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Items of Interest in Seed Control

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ANNUAL MEETING OF THE ASSOCIATION OF OFFICIAL SEED ANALYSTS

The Association of Official Seed Analysts (AOSA) held its 91st annual meeting in conjunction with the annual meeting of the Society of Commercial Seed Technologists in Albuquerque, NM, May 20-23, 2001. Botanists David Bitzel and Susan Maxon of the Seed Regulatory and Testing Branch participated in the meeting.

Rule change proposals are always among the most important agenda items. Under consideration were thirty proposals for changes in testing procedures of more than 266 different species. All proposals passed by majority vote in the business meeting on May 23. These include changes in nomenclature or classification of 135 species--including 40 prohibited Federal noxious weeds--in the "AOSA Handbook of Uniform Classification of Weed and Crop Seeds." Other rule changes involve purity working weights, germination methods, and seedling evaluation of some 132 species in the "AOSA Rules for Testing Seeds." Kinds covered by the Federal Seed Act (FSA) regulations that would be affected by the AOSA rule changes are: alfalfa (germination method), fourwing saltbush (definition of range and revegetation species), 4 species in the Solanaceae (seedling evaluation), 6 species in the Apiaceae (seedling evaluation), corn (seedling evaluation), and hard fescue and sheep fescue (factors for multiple unit procedure). Until such time as the FSA regulations may be amended, we will take into consideration these changes in the AOSA rules whenever any of these kinds are submitted to us as alleged complaints under the FSA.

Two proposals for tentative rules were considered: a testing method for genetically-modified soybean (Roundup ReadyTM) and a grow-out of fluorescent ryegrass seedlings. The AOSA Executive Board accepted the testing method for genetically-modified soybean (Roundup ReadyTM) as a tentative rule for 13 months, but rejected the proposal for grow-out of fluorescent ryegrass seedlings.

Also on the agenda were 2 proposed changes in the bylaws and the election of executive board members. Both bylaw proposals passed. Kelly Book (TX) and Steve McGuire (MI) were re-elected to 3-year terms, and Aida Galarza (GA) was elected to fill a 1-year vacancy on the Executive Board.

In other business, a motion was passed to increase membership dues from \$270 to \$500 for official member laboratories and from \$100 to \$150 for associate and allied members. The Executive Board reported that it selected a new management company--Osburn Services in Las Cruces, NM--to operate the association office, effective July 1. The web site will remain at www.aosaseed.com.

BIOSAFETY PROTOCOL MEETING

Seed Regulatory and Testing Branch Chief Richard Payne, serving as a member of the United States delegation, attended a meeting of "technical experts" requested by the Intergovernmental Committee for the Cartagena Protocol on Biosafety (ICCP). The meeting was held in Paris, France, June 13-15, 2001. The purpose of the meeting was to develop recommendations on handling, transport, packaging, and identification of living modified organisms (LMOs) involved in transboundary movement. The recommendations are for use by parties to the ICCP so they can meet their obligations under paragraph 2(b) and 2(c) of Article 18 of the Protocol. Paragraph 2(b) pertains to LMOs shipped among researchers and paragraph 2(c) pertains to LMOs approved for release (*i.e.*, exported seed of approved varieties developed with biotechnology).

The technical experts recommended that the ICCP consider the following options:

- (1) "Parties use an accompanying document provided by the originator and/or existing international documentation systems that incorporates the information required under Article 18, paragraph 2(b) and Article 18, paragraph 2(c), as relevant to enable Parties to fulfill their obligations as required in the Protocol."
- (2) "Parties keep under review and discuss the need to develop a new system of documentation under Article 18, paragraph 2(b) and Article 18, paragraph 2(c)."

It appears that the invoice could serve as the accompanying document. A statement would be put on the invoices similar to "This is LMO seed that was released according to an approved protocol (protocol to be specified)." This procedure would be used when Roundup Ready™ soybean seed and Bt corn seed are exported to countries that accept them. Further details will be reported as they become available.

TWENTY-SIXTH INTERNATIONAL SEED TESTING ASSOCIATION CONGRESS

Seed Regulatory and Testing Branch Chief Richard Payne attended the 26th International Seed Testing Association (ISTA) Congress in Angers, France, June 14-22, 2001. Over 560 participants from 74 countries attended. The 17 ISTA technical committees met from June 13-16. A symposium involving technical papers covering various aspects of seed testing and seed technology was held from June 18-20. The ISTA Business Meeting was held on June 21 and 22 with voting delegates from 43 countries in attendance.

The ISTA membership voted to increase the frequency of ISTA Business Meetings from every three years to every year. In addition, the voting delegates approved an increase in annual dues that will result in a 40 percent increase in the annual dues paid by U.S. Government laboratories.

The voting delegates approved the following additions and changes to the ISTA Rules:

- The addition of the conductivity test for garden peas and the accelerated aging test for soybeans;
- A prohibition against submitting samples for germination testing in moisture proof containers (however, no definition of "moisture-proof container" was provided);
- The addition of an isoelectric focusing procedure for determining hybrid purity of sunflower seeds;
- The addition of a procedure for determining seed moisture content with electronic moisture meters;
- The addition of compost (commercial potting soil) as a primary substrate for germination tests of sunflower, cotton, soybean, and fava bean;
- The revision of the chapter on seed health testing by establishing a process to review seed health tests for approval by the membership;
- Defined "small container" as a container of less than 15 kg for purposes of sampling seed;
- The evaluation of coleoptiles in germinating corn seedlings was changed so the evaluation is the same as that recently passed by the Association of Official Seed Analysts.

ANNUAL MEETING OF THE OECD SEED SCHEMES

The annual meeting of the Organisation of Economic Co-operation and Development (OECD) Seed Schemes was held at OECD headquarters in Paris, France, June 25-29, 2001. Seed Regulatory and Testing Branch Botanist Susan Maxon represented the U.S. Government. Also on the U.S. delegation were: Kristen Thompson, Program Manager for OECD activities of the Association of Official Seed Certifying Agencies (AOSCA); Dean Urmston, Executive Vice President of the American Seed Trade Association (ASTA); and Marsha Stanton with Monsanto Company, an ASTA member company.

It is helpful to know that decision-making in the OECD is on the basis of consensus negotiations, in contrast to the system of voting and majority rule that we are accustomed to. If reservations or objections on a particular issue cannot be overcome, the proposal does not go forward.

One of the major issues was consideration of the "Proposal for a Voluntary Experiment on the Validation of GM Seed Testing and Its Implication for Seed Certification Rules." This proposal for an OECD experiment included threshold levels of 1 percent, 0.5 percent, and nil. Provisions were included to allow importing countries to impose stricter conditions regarding previous cropping and isolation distances. No agreement could be reached on this proposal; therefore further consideration will be given at an Advisory Group meeting to be held in Geneva, Switzerland, October 19-20. In a related discussion, some countries requested that the OECD list of varieties be annotated to indicate which varieties were developed by techniques of modern biotechnology. This was not a formal proposal but may be expected to be raised again in the future.

The OECD Working Group on Accreditation discussed "Guidelines for Accreditation of Seed Sampling (Including Labeling and Sealing) and Seed Testing." This document outlines a system for accreditation of seed companies to perform seed sampling, testing, and labeling. The United States and nine other countries have indicated they will participate. One particular point of discussion was the bibliography reference to "ISTA/AOSA Seed Testing Laboratory Accreditation Standard: 2000 (to be confirmed)" and "ISTA/AOSA Accreditation and Surveillance Standard for Seed Samplers and Seed Testing Laboratories: 2000 (to be confirmed)." ISTA had presented related information, which had not been coordinated with the Association of Official Seed Analysts (AOSA). The Working Group requested that ISTA continue to work with AOSA to develop these references. (AOSA did not have a representative at the meeting.) Because of the different systems of accreditation, this will be difficult. Participants were reminded that the earlier experiment for accreditation of field inspection by non-official inspectors is now a permanent authorization as adopted by the Council on September 28, 2000.

In other business, three new countries were accepted for participation in the OECD Seed Schemes: Yugoslavia, Russia, and Latvia. In addition, as an OECD member country, Mexico is taking steps to become an active participant in the Seed Schemes. The OECD Secretariat is planning a mission to Mexico sometime later this summer.

It was agreed to extend the experiment on lot size and homogeneity in order to obtain additional data. Agreement was not reached on several issues besides the "Experiment on GM Seed." The proposal to increase cereal lot sizes from 20 to 30 metric tons raised concerns about heterogeneity. Objections also were raised concerning the proposal on herbage seed mixtures. Specific information regarding the objections will be submitted to the Secretariat so that countries with experience in herbage seed mixtures may address how they have dealt with

them. The U.S. proposal to add *Elytrigia repens*, quackgrass, as a new species was met with objections to its nature as a noxious weed. Additional information regarding the qualities of improved varieties of quackgrass will be submitted to the Secretariat for further consideration at the Advisory Group meeting this fall. Concerns were also raised about the U.S. "Proposal for Enabling OECD Certification of Maize Seed Blend (Top Cross Maize Grain Production System)" for high-oil corn, in particular whether the pollinator was eligible for OECD certification. Other items to be discussed again next year include oil-seed rape and interspecific hybrids in cotton.

As current Chair-Elect, Leopold Girsch (Austria) will become the Chair after the opening of the 2002 annual meeting, succeeding current Chair Adelaida Harries (Argentina). The nomination of Michael Scheffel (Canada) to serve as the next Chair-Elect elicited widespread expressions of support. The next annual meeting of the OECD Seed Schemes will be held June 24-28, 2002, in Bolivia.

MEETING OF THE ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

Seed Regulatory and Testing Branch Botanist Susan Maxon attended the annual meeting of the Association of Official Seed Certifying Agencies (AOSCA) from June 30 to July 3, 2001, in San Diego, CA. Of interest to many member agencies was the outcome of the annual meeting of the Organisation of Economic Co-operation and Development (OECD) (see report above). AOSCA's OECD Technical Committee, chaired by Dennis Thompson (Illinois Crop Improvement Association), discussed the function of the committee in relationship with the AOSCA Executive Committee, AOSCA's OECD Program Manager, and USDA in carrying out the OECD Seed Schemes in the United States.

AOSCA's Education and Promotion Committee presented a seminar on OECD accreditation and USDA organic certification. AOSCA has been participating in OECD Field Inspection Accreditation of seed corn and sunflower since 1996. This had started as an OECD experiment, but is now a fully authorized program. Chris Tiedje (Michigan Crop Improvement Association) described AOSCA's oversight and monitoring program of company field inspection. Mary Auth, a consultant with Marketing & Public Relations Strategies, presented guidelines for sampling, testing, and labeling, under that OECD experiment. Under this program, seed companies and seed company laboratories may apply to become accredited for one or more components; November 1 is the deadline for companies requesting to participate. In the second part of this seminar, Keith Jones, USDA National Organic Standards Board, presented information on the organic certification program in USDA. The final rule for this program was published in the Federal Register on December 13, 2000, and became effective on April 21, 2001. The deadline to apply for the first round of accreditation is October 21, 2001. More information on the National Organic Program is available at www.ams.usda.gov/nop.

Richard Arnett (Missouri Seed Improvement Association) succeeds David Howle (South Carolina Seed Certification) as AOSCA President. AOSCA's next annual meeting is scheduled to be held in Des Moines, IA, August 10-15, 2002.

ASSOCIATION OF AMERICAN SEED CONTROL OFFICIALS MEETING

Seed Regulatory and Testing Branch Chief Richard Payne and Seed Marketing Specialist Harold Laswell attended the Association of American Seed Control Officials (AASCO) meeting that met in Portland, OR, from July 15-July 19, 2001. Representatives of allied organizations gave reports: Association of Official Seed Analysts (AOSA) by Kathleen Willey, Society of Commercial Seed Technologists (SCST) by Sharon Davidson, Association of Official Seed Certifying Agencies (AOSCA) by Greg Lowry, American Seed Trade Association (ASTA) by

Leslie Cahill, Canadian Food Inspection Agency (CFIA) by
Luc Mougeot, and U.S. Department of Agriculture (USDA) by Richard Payne.

Dr. Kevin Turner, Scotts Company, reported on biotechnology work being done with grasses to make them resistant to RoundUp™ herbicide. Leslie Cahill explained ASTA's involvement in invasive species issues. Don Kendall, USDA-Grain Inspection Packers and Stockyards Administration, spoke on accreditation and certification of testing techniques to determine genetically engineered traits. Travis Brown and Larry Mix, Monsanto Company, discussed Monsanto's new labeling scheme for soybeans and other biotechnology amended crop kinds. Dr. Reed Barker explained the testing being done at Oregon State University to develop a fluorescence grow-out test for ryegrasses, and grass-seed producers related how the present testing policy for ryegrasses is detrimental to allowing their grass seed to pass certification standards.

At AASCO's business meeting Kenneth Rauscher, former Michigan seed control official, was awarded an honorary membership in AASCO. "The Recommended Uniform State Seed Law" (RUSL) was amended to include a definition and requirements for "undesirable grass seeds" (passed by one vote with Texas and USDA abstaining) and to include definitions for "complete record" and "mulch." RUSL was also amended to require that replacement germination test date labeling (stickers) show a test date and lot number that matches the original lot number. RUSL was amended to include minimum germination standards for vegetable seeds and to allow "packed for" or "sell by" dates (not to exceed 12 months) for vegetable and flower seeds. RUSL's new vegetable seed minimum germination standards are same as those in the Federal Seed Act Regulations. For 10 kinds of cool-season lawn and turf grass seed and for mixtures thereof, RUSL was changed to allow "packed for" or "sell by dates" that do not exceed 15 months.

For 2002, AASCO officers are President Mark Ringler (IL), First Vice-President Mary Smith (AR), Second Vice-President Jim Cramer (OR), Secretary Larry Nees (IN), and Treasurer Charles Dale (MN).

The membership agreed to have a "2001-2002 Mid-Year Meeting" at a location to be determined later. The 2002 AASCO annual meeting will be held July 20-25, 2002, in Bismarck, ND, at the Radisson Hotel.

Association of Seed Control Officials of the Northeastern States Meeting

The Association of Seed Control Officials of the Northeastern States (ASCONES) met in conjunction with the Association of American Seed Control Officials (AASCO) in Portland, OR. There were three members present. Those present were Malcolm Sarna (MD), Bill Nastyn (NY), and Joe Garvey (PA). No official business was conducted due to the lack of a quorum.

Several topics were discussed including the proposed amendments to the "Recommended Uniform State Seed Law," the continuing support for AASCO's resolution allowing extra label language to specify ryegrass grow-out testing was used, USDA's Agricultural Marketing Service (AMS) code designation requirements, and ASCONES' decision to keep maintaining the "turf-type" tall fescue variety list.

New officers of the organization for the next term of office are President Joe Garvey, Vice-President Floyd Yoder (NJ), Secretary-Treasurer Bill Cook (PA), and Bill Nastyn as AASCO Executive Board Representative.

We want to thank ASCONES President Joe Garvey for submitting this report.

North Central States Seed Control Officials Association Meeting

President Kent Jones (MO) presided over the North Central States Seed Control Officials Association (NCSSCOA) meeting held on July 16 during the Association of American Seed Control Officials meeting in Portland, OR. Reports of seed control activities for Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, the Canadian Food Inspection Agency, and the Seed Regulatory and Testing Branch were given. Most of the State representatives mentioned problems related to low germination on soybean. The NCSSCOA members discussed several other topics at length. Subjects of importance that were discussed included: genetically modified organism testing, fluorescence testing of ryegrass, proposed changes to the "Recommended Uniform State Seed Law" (RUSL), the regulatory role on proprietary seed, bulk sampling procedures for soybeans, and the Mississippi bulk bag seed probe report. Antonio Castro-Escobar (MI) was elected President and Luc Mougeot (Canada) was elected Vice-President.

Southern Seed Control Officials Association Meeting

President Lee Daughtry (MS) presided over the July 16 Southern Seed Control Officials Association (SSCOA) meeting held in Portland, OR. Members from Alabama, Arkansas, Florida, Kentucky, Maryland, Mississippi, North Carolina, Oklahoma, Pennsylvania, and Texas and from the Seed Regulatory and Testing Branch (SRTB) were present. Bill Nastyn (NY) also attended the southern group's meeting since the northeastern states had only three members present in Portland. Maryland and Pennsylvania have dual membership in the northeastern and southern groups. SRTB Seed Marketing Specialist Harold Laswell gave an update on SRTB activities since the last annual SSCOA meeting. Major topics discussed at this regional meeting included Arkansas' enforcement and surveillance procedures, tests used to determine genetically engineered crop seed, laboratory accreditation, ryegrass fluorescence, wildlife seed mixtures, soybean count summary, parent seed and branded seed labeling, Title V labeling issues, and compatible labeling among states. Regarding this last topic, the question was raised whether it would be possible to follow the Recommended Uniform State Seed Law.

Officers for 2002 and 2003 are President Wade Krivanek (OK), First-Vice President John Crayton (AL), Second Vice-President Kelly Book (TX), and Secretary-Treasurer Mary Smith (AR).

Western Association of Seed Control Officials Meeting

The Western Association of Seed Control Officials (WASCO) regional meeting was held during the Association of American Seed Control Officials meeting in Portland, OR. Representatives were present from the seed control programs of Arizona, Colorado, Idaho, Montana, Oregon and Washington. Guests attending the WASCO meeting included representatives from the Association of Official Seed Certifying Agencies, the Society of Commercial Seed Technologists, and the Oregon Seed Trade Association.

Among the agenda topics addressed by the representatives were:

1. The attendees discussed ryegrass fluorescence testing. The members believe that the grow-out test of fluorescent seedlings as developed at Oregon State University (OSU) appears to reflect a better reading of the presence of annual ryegrass in some cases than does the fluorescence test. Oregon is working to have this selective test more widely adopted. When asked how soon a PCR or other laboratory analytical test would be developed, Lee Schweitzer of OSU indicated they are working on developing such a test and hope it will be in place within two years.
2. The possibility of the Association of Official Seed Analysts (AOSA) amending the "AOSA Rules for Testing Seeds" to allow a three-part purity (pure seed, other seed, and inert matter) was discussed. Advantages cited for accepting this change included uniformity with the International Seed Testing Association (ISTA), less confusion when the seed passes borders between countries, less cost to AOSA for maintaining the "Uniform Classification of Weed and Crop Seeds" (AOSA Handbook 25), and because it is needed by companies selling range and native species for land rehabilitation. A concern expressed included the fact that the three-part purity would not meet the current interstate shipment provisions of State and Federal seed laws, and a noxious-weed seed examination would still have to be done as well. Another concern that would also have to be addressed is that the ISTA three-part purity is reported to only one decimal place, whereas AOSA and the Federal Seed Act (FSA) require two decimal places. If a three-part purity were to be considered for adoption in the United States, amendments to the AOSA Rules and FSA Regulations should be done at the same time. WASCO passed a motion that stated: "WASCO generally supports the concept of three-part purity and would recommend a white paper be presented to all interested agencies."
3. The question of labeling seed based on a tetrazolium test in lieu of a germination test was raised. The Uniform Labeling Task Force is working on proposing species that would be acceptable for tetrazolium labeling for inclusion in the "Recommended Uniform State Seed Law" (RUSSL). Currently data is being gathered to compare the tetrazolium versus germination test for all species that have data available.
4. Dr. Adriel Garay from OSU reported that they are working with the AOSA Research Committee to develop new blowing point procedures for some grass species.
5. Pat Brownfield, Syngenta Seeds, Inc., discussed the question of vegetable species being sold by the number of seeds instead of by the net weight of the container. Labeling by seed number is in violation of some State seed laws. The WASCO members consider the number of seeds as additional labeling information and have no problem including the seed number on the container if the net weight is also labeled.
6. A brief discussion occurred on the high violation rate of enforcement samples taken in the western region. A key factor was the type of violation that was pursued by each State in their enforcement program.
7. The members were asked if there should be a uniform maximum lot size to provide more accurate test results. A suggestion was made that the Uniform Labeling Committee look into the issue.
8. The WASCO members made no resolutions at this meeting.

We want to thank WASCO President Richard Lawson (ID) for submitting this report.

INTERNATIONAL SEED TESTING ASSOCIATION ACCREDITATION AUDIT

On June 4, 2001, the Seed Regulatory and Testing Branch (SRTB) underwent an accreditation audit by the International Seed Testing Association (ISTA). The scope of the audit included sampling and testing carried out using ISTA Rules in our service-testing program. This is our voluntary, fee-for-service, seed testing program authorized by the Agricultural Marketing Act, and does not involve testing and other regulatory activities carried out under the Federal Seed Act. The U.S. Government was a charter member of ISTA and SRTB has maintained its status as an accredited member. A few years ago ISTA decided to require on-site visits as part of the accreditation process and also to open membership up to private seed testing laboratories. As a result of the all-day audit, SRTB is in the process of addressing several items identified by the auditors, Heinz Schmid and Monica Moreno. Their recommendation to the ISTA Executive Committee is for approval of our continued accreditation upon satisfactorily addressing those items. This ISTA accreditation does not change U.S. policy of not issuing ISTA certificates for agricultural and vegetable seed.

RYEGRASS FLUORESCENCE LIST

The Association of Official Seed Certifying Agencies National Grass Variety Review Board (NGVRB) issued a memorandum dated August 10, 2001, that updated their ryegrass fluorescence level descriptions. They added the experimental varieties SR 4500 (SRX NJPR, SRX 4NJPR, SRX 4500) perennial ryegrass and Paragon (MML, TMI-MML) perennial ryegrass.

The perennial ryegrasses Admire, A.S.A.P., Extreme, Galaxy, Monterey II, Prosport, and Wilmington have been accepted for certification as varieties. Passerel Plus annual ryegrass has also been accepted for certification as a variety.

Brightstar II perennial ryegrass and Target perennial ryegrass have been given the Organisation for Economic Co-operation and Development (OECD) names Polarstar and Libra, respectively.

Perennial Ryegrass Variety Name	Percent Varietal Fluorescence	Perennial Ryegrass Variety Name	Percent Varietal Fluorescence
246	0.27%	Allaire II	1.15%
2CB	1.97%	APM	0.59%
856	0.87%	Aquarius	0.97%
89-90	2.15%	Archer	1.51%
90-14 ¹	7.12%	A.S.A.P.	1.42%
96-KSOS-L-1-PR-WVPB-C-24 ¹	6.50%	Ascend	3.09%
A+	6.23%	ASP410	0.18%
Academy	2.33%	Assure	0.72%
Accent	0.56%	Bayou ¹	1.33%
Accolade	4.83%	Bedford	1.40%
Accord	4.08%	Bella	0.65%
Achiever	0.93%	Blackhawk	1.17%
Admire	2.37%	Blazer III	1.18%
Advent	0.14%	Boardwalk	2.72%
Affinity	0.77%	Breeze	1.57%
Affirmed	2.59%	Brightstar	1.79%
Agresso	2.00%	Brightstar II ³	2.24%
AllSport	0.92%	Buccaneer	7.44%
All*Star	0.47%	Buccaneer II	5.48%

Perennial Ryegrass Variety Name	Percent Varietal Fluorescence	Perennial Ryegrass Variety Name	Percent Varietal Fluorescence
CIS-MBH	1.27%	Jet	0.84%
C-21	6.28%	Jiffie	6.06%
Caddieshack	1.57%	Laredo	0.53%
Caliente	0.74%	Legacy	0.37%
Calypso	1.29%	LF-100 (Continental) ¹	5.88%
Calypso II	0.47%	Lindsay	1.72%
Catalina	3.18%	Line Drive	2.72%
Cathedral	0.85%	Linn	5.00%
Chaparral	1.62%	Lowgrow ³	1.31%
Charger II ³	0.54%	Lowgrow II	1.35%
Charisma	2.39%	LP22 (Vail) ¹	0.82%
Chatham ³	2.11%	LRF-94-C8 ¹	0.64%
Churchill	2.93%	Lynx	4.19%
Citation III	0.96%	MB 49 (Nexus) ¹	2.01%
Commander	1.02%	Magic	1.21%
Cutter	1.65%	Majesty	1.59%
Dancer	0.78%	Manhattan II ³	0.65%
Dandy	2.00%	Manhattan 3 ³	0.88%
Delaware Dwarf	2.60%	Mardi Gras	1.07%
Derby Supreme	2.85%	Monterey	2.64%
Dillon	4.14%	Monterey II	1.94%
Divine	3.09%	Morningstar	0.87%
DS95-201 (Enchanted) ¹	1.12%	MP5 (PDQ) ¹	4.65%
Edge	1.73%	Mulligan	1.86%
Elegance	1.51%	Navajo ³	0.37%
Elf	0.75%	Newlinn	5.85%
Elite	4.84%	NightHawk	1.39%
Envy	0.22%	Nobility	7.53%
EP37 (Magic II) ¹	1.36%	Nomad	1.03%
EP39 (Pronto II) ¹	1.75%	Nova	1.00%
Equal	1.98%	Omega 3	0.73%
Esquire ¹	3.10%	Omni	0.51%
Evening Shade	1.17%	Pageant	2.22%
Exacta	1.22%	Pageant II ¹	3.32%
Excel ³	1.53%	Palmer	1.04%
Express	4.00%	Palmer II	1.51%
Extreme	1.32%	Palmer III	0.23%
Fiesta II ³	1.14%	Panther	1.18%
Fiesta 3	1.02%	Paragon (MML, TMI-MML) ¹	0.88%
Galaxy	1.19%	Passport ³	1.06%
Gator	0.88%	Patriot II	0.42%
Gator II	2.50%	Pearl	1.86%
Gettysburg	2.74%	Pegasus	2.41%
Goalkeeper	0.82%	Pennant	0.50%
Greenland	1.20%	Pennant II	1.63%
Grimalda	2.00%	Phantom	2.19%
Headstart	2.09%	Pick Lp Q-93 ¹	6.44%
Imagine	1.31%	Pleasure	4.09%

Perennial Ryegrass Variety Name	Percent Varietal Fluorescence	Perennial Ryegrass Variety Name	Percent Varietal Fluorescence
Pleasure XL	1.11%	Target ³	3.28%
PR8820	0.79%	Tonga	11.53%
Prelude	1.72%	TopGun	1.15%
Prelude II	2.25%	Top Hat	0.77%
Prelude III	0.59%	Topeka	2.34%
Prizm	0.71%	Tove	17.48%
Prosport	1.36%	Twister	3.85%
Protocol	4.30%	Vantage	2.19%
Protocol II ¹	5.28%	Vibrant ¹	4.30%
Prowler	0.21%	Vivid	1.24%
Quickstart	0.18%	Wilmington	0.17%
R2	1.25%	Wind Dance	1.17%
Racer	1.23%	Wind Star	0.47%
Regency	0.99%	Wizard ³	2.57%
Repell	0.33%	WVPB-PR-C-2, C-2 ¹	8.65%
Repell II ³	1.56%	WVPB-93-KFK ¹	3.84%
Repell III	0.80%	WVPB-PR-Koos-95-9 (Breeze II) ¹	6.85%
Reveille	2.00%	WVPB-PR-RS-2 ¹	1.59%
Riviera	0.58%	WVPB-XB-2 ¹	26.71%
Riviera II	1.08%	WVPB-XP-6 ¹	21.69%
Roadrunner	2.53%	Yorktown III	1.42%
Rodeo II	2.47%		
Rosalin	3.26%		
Saturn II	0.85%	Annual	Percent
Seville ³	0.33%	Ryegrass	Varietal
Sherwood	1.08%	Variety Name	Fluorescence
Shining Star	0.10%	Florida 80	98.89%
Sonata	1.20%	Grazer	99.78%
SR 4100 ³	0.37%	Gulf	99.02%
SR 4200	0.34%	Jackson	98.80%
SR 4500 (SRX NJPR, SRX 4NJPR, SRX 4500) ¹	0.24%	Magnolia ²	---
Stallion Select	2.37%	Marshall	96.00%
Stallion Supreme	1.16%	Passerel Plus	98.83%
Stardance	1.90%	Rio ¹	98.97%
Statesman	1.27%	Surrey	98.91%
Statesman II	8.42%	TAM 90	98.45%
Sunshine	2.65%		

¹ Experimental Designation and/or Variety.

² Exempt from varietal fluorescence testing calculations.

³ The NGVRB is now listing OECD synonym names. **These names are not acceptable for sale in the United States** and are included for informational purposes. The variety and its OECD synonym shown in italics are: Brightstar II-*Polarstar*, Charger II-*Fairway*, Chatham-*Catia*, Excel-*Romadera*, Fiesta II-*Pickwick*, Lowgrow-*Lex86*, Lowgrow II-*Sunbright*, Manhattan II-*Numan*, Manhattan 3-*Triman*, Navajo-*Comanche*, Passport-*Romeo*, Repel II-*Verdi*, Seville-*Leonardo*, SR4100-*Athena*, Target-*Libra*, and Wizard-*Sardinero*.

FEDERAL SEED ACT CASES SETTLED

The following cases were settled administratively under the Federal Seed Act between April 1 and June 30, 2001. Under the administrative settlement procedure, the Seed Regulatory and Testing Branch and the firms agreed to settle the cases for the amount specified, with the firms neither admitting nor denying the charges:

- NK Lawn and Garden Company, Chattanooga, TN, has paid \$4,200 for a case involving 7 seed shipments. The alleged violations, while not the same for all shipments, were failure to properly label vegetable seed germinating “less than standard” and failure to test seeds for germination within the prescribed period prior to interstate shipment. Seed regulatory officials in Maryland and Utah cooperated in the initial sampling and inspection.
- Olean Seed Company, Olean, MO, has paid \$1,925 for a case involving 4 seed shipments. The alleged violations, while not the same for all shipments, were false labeling of noxious-weed seeds, of pure seed, and weed seed percentages; failure to label the presence of noxious-weed seeds; and failure to keep required records. Seed regulatory officials in Kentucky and North Carolina cooperated in the initial sampling and inspection.
- Roberts Seed Company, Inc., Tangent, OR, has paid \$875 for a case involving 2 seed shipments. The alleged violations, while not the same for both shipments, were failure to label the presence of noxious-weed seeds and false labeling of noxious-weed seeds and of the date of test. Seed regulatory officials in Maryland cooperated in the initial sampling and inspection.
- Southern States Cooperative, Inc., Richmond, VA, has paid \$2,250 for a case involving 8 seed shipments. The alleged violations, while not the same for all shipments, were false germination, noxious-weed seed, and purity labeling and failure to label the presence of noxious-weed seeds. Seed regulatory officials in Maryland and North Carolina cooperated in the initial sampling and inspection.
- The Wetsel Seed Company, Inc., Harrisonburg, VA, has paid \$500 for a case involving 2 seed shipments. The alleged violations, while not the same for both shipments, were shipping seed containing prohibited noxious-weed seeds and failing to label the presence of noxious-weed seeds. Seed regulatory officials in Maryland cooperated in the initial sampling and inspection.

Additions and Deletions
Of
Plant Variety Protection
Certificates

PLANT VARIETY PROTECTION CERTIFICATES
(**Issued** May 1, 2001, through July 31, 2001)

KIND VARIETY	APPLICANT	TITLE V (GEN.)	1994 PVPA	KIND VARIETY	APPLICANT	TITLE V (GEN.)	1994 PVPA
ALFALFA				COTTON			
WL 442	Peterson AgriBioTech		Y	NuCOTN 68S	Delta and Pine Land Company		Y
BEAN, FIELD							
Ensign	Novartis Seeds, Inc.		Y	FESCUE, CHEWINGS			
Messina	Novartis Seeds, Inc.		Y	Treasure	Pro-Seeds Marketing, Inc.		Y
ROG922	Novartis Seeds, Inc.		Y	FESCUE, TALL			
BEAN, LIMA				SR 8210	Seed Research of Oregon, Inc.		Y
Merced	Agrisales, Inc.		Y				
BLUEGRASS, KENTUCKY				OAT			
Rita	Pure-Seed Testing, Inc.		Y	Chaps	The Board of Trustees of the University of Illinois	Y (2)	Y
BUFFELGRASS							
PS-560	Pogue Seed Co., Inc.	Y (*)	Y	Harrison	Arkansas County Seed Co., Inc.		Y
BURCLOVER, CALIFORNIA							
Armadillo	Texas Agricultural Experiment Station	Y (2)	Y	Ida Jay	Michigan State University Agricultural Research Programs Purdue University	Y (2) Y (3)	Y Y
CHICKPEA							
AMIT	A.R.O.-VOLCANI CENTER	Y (1)	Y				
CORN, FIELD							
LH237	Holden's Foundation Seeds L.L.C.		Y	TAMO 397	Texas Agricultural Experiment Station	Y (2)	Y
LH238	Holden's Foundation Seeds L.L.C.		Y	POTATO			
LH292	Holden's Foundation Seeds L.L.C.		Y	Morene	HZPC Holland B.V.		Y
LH300	Holden's Foundation Seeds L.L.C.		Y	Red Companion	Wisconsin Alumni Research Foundation		Y
ND289	NDSU Research Foundation		Y	SOYBEAN			
PH0JG	Pioneer Hi-Bred International, Inc.		Y	90A07	Pioneer Hi-Bred International, Inc.		Y
PH1CN	Pioneer Hi-Bred International, Inc.		Y	90B43	Pioneer Hi-Bred International, Inc.		Y
PH24D	Pioneer Hi-Bred International, Inc.		Y	90B73	Pioneer Hi-Bred International, Inc.		Y
PH45A	Pioneer Hi-Bred International, Inc.		Y	91B33	Pioneer Hi-Bred International, Inc.		Y
				91B92	Pioneer Hi-Bred International, Inc.		Y
				92B36	Pioneer Hi-Bred International, Inc.		Y
COTTON							
DP 9911 Pima	Delta and Pine Land Company		Y	92B56	Pioneer Hi-Bred International, Inc.		Y
NuCOTN 66S	Delta and Pine Land Company		Y	92B62	Pioneer Hi-Bred International, Inc.		Y

(*) No limit to the number of generations of certified seed beyond breeders seed.

PLANT VARIETY PROTECTION CERTIFICATES
(**Issued** May 1, 2001, through July 31, 2001)

KIND VARIETY	APPLICANT	TITLE V (GEN.)	1994 PVPA	KIND VARIETY	APPLICANT	TITLE V (GEN.)	1994 PVPA
SOYBEAN				SOYBEAN			
92B75	Pioneer Hi-Bred International, Inc.		Y	94B73	Pioneer Hi-Bred International, Inc.		Y
92B76	Pioneer Hi-Bred International, Inc.		Y	95B34	Pioneer Hi-Bred International, Inc.		Y
92B84	Pioneer Hi-Bred International, Inc.		Y	95B71	Pioneer Hi-Bred International, Inc.		Y
93B26	Pioneer Hi-Bred International, Inc.		Y	95B95	Pioneer Hi-Bred International, Inc.		Y
93B46	Pioneer Hi-Bred International, Inc.		Y	95B97	Pioneer Hi-Bred International, Inc.		Y
93B47	Pioneer Hi-Bred International, Inc.		Y	96B21	Pioneer Hi-Bred International, Inc.		Y
93B51	Pioneer Hi-Bred International, Inc.		Y	96B32	Pioneer Hi-Bred International, Inc.		Y
93B66	Pioneer Hi-Bred International, Inc.		Y	96B51	Pioneer Hi-Bred International, Inc.		Y
93B67	Pioneer Hi-Bred International, Inc.		Y	97B52	Pioneer Hi-Bred International, Inc.		Y
93B72	Pioneer Hi-Bred International, Inc.		Y	97B61	Pioneer Hi-Bred International, Inc.		Y
93B82	Pioneer Hi-Bred International, Inc.		Y	AG0801	Asgrow Seed Company LLC		Y
93B85	Pioneer Hi-Bred International, Inc.		Y	AG1601	Asgrow Seed Company LLC		Y
93B86	Pioneer Hi-Bred International, Inc.		Y	AG2001	Asgrow Seed Company LLC		Y
94B01	Pioneer Hi-Bred International, Inc.		Y	AG2601	Asgrow Seed Company LLC		Y
94B22	Pioneer Hi-Bred International, Inc.		Y	AG6701	Asgrow Seed Company LLC		Y
94B23	Pioneer Hi-Bred International, Inc.		Y	DP 5110 S	Delta and Pine Land Company d/b/a Deltapine Seed		Y
94B24	Pioneer Hi-Bred International, Inc.		Y	MN0901	Minnesota Agricultural Experiment Station	Y (3)	Y
94B41	Pioneer Hi-Bred International, Inc.		Y	MN1801	Minnesota Agricultural Experiment Station	Y (3)	Y
94B53	Pioneer Hi-Bred International, Inc.		Y	Turner	South Dakota Agricultural Experiment Station		Y
94B54	Pioneer Hi-Bred International, Inc.		Y	WHEAT, COMMON 25R37	Pioneer Hi-Bred International, Inc.		Y
				25R44	Pioneer Hi-Bred International, Inc.		Y

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PLANT VARIETY PROTECTION CERTIFICATES
(**Issued** May 1, 2001, through July 31, 2001)

KIND VARIETY	APPLICANT	TITLE V (GEN.)	1994 PVPA	KIND VARIETY	APPLICANT	TITLE V (GEN.)	1994 PVPA
WHEAT, COMMON							
25R49	Pioneer Hi-Bred International, Inc.		Y				
25R75	Pioneer Hi-Bred International, Inc.		Y				
26R24	Pioneer Hi-Bred International, Inc.		Y				
26R38	Pioneer Hi-Bred International, Inc.		Y				
Alsen	NDSU Research Foundation	Y (*)	Y				
Brundage	University of Idaho	Y (3)	Y				
Hank	Western Plant Breeders, Inc.		Y				
Hopewell	The Ohio Agricultural Research and Development Center The Ohio State University	Y (*)	Y				
Natchez	Monsanto Company	Y (3)	Y				
Norpro	Monsanto Company	Y (3)	Y				
TAM110	Texas Agricultural Experiment Station	Y (3)	Y				
WHEATGRASS, CRESTED							
CD-II	USDA-Agricultural Research Service Utah Agricultural Experiment Station	Y (2)	Y				
Douglas	USDA-ARS Utah Agricultural Experiment Station USDA-NRCS	Y (2)	Y				

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PLANT VARIETY PROTECTION CERTIFICATES
(**Expired** May 1, 2001, through July 31, 2001)

KIND VARIETY	APPLICANT	TITLE V (GEN.)	1994 PVPA	KIND VARIETY	APPLICANT	TITLE V (GEN.)	1994 PVPA
BROCCOLI RAAB D'Arrigo No. 905	D'Arrigo Brothers Company of California						
CORN, FIELD LH119	Holden's Foundation Seeds, Inc.						
LH51	Holden's Foundation Seeds, Inc.						
LH74	Holden's Foundation Seeds, Inc.						
LETTUCE FM 8248	Harris Moran Seed Company						
ONION Texas Grano 1015Y	Texas Agricultural Experiment Station						
Texas Grano 1025Y	Texas Agricultural Experiment Station						
Texas Grano 1030Y	Texas Agricultural Experiment Station						
Texas Grano 1105Y	Texas Agricultural Experiment Station						
SOYBEAN 1082	Pioneer Hi-Bred International, Inc.						
2400	Novartis Seeds, Inc.						
5482	Pioneer Hi-Bred International, Inc.						
60524-30575	Midwest Oilseeds, Inc.						
90339-30435	Midwest Oilseeds, Inc.						
9561	Pioneer Hi-Bred International, Inc.						
DSR-227	Dairyland Seed Company, Inc.	Y (2)					
TREFOIL, BIRDSFOOT Fergus	University of Kentucky						
TRITICALE Grace	Resource Seeds, Inc.						

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