JACKLIN SEED

Research Newsflash

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Winter Overseeding with *Poa trivialis*

by Doug Brede, Ph.D.

October is the month when most winter overseeding of bermudagrass takes place. And this October, Jacklin Seed is proud to introduce **Havana**, the newest and most advanced *Poa trivialis* variety on the market, targeted at putting green overseeding.

Havana offers advantages over other *Poa triv*'s on the market, including color, establishment, wear tolerance, and enhanced winter quality performance. Seed production of **Havana** was quietly geared up two years ago, making 2008 its premier seed crop year.

Havana *Poa triv*, or rough bluegrass, offers many advantages over perennial ryegrass for golf greens in the southern zone, including easier establishment in the fall with less disruption of play, slower topgrowth, a finer texture, more reliable spring transition back to bermudagrass, and excellent putting quality. In northern areas, **Havana** will be used for moist shaded lawns, where its fine texture and weakly stoloniferous growth fills the ground better than most other grasses.

NEW HAVANA POA TRIVIALIS

Jacklin Seed acquired the turf division of Northrup King in 1992 and in doing so, became the longest running breeding program of winter overseeding grasses in the world. Howard Kaerwer, the original breeder for NK, invented the whole concept of winter overseeding back in 1962. Since that time, winter overseeding has grown into a multi-million dollar industry, with seed shipped each fall to golf courses around the world.

Poa triv overseeded onto a bermuda putting green at Savannah (GA) Country Club, Feb. 2008.

Tips for establishment

Havana benefits from good establishment and follow-up practices. John H. Foy, Director of the Florida Region of the USGA Green Section, recommends the following management tips for successful *Poa triv* overseeding: *cont. p.2.*

Final Creeping Bentgrass National Results Highlight T-1, Alpha, L-93

Recently the final results of the 2003-2007 creeping bentgrass NTEP were posted online. It confirmed what hundreds of golf course superintendents have already found: **T-1** and **Alpha** are a major step forward in bentgrass technology.

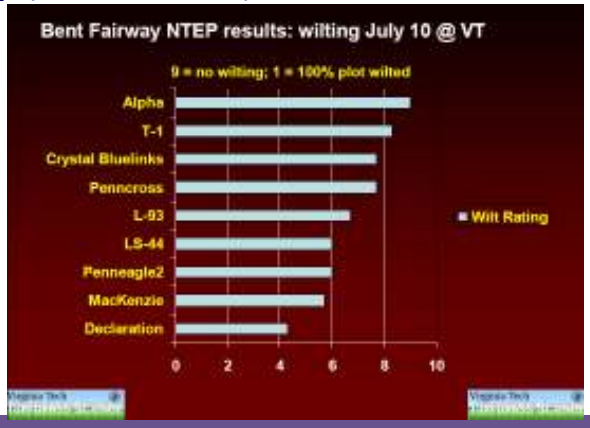
Equally as important as the final running averages, are the year 5 tallies that were released a couple months earlier. These average of year 5 demonstrate the "staying power" of these grasses. **T-1** and **Alpha** garnered a number of top accolades in quality, drought tolerance, and pest resistance. Even trusted-and-true **L-93** was showing remarkable spunk in keeping up with the new kids on the block – a sign of an enduring cultivar.

T-1 is on its way to becoming the fastest growing creeping bentgrass variety in history. Each year since its release in 2002, the crop has sold out – in spite of marked increases in seed production acreage each year.

Final results 2003-07 tee/fairway NTEP

T-1 -- tied for #1 in overall quality nationwide
T-1 -- tied for #1 in quality in the Northcentral states
T-1 -- #1 in quality in the Upper West/Mountain region
T-1 -- #1 in quality in California
T-1 -- #1 in genetic color
T-1 -- #1 in fall color
T-1 -- tied for #1 among creeping bents in spring greenup
T-1 -- #1 in drought tolerance (wilting) *cont. p.2.*

Drought tolerance ratings at Virginia Tech Univ. in Blacksburg showing Alpha and T-1 at the top of the trial, with L-93 not far behind.



Trivialis, continued

✓ Seeding rate of 8 to 10 lbs. per 1000 sq. ft.

✓ For seedbed preparation, two to four light verticutting replications to open up the turf canopy, followed by application of the seed and a medium to heavy topdressing.

✓ Maintain a slightly elevated height of cut (in the range of 0.180 inch) and add supplemental irrigation to maintain a moist, but not wet upper rootzone.

✓ After 4-6 weeks and only if absolutely necessary to achieve a more uniform stand, reseed with 1 to 2 lbs. per 1000 sq. ft. Application of additional seed after the first of January is discouraged.

Tee, fairway, and even some greens overseedings benefit from a scalp treatment prior to vertical mowing. Scalping weakens the bermudagrass and removes foliage that

Richard L. Duble, turfgrass specialist at Texas Cooperative Extension, lists his top seven most common mistakes made during winter overseeding:

1. Poor seedbed preparation
2. Planting too early (or too late)
3. Seedling diseases
4. Herbicide injury (pre- and post-emerge)
5. Overwatering (or excessive rain)
6. Fertilizer burn
7. Mowing with dull mowers

Planting at the right time

Choosing the right week to overseed can make the difference between a fast conversion and a prolonged, spotty mess. Wait too long and cool temperatures delay grow-in. But seed too early, and the bermuda can rebound to compete against the new grass. Seedling diseases can also be a problem when seeding before temperatures cool down.

Chunhua Liu, S. Bruce Martin, and James J. Camberato of the Pee Dee Research & Education Center at Clemson Univ., performed a study looking at *Poa triv* varieties and seedlots in regard to the optimum temperature for rapid establishment. They found that *Poa triv* "germinated faster, and more seed germinated, at warmer temperatures in the growth chambers and with earlier seeding dates on the bermudagrass green."

With the environmental growth chamber set at 77/59 F day/night temperatures, seed germination exceeded 80% on day 7. However, at a cooler 50/32 F, germination was delayed for 2 weeks and the final germination never reached 70%.

The researchers found that it's important to seek out improved cultivars and quality seedlots with *Poa triv*.

Roughstalk bluegrass is carefully handled in seed production, because it can become a contaminant in seedlots of other grasses. Jacklin Seed goes to great measures to keep the production and cleaning of *Poa triv* quarantined from our other crops. This includes growing it in restricted counties, on ground distant from other grass crops, and cleaning the seed in dedicated facilities away from Post Falls.

"Rough bluegrass varieties and seedlots varied widely in germination rate, especially at low temperatures," they wrote. "In the growth chamber at 50/32 F, the fastest-germinating rough bluegrass attained 60% germination 21 days after seeding, whereas the slowest variety [Winterplay] achieved only 35% germination at 28 days. The same two varieties had 35% and 10% germination on [our golf] green during the coolest overseeding period."

NTEP, continued

T-1 -- #5 in fine leaf texture
T-1 -- #5 in spring density
T-1 -- tied for #3 in brown patch resistance across 6 locations
T-1 -- tied for #1 in pythium blight resistance
T-1 -- #3 in least *Poa annua* encroachment
T-1 -- #3 in Indiana
T-1 -- #1 in Maryland
T-1 -- #2 in Nebraska (**L-93** was #1)
T-1 -- #1 in Washington State

Alpha -- tied for #2 in the Upper West/Mountain region
Alpha -- #4 in genetic color
Alpha – tied for #3 among creeping bents in spring greenup
Alpha -- #2 in drought tolerance (wilting)
Alpha – tied for #4 in typhula gray snow mold resistance
Alpha – tied for #3 in brown patch resistance across 6 locations
Alpha –#2 in pink snow mold resistance
Alpha – #3 in resistance to fiery skipper insect larvae
Alpha – #1 in mowing quality among creeping bents
Alpha – tied for #3 among creeping bents in resistance to scalping across 3 locations
Alpha -- #1 in Oklahoma

L-93 – tied for #2 in Transition Zone quality
L-93 –#8 in genetic color
L-93 -- #5 in fall color
L-93 -- #5 in spring living ground cover
L-93 -- #2 in summer living ground cover
L-93 -- tied for #1 in resistance to Microdochium pink snow mold
L-93 -- tied for #1 in brown patch resistance at Blacksburg, VA
L-93 -- tied for #1 in pythium blight resistance
L-93 -- #4 in anthracnose resistance among creeping bents
L-93 -- #3 in fairy ring resistance among creeping bents
L-93 -- tied for #2 in yellow tuft (downy mildew) resistance
L-93 -- #2 in divot recovery (coverage) speed

Final results 2003-07 putting green NTEP

T-1 -- #1 in genetic color
T-1 -- #1 in fall color
T-1 -- tied for #2 in spring density
T-1 -- #3 in spring greenup
T-1 -- #2 in seedling vigor
T-1 -- #1 in establishment at 8 locations
T-1 -- tied for #1 in resistance to Microdochium pink snow mold

Alpha – same dark genetic color as Penn A-1
Alpha -- tied for #1 in resistance to Microdochium pink snow mold
Alpha -- #3 in resistance to fairy ring disease