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Market Watch

Now that we have all turned our calendars, its time to get cranking for spring! If activity at our place is an indication for the rest of the industry, there is already a very good level of activity focused on moving product to both the retail sector and the distributor level. As far as any price changes, we would expect markets to stay steady to strong, especially if spring shipping activity starts early and remains strong. Finally, we once again feel compelled to encourage you to order with plenty of lead time, so that you are not caught short due to uncontrollable shipping problems.

Who's the Fastest?

In the Spring of 2003, Ohio State University established a wear tolerance study. As part of the study, they recorded days to germination and time to 100% ground cover. As the adjacent chart shows, a perennial ryegrass lawn can be fully established in less than 6 weeks. Kind of amazing, when you stop and think about it, eh?

Species	Days to Germi- nation	Days to 100% Cover
PRG	5	40
KY/PR mix	5-7	51-64
Tall Fescue	7	64-75
KB/FF mix	8	80
TX x KY bluegrass	8	75
KY bluegrass	8	64-80

Speaking of Speed...

When it comes to jumping out of the ground and quick establishment, be sure to consider Smith Seeds' Renaissance perennial ryegrass. A close look at the



NTEP ratings (www.ntep.org) shows that not all ryegrasses establish at the same rate. This spring make sure your mixes and blends include the fast establishing, great looking Renaissance perennial ryegrass.

Variety	Ave. Establishment @ 7 locations	Ave. Fall & Spring Estab- lishment @ Columbia, MO
highest rating	72.5%	73.3%
Renaissance	67.3%	71.7%
lowest rating	34.1%	34.2%
Isd	6.6%	13.8%

TZ test defined

We've probably all heard and used the term "TZ" related to seed germination testing, but in case you didn't now exactly what a TZ test is, or where the term comes from, here is a 'simplified explanation:

The TZ or tetrazolium test is a biological test used throughout the world to provide a rapid (within 1-2 days) determination of seed viability. How it works is actually pretty cool. First, seeds are completely imbibed (soaked). Then, they are cut or punctured to allow the colorless TZ solution to come in contact with the seed embryos. The seeds are then placed in a solution of tetrazolium salts for a specified period of time. During that time, tissues that are alive and respiring will stain red, while dead tissues remain white. This staining is caused by the release of hydrogen ions from the live cells, changing the TZ solution into a red compound called formazan.

Seed analysts will then study pattern and intensity of the staining to determine whether the seeds are capable of producing normal seedlings. They will then record the number in their results.

Sometimes our industry uses the TZ test during harvest time to expedite shipping. Although not 100% accurate, a high TZ count is usually a good indicator of a high germination rate. However, since it does not measure the capacity for normal cell division, growth speed, or dormancy, it can't really be used as a complete substitute for a germination test. The TZ test also doesn't provide information about seed immaturity, seed disease, or damage from over application of herbicides or other chemicals. Finally, TZ testing is a time consuming process for analysts and does add costs.

It's for these reasons that although useful, TZ tests are not always performed or recommended. You can learn more about TZs from your local seed laboratory or by visiting www.aosaseed.com