



SUBJECT: 2009 National Cool-Season Drought Trial

TO: Seed Companies and Breeders

FROM: Kevin N. Morris, Executive Director

DATE: July 2, 2009

In response to the need for more specific information on turfgrass species and cultivars, the NTEP Policy Committee has established a new program, '*Trait Specific Testing*'. The first trial in this program will test drought tolerance of cool-season grasses at six locations.

Three locations will be established in the eastern half of the U.S., using rainout shelters. The other three locations will be established in the western half of the U.S., using deficit irrigation regimes. The trial will be open to single cultivars of all cool-season grass species. Blends and mixtures will not be accepted.

Data will be collected regularly on percent green and ground cover over time, using digital imaging technology (digital camera plus software manipulation). Since last fall, we have refined the trial parameters and have developed updated trial procedures. Some highlights of the procedures are below:

1. Three locations will utilize rainout shelter technology. Rainout shelters allow testing of *acute* (or short-term drought situations, i.e. 60-75 days) during two growing seasons. Locations include Fayetteville, AR, St. Paul, MN and Ithaca, NY.
2. Three other locations will measure *chronic* drought stress by imposing deficit irrigation over two full growing seasons. Deficit irrigation levels will be determined by the needs at each location, however, will range somewhere around 50% ET_0 during spring and fall and up to 65% of ET_0 during summer. Locations conducting the chronic testing include Ft. Collins, CO, Logan, UT and Fargo, ND.
3. Cool-season species will be organized into high-fertility and low-fertility groups, for the purposes of this trial. Therefore low fertility species, such as fineleaf fescue, will receive only one-half the fertility of species such as perennial ryegrass and Kentucky bluegrass.

DROUGHT TRIAL MEMO (page two)

To read the more detailed drought trial proposal, please go to the NTEP web site News Room, www.ntep.org/newsroom.htm.

The following gives the details concerning this test. Please complete the enclosed Test Entry Application Form and Sponsorship Agreement for each entry you wish to submit. The first payment for testing is due when the seed is shipped to us. Please make checks payable to the "National Turfgrass Evaluation Program" in \$US only.

Plot size will be 10 sq. ft. for the *acute* trial locations and 25 sq. ft. for the *chronic* trial locations, replicated four times. Seeding rates will be based on the following: Ky. Bluegrass – 2.2 lbs./1000 sq. ft., Tall fescue and perennial ryegrass – 6 lbs./1000 sq. ft., and fineleaf fescue – 4.4 lbs./1000 sq. ft. Please contact us if you are submitting a species other than those listed above.

Therefore, we will need the following amounts of seed:

Ky. Bluegrass – 1.5 lbs.

Tall fescue – 4 lbs.

Perennial ryegrass – 4 lbs.

Fineleaf fescue – 3 lbs.

The entry fee structure for this test is the following:

**All
entries**

\$2,000.00 each entry - when seed is sent to us

\$2,000.00 each entry - on or before June 1, 2010

\$4,000.00 total

The following are guidelines for sending seed for this test:

- a. Seed must be received at Beltsville, MD by August 17, 2009.
- b. Seed received after August 17, 2009 but by August 21, 2009 can be included in this test but a **double (2x)** entry fee will be charged.
- c. Seed received after August 21, 2009 will **not** be included in this test.
- d. The entire requested amount of seed is needed for an entry to be included in this test. Entries that are received with less than the requested amount of seed will **not** be included in this test.

Therefore, we encourage good planning in preparing and shipping entries on or before the August 17th deadline. In addition, it would be helpful to send seed earlier than the August 17th

DROUGHT TRIAL MEMO (page three)

deadline if possible. Please do not send seed treated with a pesticide. Treated seed will **not** be accepted by the NTEP. Also, please make sure seed is prepaid for shipping charges to Beltsville, MD. The NTEP will **not** pay any additional shipping fees to forward seed to Beltsville.

Please forward all seed, payments and completed application forms to:

Kevin Morris, Executive Director
National Turfgrass Evaluation Program
Beltsville Agricultural Research Center-West
Building 005, Room 307
Beltsville, Maryland 20705 USA

If any of the above information is unclear, or if you have a question about any aspect of this test, feel free to contact me by phone (301-504-5125), fax (301-504-5167), mobile (301-873-6545) or via email (kmorris@ntep.org). Thanks for your continued cooperation with NTEP.

Enclosures

2009 NATIONAL COOL-SEASON DROUGHT TRIAL

Sponsorship of Entries

TEST ENTRY APPLICATION FORM

(Please complete one for each entry)

Required Information:

1. Variety name or experimental designation _____

2. Genus and species name _____

3. All previous name(s) or experimental designation(s) this entry has been tested under

4. Genetic structure, i.e. single plant selection, number of parental clones, composite cross, open pollinated, etc.

5. Is this variety in commercial production?_____ If not, what are the prospects of it being made available in the United States in two or three years?

6. Has seed been treated with a pesticide?_____ Treated seed will not be accepted.

7. Name and address of organization sponsoring this entry and contact person

TEST ENTRY APPLICATION FORM - 2009 NATIONAL COOL-SEASON DROUGHT TEST (cont'd)

Suggested Information:

1. What is the origin of the entry? _____

2. Seed Quality:

a. Seed lot number _____

b. Year of production _____

c. Location of production _____

d. Purity _____

e. Germination percent _____ Test date _____

f. Noxious and objectionable weed or other crop present _____

3. Description of entry (merits or limitations)

The NTEP reserves the right to reject any entry submitted for testing based on:

a. Completeness of information supplied

b. Seed quality, quantity, or presence of pesticide treatment

c. Failure to pay entry fee(s)

