

- DR Parwinder Grewal, Dept of Entomology, Ohio State Univ., Wooster - OH

Other benfits? The real interesting note is that there may be a wide range of other less obvious, but valuable benefits. Recent work by Ohio State University is showing that endophyte enhanced turf may have greater environmental adaptation range, greater seed survival, improved germination, improved establishment, improved drought resistance, enhanced summer



survival, improved performance in poor quality acidic soils and soils with low phosphorus content, and a better ability to compete against common weed species.

Better still? Finally, studies show that basic cultural practices can actually INCREASE the toxin levels of endophyte to obtain greater benefit in turf. How? Simply by increasing mowing height, reducing mowing frequency, and increasing nitrogen and phosphorus levels combined with reduced irrigation.

Get your endophyte varieties here! Yes, Nexus, Paradigm, Protocol II, Titan LTD, Titan 2, Rendition and Kittyhawk SST all have effective levels of endophyte! Much of this info taken from TURF News Volume 65

## Did you know?

You can get this newsletter and price sheet via e-mail instead of fax. Just let Jonathan know at jonathan@smithseed.com. And, if for some reason you do not wish to continue getting our newsletter and price sheet, please let us know that too- we will remove you from our mailing list.





Why do red and white clovers do so well with frost seeding? According to Jim Gerrish, from the University of MO, it's due to their high seedling vigor and frost tolerance in the seedling stage. Although they are guite susceptible to freezing in the cotyledon stage, they are very hardy after the first trifoliate

leaf emerges. And with the way this winter has gone, that's one trait that might be very much appreciated!