



Seed Regulatory and Testing Branch

ITEMS OF INTEREST IN SEED

April 2012

www.ams.usda.gov/seed



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EDITOR'S NOTES

“Be an opener of doors for such as come after thee.”

Ralph Waldo Emerson
(American poet, lecturer and essayist, 1803-1882)

During the past year, many of us have witnessed firsthand, personnel changes in our workplaces. Several of our more experienced and knowledgeable colleagues have either retired from their positions or moved on to pursue other interests. The Seed Regulatory and Testing Division (SRTD) felt the impact of change in December 2011 when Dr. Richard C. Payne retired from his position as Division Director after more than 36 years of Federal service (see page 4 for a special article). The loss of these skilled men and women from our workplaces certainly impacts all of our seed programs in some form or another. With so many organizations feeling the burden of budget constraints, workplaces are challenged to do more with fewer personnel.

With these changes in the workplace, knowledge sharing becomes more crucial than ever. Irish writer and poet Oscar Wilde once said, “I always pass on good advice. It is the only thing to do with it. It is never of any use to oneself.” Let’s make sure we share our knowledge with one another. By doing so, we leave our work areas in better shape than when we started, and our seed customers continue to reap the quality service they deserve.

In every edition of the Items of Interest in Seed (IOI), we share pertinent information that relates to your seed programs. Among the many relevant articles in this issue, Seed Marketing Specialist Jerry Irwin provides an update concerning the Noxious-Weed Seed List for 2012 (see page 9), and Botanist Charlene Burton discusses noxious-weed seed examinations in a question-and-answer format on page 9. Seed Marketing Specialist Kevin Robinson’s article on SRTD’s trueness-to-variety (TTV) program reminds the State seed control programs that collard, onion, sweet corn, and watermelon seed samples must be submitted to the SRTD office by May 1, 2012, for inclusion in our upcoming TTV field tests (see page 15 for a complete listing of samples and submission deadlines). Acting Director Susan Maxon provides information on the upcoming Federal Seed Schools in Gastonia, NC, on page 15. Plant Physiologist Yujia Wu provides an enhanced laboratory method for identifying annual and perennial ryegrass (page 13). There are several other articles that we hope you find informative.

Your feedback concerning our IOI provides SRTD an excellent way to measure whether we are addressing the topics that interest you the most. Please send your comments and suggestions to linda.vanderhoof@ams.usda.gov.

In closing, the SRTD would like to thank Dr. Payne for his many years of service and numerous contributions to the Seed Regulatory and Testing Division. We extend our best wishes to him and his family.

Linda Vanderhoof
IOI Editor

DIRECTOR RICHARD C. PAYNE RETIRES

After more than 36 years of service to the [Agricultural Marketing Service \(AMS\)](#), Dr. Richard C. Payne retired in December 2011. Dr. Payne had been the Director of the Seed Regulatory and Testing Division since 1999. He began his career with AMS in June 1975 as the plant physiologist at the Federal Seed Laboratory in Beltsville, MD, and became laboratory supervisor in 1982. In April 2003, the Division, consisting of seven staff members, moved to a new facility in Gastonia, NC. Within a year the staff tripled in number; Dr. Payne seamlessly led the transition.

Throughout his tenure at AMS, Dr. Payne worked closely with various seed associations such as the American Association of Seed Control Officials (AASCO), Association of Official Seed Analysts (AOSA), Association of Official Seed Certifying Agencies (AOSCA), American Seed Trade Association (ASTA), and the Society of Commercial Seed Technologists (SCST). These organizations have honored Dr. Payne with many awards throughout his career. Dr. Payne served as U.S. voting delegate to the International Seed Testing Association (ISTA), chaired the ISTA Variety Committee, and was elected to the ISTA Executive Committee. Dr. Payne noted that the most enjoyable aspect of his job has been working with his colleagues and the seed trade. Likewise, he has been highly respected by his staff and warmly regarded throughout the seed world.

Dr. Payne's leadership in enforcing the interstate commerce provisions of the Federal Seed Act, his advocacy of a level playing-field among seed companies of all sizes, his support of uniformity in seed testing, and his emphasis on providing necessary training have created a legacy that will continue to benefit consumers, seed companies, and the USDA. We extend our appreciation and gratitude to Dr. Payne for his leadership and years of dedicated Federal service, and we offer him our best wishes in all of his future endeavors.

Photo by Dr. Yujia Wu, USDA, AMS, 2011



Dr. Payne, in a test field, examines a cucumber for trueness-to-variety.

FEDERAL SEED ACT CASES SETTLED

The Federal Seed Act (FSA) regulates the interstate shipment of agricultural and vegetable seeds. The FSA requires that seed shipped in interstate commerce be labeled with certain information necessary for the seed buyer to make an informed choice. The labeling information and any advertisements pertaining to the seed must be truthful. The FSA helps promote uniformity among the state laws and fair competition within the seed trade.

The following cases were settled administratively under the FSA between September 10, 2011, and March 13, 2012. Under the administrative settlement procedure, the Seed Regulatory and Testing Division and the firms agreed to settle the cases, for the amount specified, with the firms neither admitting nor denying the charges. Official Program Announcements on each of these cases are accessible on the following Web site under the "Latest Releases" link: <http://www.ams.usda.gov/news/newsrel.htm>.

Allied Seed, LLC, Nampa, ID, has paid \$2,600 for cases involving three seed shipments to Georgia, Indiana, Pennsylvania, and Virginia. Seed regulatory officials in Georgia, Indiana, Pennsylvania, and Virginia cooperated in the initial sampling and inspection. The alleged violations, while not the same for all shipments, were:

- false labeling of weed seed percentage, germination percentage, and variety name.

Beachner Seed Company, St. Paul, KS, has paid \$5,200 for cases involving seven shipments of tall fescue seed to Georgia, Kentucky, and South Carolina. Seed regulatory officials in Georgia and Kentucky cooperated in the initial sampling and inspection. The alleged violations, while not the same for all shipments, were:

- false labeling of germination percentage; and
- failure to label the interstate shipper's name and address or code designation.

W. Atlee Burpee Company, Inc., Warminster, PA, has paid \$2,750 for cases involving three vegetable seed shipments to North Carolina and Texas. Seed regulatory officials in Texas cooperated in the initial sampling and inspection. The alleged violations, while not the same for all shipments, were:

- false labeling of germination percentage and variety name;
- failure to test for germination within the prescribed time prior to interstate shipment; and
- failure to keep or supply complete records of the seed.

Farmers Ag Center, Mountain Grove, MO, has paid \$1,225 for cases involving three shipments of tall fescue seed to Georgia, Kentucky, and Tennessee. Seed regulatory officials in Georgia and Kentucky cooperated in the initial sampling and inspection. The alleged violations, while not the same for all shipments, were:

- false labeling of germination percentage;
- failure to test for germination within the prescribed time prior to interstate shipment; and
- failure to keep or supply complete records of the seed.

Farmers Ag Center, Mountain Grove, MO, has paid \$1,800 for cases involving four shipments of tall fescue seed to Kentucky and Tennessee. Seed regulatory officials in Kentucky and Tennessee cooperated in the initial sampling and inspection. The alleged violation was:

- false labeling of variety name.

J. Lee Company, Hennessey, OK, has paid \$1,350 for cases involving three seed shipments to Georgia. Seed regulatory officials in Georgia cooperated in the initial sampling and inspection. The alleged violations, while not the same for all shipments, were:

- false labeling of pure seed and inert matter percentages and
- false labeling of noxious-weed seeds rate of occurrence.

Pennington Seed, Inc., Madison, GA, has paid \$16,900 for cases involving 18 grass seed shipments to Georgia, Indiana, Kansas, Kentucky, Missouri, Nebraska, Ohio, Pennsylvania, and Texas. Seed regulatory officials in Georgia, Kentucky, Missouri, Nebraska, Pennsylvania, and Texas cooperated in the initial sampling and inspection. The alleged violations, while not the same for all shipments, were:

- false labeling of pure seed and germination percentages, noxious-weed seeds rate of occurrence, variety name, and date of test;
- failure to label the presence of noxious-weed seeds; and
- failure to keep or supply complete records of the seed.

Plantation Products, Inc., Norton, MA, has paid \$1,950 for cases involving four vegetable seed shipments to Indiana and Utah. Seed regulatory officials in Indiana and Utah cooperated in the initial sampling and inspection. The alleged violations, while not the same for all shipments, were:

- false labeling of germination percentage and kind name.

James Reneau Seed Company, Shamrock, TX, has paid \$16,200 for cases involving 14 shipments of rye seed to Alabama and Georgia. Seed regulatory officials in Alabama and Georgia cooperated in the initial sampling and inspection. The alleged violations, while not the same for all shipments, were:

- false labeling of germination percentages and noxious-weed seeds rate of occurrence;
- failure to test for germination within the prescribed time prior to interstate shipment; and
- failure to keep or supply complete records of the seed.

Wild West Seed, Inc., Albany, OR, has paid \$2,450 for cases involving four collard seed shipments to North Carolina and Wisconsin. Seed regulatory officials in Wisconsin cooperated in the initial sampling and inspection. The alleged violations, while not the same for all shipments, were:

- false labeling of variety name;
- failure to test for germination within the prescribed time prior to interstate shipment; and
- failure to keep or supply complete records of the seed.

SUBMITTING REGULATORY COMPLAINTS – FOR SEED CONTROL OFFICIALS

Inspection of seed in intrastate commerce may indicate that the seed was falsely labeled when shipped in interstate commerce. For that reason, the Seed Regulatory and Testing Division (SRTD) encourages cooperating States to submit complaints if a Federal Seed Act (FSA) violation is suspected. It is helpful for SRTD to receive as much evidence as possible from the State to aid investigation of an apparent interstate violation. The information needed varies among the following types of alleged FSA violations.

Quality violations affect the seed quality and include, for example, errors related to germination and purity percentages and the name and rate of occurrence of noxious-weed seeds.

Technical violations involve information on the label that may not necessarily affect the quality of the seed, as is the case with test dates, interstate shipper identity or the Agricultural Marketing Service (AMS) number, and other labeling violations.

Advertisement violations involve all representations of kind or kind and variety names of seed regulated by the FSA, other than those on the label, disseminated in any manner or by any means.

Title V violations involve seed of which a plant variety protection certificate specifies that a variety can be sold only as a class of certified seed. Therefore, seed of that variety name cannot be advertised, sold, or offered for sale unless it is certified.

SRTD needs the following information for each type of Federal Seed Act complaint:

Quality Complaint

- Official sample (enough to test for factors in question)
- Official State test report showing analysis and nature of alleged violation
- Seed inspector's report or other sampling record
- Labeling – Original or copy of the analysis label that was on the seed container at the time of sampling (Include additional relevant information, if shown, such as the AMS number from the label and any bag lot numbers stenciled on the bags.)
- Interstate shipping documentation – A copy of interstate shipper's invoice or bill of lading if available
- Intrastate shipping documentation especially if the interstate shipper is unknown (If the interstate shipper did not ship the seed directly to the sampling location, SRTD must document each movement of the seed until the interstate shipper is identified.)

Technical Complaint

The same information is needed as for quality complaints, except that the official State test report may not be required.

Advertisement Complaint

- Copy of advertisement
- Violation report indicating the misleading nature of the advertisement
- Identity of publication including the name and date

Title V Complaint

- Advertisement or record of sale – such as an invoice, sales ticket, affidavit, or advertisement
- Variety representation – such as an advertisement, analysis tag, invoice, or affidavit
- Evidence that seed was not certified and not eligible for certification

The following procedures enable the SRTD staff to process samples in a safe and timely manner. When submitting samples, please ensure that:

- Treated samples are clearly marked "Treated" and submitted in non-porous packaging

- Each sample clearly matches its corresponding documentation
- All documents for each Federal Seed Act complaint are stapled or clipped together

Address for submitting Federal Seed Act complaints:

ATTN: Regulatory Samples
c/o Susan R. Maxon, Acting Director
USDA, AMS, Livestock & Seed Program
Seed Regulatory and Testing Division
801 Summit Crossing Place, Suite C
Gastonia, NC 28054-2193

For information regarding this article, contact Seed Marketing Specialist Jerry Irwin at jerry.irwin@ams.usda.gov.

INSPECTOR AUTHORIZATION FOR FEDERAL SEED ACT ENFORCEMENT

This is a reminder to all State seed control officials to recommend qualified seed inspectors to apply for an inspector authorization card from the Seed Regulatory and Testing Division (SRTD). The application may be obtained by contacting Seed Marketing Specialist Jerry Irwin (jerry.irwin@ams.usda.gov). Section III of the application shows the qualification requirements. Upon receiving the authorization cards, inspectors will be authorized to draw samples, secure information, inspect records, and otherwise inspect seed and screenings subject to the Federal Seed Act.

ORIGIN LABELING

Origin is addressed in the Federal Seed Act (Act), Title II—Interstate Commerce-Prohibitions Relating to Interstate Commerce in Certain Seeds

Section 201(a)(3) Origin, stated in accordance with paragraph (a)(1) of this section, of each agricultural seed present which has been designated by the Secretary of Agriculture as one on which a knowledge of the origin is important from the standpoint of crop production, if the origin is known, and if each such seed is present in excess of 5 per centum. If the origin of such agricultural seed or seeds is unknown, that fact shall be stated;

Additionally, the following Federal Seed Act regulations address origin-of-seed requirements:

Records Section 201.5 Origin.--(a) The complete record for any lot of seed of alfalfa, red clover, white clover, or field corn, except hybrid seed corn, shall include a declaration of origin, or information traceable to a declaration of origin or evidence showing that a declaration of origin could not be obtained.

Labeling Agricultural Seeds Section 201.14 Origin.--(a) Alfalfa, red clover, white clover, and field corn (except hybrid seed corn) shall be labeled to show: (1) The origin, if known or (2) if the origin is not known, the statement "origin unknown." (b) Whenever such seed originates in more than one State, the name of each State and the percentage of seed originating in each State shall be given in the order of its

predominance. Whenever such seed originates in a portion of a State, it shall be permissible to label such seed as originating in such portion of a State. (c) Reasonable precautions to insure that the origin of seed is known shall include the maintaining of a record as described in section 201.5. The examination of the seed and any pertinent facts may be taken into consideration in determining whether reasonable precautions have been taken to insure the origin to be that which is represented.

There are no requirements for origin-labeling of vegetable seed in the Act or its regulations.

Since this article is based on the requirements of the Act and its regulations, it is recommended that origin-labeling requirements also be addressed with individual State seed control officials. A list of State seed control contacts is available on the Association of American Seed Control Officials Web site (www.seedcontrol.org). Once at the site, click on “members” for the membership directory and then click on the individual State for contact information.

For information regarding this article, contact Seed Marketing Specialist Roger Burton at (704) 810-7265; roger.burton@ams.usda.gov.

NOXIOUS-WEED SEED LIST FOR 2012

The Seed Regulatory and Testing Division (SRTD) staff recently revised the State Noxious-Weed Seeds Recognized in the Administration of the Federal Seed Act. The SRTD staff is grateful to the State seed control officials and contacts for submitting State seed-law changes to this office.

SRTD posted the 2012 issue in March. To receive e-mail notification of new publications or changes to current publications, visit <http://www.ams.usda.gov/seed>, choose “Subscribe to Publications” under the Resources heading, and follow instructions to select the option to receive electronic publications.

For information regarding this article, contact Seed Marketing Specialist Jerry Irwin at jerry.irwin@ams.usda.gov.

QUESTIONS AND ANSWERS: NOXIOUS-WEED SEED EXAMINATIONS

QUESTION: How much seed is required for testing when a noxious-weed seed examination is requested?

ANSWER: Table 1 of the Federal Seed Act (FSA) Regulations (Sec 201.46) and Table 2A of the Association of Official Seed Analysts (AOSA) Rules for Testing Seeds-Volume 1 list the minimum weight in grams for noxious-weed seed examinations for each crop kind. The weight may be more—but not less—than the minimum noxious-weed seed weight given in the tables for the specific kind of seed being tested.

QUESTION: Is the purity test part of the noxious-weed seed examination?

ANSWER: The purity test may be part of the noxious-weed seed examination; however, several conditions must be met. First, the combined weights of the representative purity and

noxious portions must meet the minimum weight for noxious-weed seed examinations stated in Table 1 of FSA regulations or Table 2A of AOSA Rules for Testing Seeds. The purity portion must also meet Table 1 or Table 2A requirements. In addition, in order to be representative, the entire submitted sample must be mixed and divided successively as described in section 201.45 of FSA regulations and section 2.2 and 2.2(a) of the AOSA Rules for Testing Seeds. From these divisions, representative noxious and purity working samples are obtained. When the purity and noxious examinations are completed, the number of noxious-weed seeds found in each test portion are added together to obtain the total noxious-weed seed content of the noxious examination.

For example, the minimum weight for a tall fescue noxious-weed seed exam is 50 grams. There are several ways to obtain the noxious working sample. The entire 50 grams could simply be examined for noxious-weed seeds without a purity exam. If a purity exam is requested, however, a 5-gram purity working weight may be subdivided from the 50-gram total, resulting in two portions of approximately 45 and 5 grams each. The two resulting portions are then examined. The number of each kind of noxious-weed seed found in both the purity and the remaining noxious portion are added to get the total noxious-weed seed amount.

QUESTION: Is it necessary to examine the remaining portion of a noxious-weed seed exam when the threshold number listed in section 201.52 of the FSA regulations has been found in the purity analysis?

ANSWER: The conditions set forth in section 201.52 of the FSA regulations and section 5.1(c) of the AOSA Rules for Testing Seeds-Volume 1 state that when noxious-weed seeds are found in the amounts of 16 or more seeds in a 1/2-gram purity working sample, 23 or more seeds in a 1-gram purity working sample, and 30 or more seeds in a 2-gram purity working sample or larger, then the remainder of the noxious portion need not be searched for those specific seed kinds. However, the remaining noxious portion must be examined for other noxious-weed seed kinds.

QUESTION: How is the number per pound determined for a noxious-weed seed examination when a purity test is also requested?

ANSWER: Noxious-weed seeds found in the purity analysis alone should not be expressed as number per pound. The number per pound is determined by working through the entire minimum working weight for the noxious-weed seed exam which includes both the purity and noxious portions of the sample. At the completion of the noxious-weed seed exam, the number of noxious-weed seeds found in the purity analysis and noxious exam are added together and then used to calculate the number per pound. The formula for the number per pound calculation is found in Appendix 1 of the AOSA Rules for Testing Seeds.

For information regarding this article, contact Botanist Charlene Burton at (704) 810-8880; charlene.burton@ams.usda.gov.

UP CLOSE WITH INERT

When conducting a purity test, inert matter is one of the four components into which the analyst separates the sample, along with pure seed, other crop, and weed seed. Typical inert matter

includes broken seeds, plant debris, and empty florets. However, the analyst may occasionally find less common types of inert matter, such as insects (living or dead or both), insect parts, frass (insect excrement), soil particles, and fungal bodies. These types of inert matter may not be immediately recognizable. The following pictures illustrate some types of inert matter that analysts at the Seed Regulatory and Testing Division have found in purity test samples.

Photo by Sandy Dawson, USDA, AMS, Jan. 2012



Frass (insect or insect larva excrement)

Photo by Todd Erickson, USDA, AMS, March 2012



Sclerotia

Photo by Todd Erickson, USDA, AMS, Feb. 2012



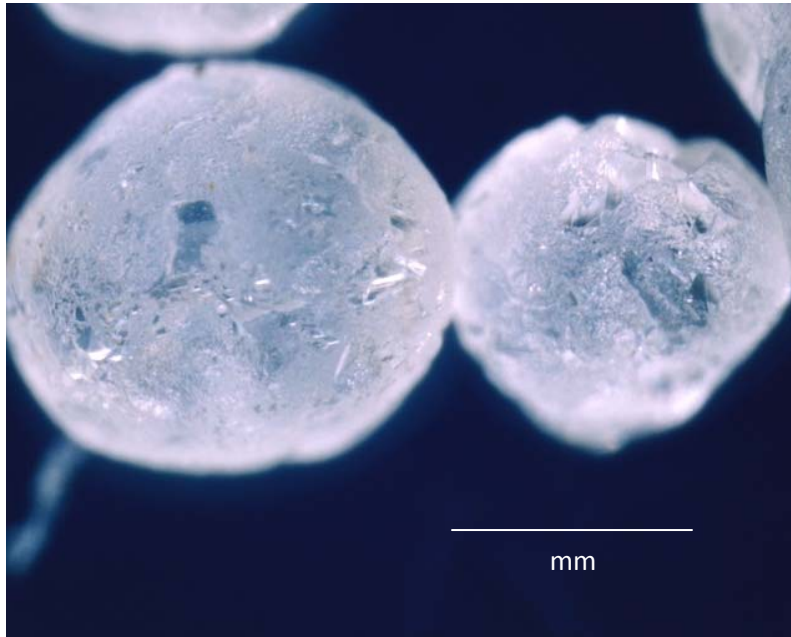
Fresh insect larva

Photo by Todd Erickson, USDA, AMS, Feb. 2012



Not so fresh insect larva

Photo by Todd Erickson, USDA, AMS, Feb. 2012



Sand particles

The USDA defines particle size as:
Sand = 2.0 mm to 0.05 mm in diameter
Silt = 0.05 mm to 0.002 mm in diameter
Clay = less than 0.002 mm in diameter

For more information on this article, contact Botanist Todd Erickson at 704-810-7266;
todd.erickson@ams.usda.gov.

IDENTIFICATION OF ANNUAL AND PERENNIAL RYEGRASS BY GLUCOSE PHOSPHATE ISOMERASE

Seed Regulatory and Testing Division Plant Physiologist Yujia Wu published articles describing electrophoresis variety tests for distinguishing annual ryegrass (*Lolium multiflorum* Lam.) and perennial ryegrass (*Lolium perenne* L.) in previous issues of the Items of Interest in Seed. These are additional methods that may be useful in support of the current root-fluorescence test for annual and perennial ryegrass (Federal Seed Act Regulations Section 201.58a(a)). In this article, Dr. Wu continues to use iso-electric focusing (IEF) gel electrophoresis protein separation but has refined this varietal test method by staining for glucose phosphate isomerase in ryegrass seeds and seedlings.

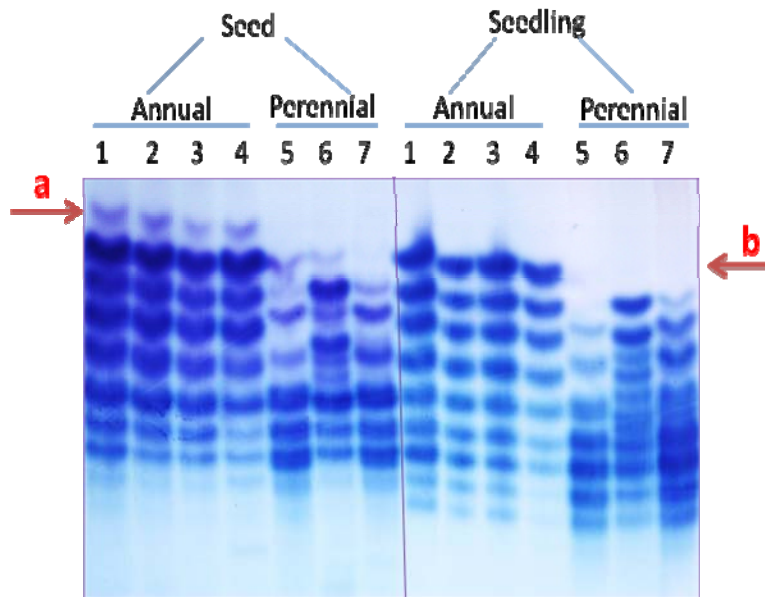
Unless otherwise noted, the same experimental conditions used in previous studies (Wu, 2010; Wu, 2011) were also used in this study. Seeds and seedlings of four annual and three perennial ryegrass samples, each representing a different variety, were used in the study. Protein was extracted from each sample and 15 μ l of the resulting supernatants were loaded onto IEF gels. Gels were run at 100V for 60 minutes, 250V for 60 minutes, and 500V for 30

minutes, followed by staining for about 45 minutes in a solution to detect glucose phosphate isomerase bands in blue color (see photo below).

The IEF gel (see photo below) detected activity of the enzyme, glucose phosphate isomerase, in both annual and perennial ryegrass samples, with a protein isoelectric point between pH 3 and 10. The banding pattern, however, is different between annual and perennial ryegrass. Bands (a) and (b) are strong unique signals capable of identification of ryegrass seed or seedling samples as annual or perennial. The top band (a), indicating glucose phosphate isomerase enzyme activity, appears only on the left side of the gel, in annual ryegrass seed; it is not present in perennial ryegrass seed. The top band (b), on the left side of the seedling portion of the gel, indicates activity only in annual ryegrass seedlings as well; neither band is present in perennial ryegrass seedlings.

The glucose phosphate isomerase enzyme is easy to distinguish in both annual and perennial ryegrass samples by means of IEF gel electrophoresis. The method does not show potential for identification to the varietal level due to the similarity of banding patterns between varieties. However, it is a strong new method for easily distinguishing between annual and perennial ryegrass. Similar to the esterase method (Wu, 2011), the glucose phosphate isomerase method reveals a distinctive band from annual ryegrass seed protein extracts that is not present in perennial ryegrass seed protein extracts. However, the esterase method does not produce distinctive bands that are uniquely present in either annual or perennial ryegrass seedling protein extracts. In contrast, the glucose phosphate isomerase method manifests bands from annual ryegrass seeds and seedlings that are not readily detectable in their perennial counterparts. Based on these results, patterns of glucose phosphate isomerase activity (i.e., stained bands) from IEF gel electrophoresis is a rapid and simple way to distinguish annual ryegrass from perennial ryegrass, in seed or seedling samples.

Photo by Dr. Yujia Wu, USDA, AMS, 2011



Glucose phosphate isomerase banding in IEF gel (pH 3-10) from ryegrass seed and seedling protein extracts.

References:

Wu, Yujia. 2010. Differentiating Annual and Perennial Ryegrass Varieties by Electrophoresis. Items of Interest in Seed, October 2010. pp. 24-25.

Wu, Yujia. 2011. Comparing Ryegrass Seed and Seedling Banding Patterns of Annual and Perennial Varieties. Items of Interest in Seed, April 2011. pp. 20-21.

For more information about this article, contact Plant Physiologist Yujia Wu, Ph.D., at (704) 810-7267; yujia.wu@ams.usda.gov.

SPRING TRUENESS-TO-VARIETY OVERVIEW

Each year, the Seed Regulatory and Testing Division (SRTD) conducts trueness-to-variety (TTV) field tests to determine if seed lots are properly labeled for variety as required by the Federal Seed Act (FSA) and State seed laws. Field testing is conducted by crop experts at State Universities and State departments of agriculture in cooperation with SRTD. SRTD relies on State seed control programs to submit samples for inclusion in the TTV tests.

Winter small grain TTV testing at the Piedmont Research Station, Salisbury, NC, is well underway, and the SRTD is currently preparing samples for summer TTV trials. Participants should submit **collards**, **onions**, **sweet corn**, and **watermelon** TTV seed samples by May 1, 2012; **pumpkin** and **winter squash** by June 1, 2012; and **tall fescue** by September 1, 2012. Growing-locations for summer TTV samples may include: Alcorn State University, Lorman, MS; Clemson University, Clemson, SC; Piedmont Research Station, Salisbury, NC; and the SRTD greenhouse in Gastonia, NC.

All State seed control programs are encouraged to submit seed samples of the previously mentioned kinds (**in bold**) for TTV testing.

For additional information concerning the TTV program or directions for submitting samples, contact Seed Marketing Specialist Kevin Robinson at (704) 810-7264; kevin.robinson2@ams.usda.gov.

FEDERAL SEED SCHOOLS 2012

The Seed Regulatory and Testing Division will hold two Federal Seed Schools at our facility in Gastonia, NC, April 23-27, 2012, and August 13-17, 2012. Presentation of topics will be on a level appropriate for experienced seed analysts. Topics presented at both seed schools will be substantially the same.

The first three and a half days will focus on purity and identification of similar crop and weed species, with emphasis on identification of noxious-weed seeds. Other topics such as the uniform blowing procedure, fluorescence tests, and pure seed definitions will also be covered. The last day and a half of the week will focus on variety testing, including trait testing, and seed health testing such as detection of seed treatments by bioassay methods, depending upon the interest of the participants.

These seed schools are open to seed analysts from private and government seed testing laboratories. Enrollment at each of the seed schools will be limited to 20 participants due to the

hands-on nature of the topics and one-on-one attention from the instructors. Participants from non-government laboratories will be charged a fee of \$160 (\$32 per day).

For more information about these seed schools or to request a pre-registration sheet, please contact Botanist Patsy Jackson at patsy.jackson@ams.usda.gov or Acting Director Susan Maxon at susan.maxon@ams.usda.gov.

2012 OECD SEED SCHEMES MEETING HIGHLIGHTS

The Organization for Economic Cooperation and Development (OECD) Seed Schemes met January 23-27, 2012, in Paris, France. The meetings included the Technical Working Group on January 25 and the Extended Advisory Group on January 26-27. The U.S. OECD Seed Schemes Program Manager Gene Wilson participated in the meetings as the U.S. delegate. As Vice-Chair of the OECD Seed Schemes, Mr. Wilson led the Technical Working Group meeting. The Vice-Chair also serves on the OECD Seed Schemes Bureau, whose purpose is to decide direction and policy for the Seed Schemes.

Some key accomplishments and areas of interest from the meeting follow:

- The United States will be the OECD Seed Schemes Chair for the 2012 and 2013 Annual Meetings.
- No further action will be taken on the question of the presence of awns as a distinguishing characteristic in perennial vs. annual ryegrass seed.
- A sub-working group will review the OECD experiment of larger lot sizes, conducted in response to the proposal for extending the lot size for herbage seed.
- The document that relates to extending authorization for field inspection to basic and pre-basic seed will be revised and recommended for approval at the 2012 Annual Meeting.
- An Ad Hoc Working Group will produce a document that analyzes results of a survey concerning the identification of seed not yet OECD listed. This will be presented to the Technical Working Group in July.
- The Annual Meeting is scheduled for July 9-13, 2012, in Helsinki, Finland.

For more information on the OECD Seed Schemes, visit <http://www.oecd.org>. For more details regarding this year's meeting or for more information regarding this article, contact Gene Wilson at (704) 810-8888; gene.wilson@ams.usda.gov.

NEW SEED MARKETING SPECIALIST

After almost six years as a Management Analyst with the Seed Regulatory and Testing Division, Karen Sussman was selected to fill the position of Seed Marketing Specialist. As a Seed Marketing Specialist, Karen will be responsible for enforcing the interstate provisions of the Federal Seed Act and assisting with the U.S. OECD Seed Schemes Program. In this capacity, her responsibilities will include the day-to-day operations of the Seed Schemes Program and participation at international meetings. Congratulations to Karen on her new position.

SERVICE TESTING REMINDER FOR SEED COMPANIES

The Seed Regulatory and Testing Division (SRTD) provides service testing with issuance of results on Federal Seed Analysis Certificates. Customers using this service should provide the following information each time samples are submitted for testing:

- Company name and address - If this is the first time the company has submitted a sample, please include the company's Federal Taxpayer ID number in order to establish a customer account.
- Letter signed by the party responsible for payment.
- Authorized contact person's name, phone number, and fax number.
- Instructions for how SRTD should send completed certificates (mail or courier, e.g., FedEx, UPS) including courier account number for returns by courier.
- Kind name (scientific and common)
- Variety name - Clearly indicate if no variety name will be used.
- Lot number - Ensure the lot number matches the lot number supplied on all accompanying paperwork. If the lot number on the sample does not match the accompanying paperwork, testing may be delayed. If the submitted sample is labeled incorrectly, a new sample labeled with the correct lot number is required.
- Total lot size represented by the sample - The lot size cannot increase once the sample is submitted for testing.
- Size of shipment (specify units, i.e. KG, LBS, or number of seeds) - This can be an amount up to the total lot size.
- Country of export when requesting noxious-weed seed testing.
- Testing rules requested - International Seed Testing Association (ISTA), Association of Official Seed Analysts (AOSA), or Federal Seed Act (FSA)
- Tests needed (e.g., germination, purity, noxious, moisture, pathology, variety). Please note that a purity test consists of pure seed, inert matter, crop seeds, and weed seeds. A noxious-weed seed examination is a separate test. Other tests such as germination, pathology, moisture, etc. are also separate tests. The SRTD performs only those tests specifically requested by the customer in writing. If a moisture test is requested, the seed sent for the moisture test should be in a moisture-proof container (such as a sealed plastic bag).
- Name(s) of seed treatment substances or a statement that the seed is not treated.
- Special instructions or other identifying marks, such as letter of credit number, order number, or customer name.

Including the requested information enables us to provide a certificate of analysis faster and without delay.

Please refer to the SRTD Web site at www.ams.usda.gov/Seed for more information related to service testing and associated fees. Questions regarding seed testing services should be sent to seedservice@ams.usda.gov.

RYEGRASS FLUORESCENCE LIST

The Association of Official Seed Certifying Agencies (AOSCA) revises The Variety Fluorescence Levels Recognized by the AOSCA National Ryegrass Review Board report twice a year. Click on the Grass National Variety Review Board section of the Web site (<http://www.aosca.org/VarietyReviewBoards/Grass/Grass.html>); then click on the National Perennial Ryegrass Variety Fluorescence Report link to view the most current report.

PLANT VARIETY PROTECTION CERTIFICATE STATUS

The Plant Variety Protection Office (PVPO) posts a public version of the Certificate Status Database. Access the [PVPO Certificate Status Database](#) to check the status of certification or to search for expired certificates. To view the PVPO List of U.S. Protected Varieties, visit the [PVPO List of U.S. Protected Varieties](#). This is a large document that may take several minutes to open. Both links are updated monthly or as time permits.

CALENDAR OF EVENTS - 2012

Federal Seed School* Gastonia, NC	April 23-27, 2012
Association of Official Seed Analysts (AOSA) Annual Meeting Des Moines, IA	May 20-24, 2012
International Seed Testing Association (ISTA) Annual Meeting Venlo, The Netherlands	June 11-14, 2012
American Seed Trade Association (ASTA) 129 th Annual Convention National Harbor, MD	June 20-23, 2012
Association of Official Seed Certifying Agencies (AOSCA) Annual Meeting Sun Valley, ID	June 24-27, 2012
Organization for Economic Cooperation and Development (OECD) Seed Schemes Working Group and Annual Meeting Helsinki, Finland	July 9-13, 2012
American Association of Seed Control Officials (AASCO) Annual Meeting New Orleans, LA	July 22-26, 2012
Federal Seed School* Gastonia, NC	August 13-17, 2012
American Seed Trade Association Corn & Sorghum and Soybean Research Conference Chicago, IL	December 4-7, 2012

*Seed Regulatory and Testing Division (SRTD) sponsored training is shown in **bold**.
For further information regarding the Calendar of Events, contact the SRTD at (704) 810-8871.

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“But if I were to pause on the threshold of the year to consider the miracles of seeds alone, I should never, I fear, reach my garden plot at all!”

---Celia Thaxter

From ‘An Island Garden’ 1894

(Contributed by Seed Regulatory and Testing Division Botanist Sandy Dawson)

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