

United States Department of Agriculture

Marketing and Regulatory Programs

Agricultural Marketing Service

Livestock and Seed Program

Items of Interest in Seed Control

Fall 2002

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Seed Regulatory and Testing Branch Room 209, Building 306, BARC-East Beltsville, Maryland 20705-2325

Regulatory: 301-504-9430; Fax 301-504-8098 Testing: 301-504-8089; Fax 301-504-8098 http://www.ams.usda.gov/lsg/seed.htm

NORTHEAST SEED ANALYSTS WORKSHOP

Seed Regulatory and Testing Branch Botanist Pattsy Jackson traveled to Harrisburg, PA, to attend the Northeast Seed Analysts Workshop (NESAW) hosted by the Pennsylvania Department of Agriculture September 25-26, 2002.

Ms. Jackson conducted a training session using four different <u>Bromus</u> spp. seed study sets. Seed study sets consisting of known mixtures of closely related species are used to help train seed analysts to identify seeds of different species that closely resemble each other. Representatives of State seed laboratories of the Maryland Department of Agriculture, New Jersey Department of Agriculture, New York Department of Horticultural Sciences, and Pennsylvania Department of Agriculture attended, as well as a representative of Seedway, Inc.

Highlights included a presentation by Ellen Chirco (NY) on identification of exotic seeds. Marcello Mangano (NJ) handed out copies of a scientific article entitled, "Identification of Annual and Perennial Ryegrass Using Reversed-Phase High Performance Liquid Chromatography" by Glenn W. Freeman and Marcello J. Mangano that will be published in Seed Technology, Vol. 24, No. 1, 2002. Chuck Boettinger (PA) led a discussion on fatuoid oats, also known as false wild oats. [See Questions and Answers article in the Summer 2002 Items of Interest in Seed Control for information about fatuoid oats.]

We thank the Pennsylvania Department of Agriculture for hosting this year's NESAW meeting. They will also be hosting next year's meeting. Since 1979, NESAW has met annually for the purpose of promoting uniformity in seed testing and exploring new seed testing technologies. By the group's preference, NESAW is unstructured in that it has no officers, dues, constitution, or by-laws. State and Federal laboratories volunteer to host the meetings and NESAW participants select the topics covered.

For information regarding this article contact Botanist Pattsy Jackson (301-504-8177; pattsy.jackson@usda.gov).

TRUENESS-TO-VARIETY GROW-OUT TRIALS TO BE PLANTED SOON

The Seed Regulatory and Testing Branch is planning trueness-to-variety grow-out trials for winter small grains. One trial will be at Salisbury, NC, conducted by Raymond Coltrain of North Carolina State University. The other will be at Manhattan, KS, conducted by Vernon Schaffer of Kansas State University. The North Carolina trial will have southern adapted varieties while the Kansas trial will focus on midwestern varieties. We currently have about 400 samples for the North Carolina trial, not including checks. Samples for the Kansas trial are about 150 at this writing.

These trials are conducted in order to enforce the variety labeling provisions of the Federal Seed Act. We will be looking for seed lots that are varietal mixtures or mislabeled as to variety. We hope to have good participation from the States, as we have always had in the past.

For information regarding this article contact Horticulturist Al Burgoon (301-504-8138; al.burgoon@usda.gov).

HOW WE CONDUCT TRUENESS-TO-VARIETY TRIALS

Periodically the Seed Regulatory and Testing Branch selects kinds of crops to be grown out for purposes of determining trueness-to-variety (TTV). Once a crop kind is selected we ask State officials to send any samples of those particular kinds they wish to have include in these trials. As a cooperative service to the States, we do not require that the seed in these samples come from interstate shipments. Varieties of crops with different maturity dates such as corn and soybean, or different types like soft wheat (red and white) and hard red winter wheat, or spring and winter oat, are grouped by maturity or type and sent to different parts of the United States to be grown in the area where they are best adapted. Usually the grow-out trial is done in conjunction with a university or State experiment station in a particular area. We contact seed certification agencies and originators of the varieties to acquire representative samples (checks) of breeder seed, if available, for the varieties in the trials. Our cooperator plants the samples as we direct and keeps them free of weeds. In some cases, an additional plot will be planted and sprayed with a specific herbicide to determine if samples of seed sold as herbicide resistant varieties are accurately labeled. The cooperator observes the plant characteristics throughout the growing season and makes notes on those samples that do not appear to be the kind or variety labeled.

Once or twice during the year at the time when characteristics can best be determined, our Variety Specialist Al Burgoon goes to the location where the trials are held and with the help of the cooperator decides if the growing plants are the same as the check, and if observable characteristics meet the definition of the variety. When off-type plants are found, a count of the plant population and the number of off-types is made so percentages can be determined. Over a period of years samples of all major agricultural and vegetable kinds and varieties are tested. Some kinds are grown every year and some on a rotating basis. Grass seedlings are started in the greenhouse until they are large enough to transplant into the field. Some tests' such as phenol, fluorescence, electrophoresis, and herbicide resistance are conducted by our staff in the laboratory, greenhouse, or growth chamber to determine TTV of certain kinds.

In both field and laboratory tests we look for distinct differences between the known variety check sample and the submitted sample. When several samples of the same variety are grouped together in a trial, and the check sample is in the group, the differences are easily observed. Occasionally we will find the check sample to be mislabeled, and in those cases we notify the person who provided us the sample of our results so they can review their procedures to determine why it is mislabeled. This is a great opportunity for a company to have us provide check tests at no charge to them. If no off-types are noted, we usually do not notify the person providing the check sample. Some companies feel if they do not provide a check sample that we will not test their variety. If a company or originator does not send check samples, we conduct the trial and observe the results comparing them to other samples of the same variety and comparing the growing plant to the description from the originator or the one we have made based on characteristics we have determined the variety to have. Often the public is invited to the field when characteristics are most discernable.

There have been times when all samples, including certified seed, of a given variety have been found to be mislabeled. This is especially true in grasses and vegetable kinds where

selection has been made over a long period of time for different genotypes, there has been a genetic drift, or contamination has been inadvertently introduced into the variety. Sometimes we find a sample that is not distinct, uniform, and stable and segregation is still occurring so it does not meet the definition of a variety. This is often the case where a new genetic trait is introduced into an existing variety, like herbicide resistance into soybean with the new variety being released after only 2-3 generations.

In summary, we encourage all persons who originate a variety to supply information on testing procedures, check samples, and varietal descriptions because they are in the best position to know the true characteristics of their variety. We welcome those who originate the variety to go to the field trials with us to observe the plants of their varieties and all others in the trial.

For information on this article contact Seed Marketing Specialist Harold Laswell (301-504-8426; harold.laswell@usda.gov).

VARIETAL LABELING POLICY STATEMENT

AMS published a policy statement entitled, "Enforcement of the Varietal Labeling Provisions of the Federal Seed Act" in the Federal Register (Vol. 67, No. 185) September 24, 2002. The purpose of this policy statement is to make clear that AMS has a comprehensive compliance program in place that monitors and tests seed shipped in interstate commerce for truthful varietal labeling. The policy statement is also on our web site.

For further information contact Chief, Richard Payne (301-504-9430; richard.payne2@usda.gov).

QUESTIONS AND ANSWERS

Q. If <u>Poa annua</u> (annual bluegrass) is a noxious weed in lawn seed mixtures, is it noxious in all cases, i.e., if it is present in a flower mixture, or does it vary from State to State?

A. Six northeastern States (Delaware, Maryland, New Jersey, Pennsylvania, Virginia, and West Virginia) that list undesirable grass seeds (UGS) as noxious-weed seeds have Poa annua on their noxious-weed seed lists. If Poa annua is found in bentgrass, Kentucky bluegrass, chewings fescue, hard fescue, red fescue, varieties of named turf-type tall fescue, varieties of perennial ryegrass, and/or mixtures containing any of these grasses in these states, it is considered a noxious weed. If Poa annua is found in a mixture of unnamed "Variety Not Stated" (VNS) perennial ryegrass and VNS or non-turf-type tall fescue, it would not be considered noxious in these six states. Also, these six States do not consider Poa annua to be noxious in other kinds of agricultural seeds.

Several other States have <u>Poa annua</u> on their noxious-weed seed lists, with provisions varying from State to State. New York considers <u>Poa annua</u> noxious in lawn seed only (unless <u>Poa annua</u> is included as a kind on the seed label). Tennessee considers <u>Poa annua</u> noxious in lawn and turf seed. Alaska, Connecticut, the District of Columbia, Florida, Kentucky, Massachusetts, South Dakota, and Texas consider <u>Poa annua</u> noxious-weed seed in all agricultural seed (including grass seed) shipped into their State.

Since there are no requirements under the Federal Seed Act for flower seeds, it is advisable to contact the States for their interpretation of the noxious-weed seed requirements for flowers seeds shipped into their State.

- Q. Is it necessary to continue to use the same variety name for a variety whose Plant Variety Protection (PVP) has expired and the company that was issued the PVP certificate no longer exists?
- A. Once a variety name is used it can never be altered. Companies come and go and new owners want to change the names of the varieties to suit the new company trend, but the Federal Seed Act Regulations do not allow this practice.
- Q. Can a seed lot of soybean containing two varieties be labeled as ABC1 80 percent and ABC2 20 percent without being labeled as either a "blend" or "mixture?"
- A. Yes. The Federal Seed Act (FSA) does not require soybean to be labeled with the words "mixture" or "blend." Only seed mixtures intended for lawn and turf purposes are required to have the designation as a mixture on the label, according to section 212.12a of the FSA Regulations. Some States, however, require blend or mixture on the label for certain kinds other than lawn or turf seeds. Check with State officials where you ship to be certain.

For information about these questions and answers contact Seed Marketing Specialist Harold Laswell (301-504-8426; harold.laswell@usda.gov).

SEED REGULATORY AND TESTING BRANCH RELOCATION UPDATE

As written in the Summer 2002 Items of Interest in Seed Control, it is official that the Seed Regulatory and Testing Branch (SRTB) will relocate from its current site in Beltsville, MD, to a new facility in Gastonia, NC. The relocation is scheduled to take place in February 2003. The new facility will be one floor consisting of approximately 10,000 square feet. Building permits are in the process of being obtained and construction is expected to begin in early November.

There seems to be a variety of speculation and curiosity circulating about the move and which SRTB employees are relocating to North Carolina. Official notification of the move was received by SRTB employees October 8, 2002. Individual decisions about relocating are to be submitted no later than November 4, 2002. Employees choosing to relocate are to report for duty March 9, 2003. We will keep you updated as new information about the relocation becomes available.

For information regarding this article contact Chief Richard Payne (301-504-9430; richard.payne2@usda.gov).

RESERVE SEED COLLECTION INFORMATION

Our Reserve Seed Collection (RSC) consists of more than 700 different seed species. The list of seed species, available through the RSC, is on our Web site at http://www.ams.usda.gov/lsg/seed.htm under "Seed Resource."

If your Registered Seed Technologist exam is scheduled soon, please send your requests no later than mid-December. The Seed Regulatory and Testing Branch may be under time constraints at the beginning of the year with the upcoming relocation.

To request seed samples from the RSC, enclose envelopes labeled with the number and corresponding scientific names you are requesting and arrange in numerical order. For a quicker response, send no more than 150 requests at a time. Instructions are also on our Web site for your convenience.

Requests should be mailed to:

Leigh Wiltison-Allen Seed Regulatory and Testing Branch LS, AMS, USDA Building 306, Room, 213, BARC-East Beltsville, Maryland 20705-2325

ADDRESS AND PERSONNEL CHANGES REQUESTED

Although the "Items of Interest in Seed Control" is now an electronic only publication, paper correspondence still is our primary means of communication with our customers. If you receive other information from us, please keep us informed of any name, title, personnel, mailing address, or e-mail changes so that we can keep our records current.

Seed control officials: Please tell us when higher level personnel (*i.e.*, Secretaries, Commissioners, Directors, *etc.*) changes are made, including address and title changes, so we can promptly update our records and mailing lists.

Contact Seed Marketing Specialist Jeri Irwin with any changes (301-504-9188; jeri.irwin@usda.gov).

SUGGESTIONS FOR THE ITEMS OF INTEREST IN SEED CONTROL

We welcome ideas or articles you feel should be included in this publication. If you wish to submit an article, please send it to:

Jeri Irwin

Attention: Items of Interest in Seed Control Seed Regulatory and Testing Branch Livestock and Seed Program, AMS, USDA Room 209, Building 306, BARC-East Beltsville, Maryland 20705-2325

E-mail: jeri.irwin@usda.gov, Fax: 301-504-8098

FEDERAL SEED ACT CASE SETTLED

The following case was settled administratively under the Federal Seed Act between July 1 and September 30, 2002. Under the administrative settlement procedure, the Seed Regulatory and Testing Branch and the firm agreed to settle the case for the amount specified, with the firm neither admitting nor denying the charges:

➤ Turf Seed, Inc., Hubbard, OR, has paid \$1,050 for a case involving four seed shipments. The alleged violations, while not the same for all shipments, were false labeling of noxious-weed seeds and pure seed percentage; failure to show the name and rate of occurrence of noxious-weed seeds; and shipping seed containing prohibited noxious-weed seeds. Seed regulatory officials in Virginia cooperated in the initial sampling and inspection.

RYEGRASS FLUORESCENCE LIST

We have had no changes from the National Grass Variety Review Board (NGVRB) since our last issue. For your convenience we are including the list here.

Perennial Ryegrass Variety Name	Percent Varietal Fluorescence	Perennial Ryegrass Variety Name	Percent Varietal Fluorescence
246	0.27%	Calypso	1.29%
2CB	1.97%	Calypso II	0.47%
856	0.87%	Catalina	3.18%
89-90	2.15%	Cathedral	0.85%
90-14 ¹	7.12%	Chaparral	1.62%
96-KSOS-L-1-PR-WVPB-C-24 ¹	6.50%	Charger II ³	0.54%
A+	6.23%	Charisma	2.39%
Academy	2.33%	Chatham ³	2.11%
Accent	0.56%	Churchill	2.93%
Accolade	4.83%	Cinderella	1.59%
Accord	4.08%	CIS-PR72 (Stellar) 1	2.20%
Achiever	0.93%	Citation III	0.96%
Admire	2.37%	Commander	1.02%
Advent	0.14%	Covet	2.71%
Affinity	0.77%	Cutter	1.65%
Affirmed	2.59%	Dancer	0.78%
Agresso	2.00%	Dandy	2.00%
AllSport	0.92%	Delaware Dwarf	2.60%
All*Star	0.47%	Derby Supreme	2.85%
Allaire II	1.15%	Dillon	4.14%
APM	0.59%	Divine	3.09%
Aquarius	0.97%	DS95-201 (Enchanted) 1	1.12%
Aquarius 3	1.24%	Easy Livin'	1.50%
Archer	1.51%	Ecologic	1.49%
A.S.A.P.	1.42%	Edge	1.73%
Ascend	3.09%	Elegance	1.51%
ASP410	0.18%	Elf	0.75%
Assure	0.72%	Elfkin	0.89%
Bayou ¹	1.33%	Elite	4.84%
Bedford	1.40%	Envy	0.22%
Bella	0.65%	EP39 (Pronto II) 1	1.75%
Blackhawk	1.17%	Equal	1.98%
Blazer III	1.18%	Esquire ¹	3.10%
Boardwalk	2.72%	Esteem	0.43%
Breeze	1.57%	Evening Shade	1.17%
Brightstar	1.79%	Exacta	1.22%
Brightstar II ³	2.24%	Excel ³	1.53%
Brightstar SLT	0.55%	Express	4.00%
Buccaneer	7.44%	Extreme	1.32%
Buccaneer II	5.48%	Fiesta II ³	1.14%
CIS-MBH	1.27%	Fiesta 3	1.02%
C-21	6.28%	Galaxy	1.19%
Cabo	1.24%	Gallery	0.83%
Caddieshack	1.57%	Gator	0.88%
Caliente	0.74%	Gator II	2.50%

Perennial Ryegrass	Percent Varietal	Perennial Ryegrass	Percent Varietal
Variety Name	Fluorescence	Variety Name	Fluorescence
			1
Gettysburg	2.74%	Paragon (MML, TMI-MML)	
Goalkeeper	0.82%	Passport ³	1.06%
Greenland	1.20%	Patriot II	0.42%
Grimalda	2.00%	Patriot 3	2.10%
Headstart	2.09%	Pearl	1.86%
High Life	1.59%	Pearl II	1.00%
lcon	2.21%	Pegasus	2.41%
Imagine	1.31%	Pennant	0.50%
Integra	0.12%	Pennant II	1.63%
Jet	0.84%	Phantom	2.19%
Jiffie	6.06%	Pick Lp Q-93 ¹	6.44%
Laredo	0.53%	Pleasure	4.09%
Legacy	0.37%	Pleasure XL	1.11%
LF-100 (Continental) 1	5.88%	PR8820	0.79%
Lindsay	1.72%	Prelude	1.72%
Line Drive	2.72%	Prelude II	2.25%
Linn	5.00%	Prelude III	0.59%
Lowgrow ³	1.31%	Prizm	0.71%
Lowgrow II	1.35%	Prosport	1.36%
LRF-94-C8 ¹	0.64%	Protocol	4.30%
Lynx	4.19%	Protocol II 1	5.28%
, Magic	1.21%	Prowler	0.21%
Magic II	1.36%	PST-2BR (Citation Fore) 1	0.13%
Majesty	1.59%	Quickstart	0.18%
Manhattan II ³	0.65%	Quick Trans	0.11%
Manhattan 3 ³	0.88%	R2	1.25%
Mardi Gras	1.07%	Racer	1.23%
Monterey	2.64%	Racer 2	0.18%
Monterey II	1.94%	Regency	0.99%
Morningstar	0.87%	Repell	0.33%
MP5 (PDQ) ¹	4.65%	Repell II ³	1.56%
MP58 (Splendor) ¹	0.44%	Repell III	0.80%
MRF 41 (Federation) ¹	2.74%	Reveille	2.00%
Mulligan	1.86%	Riviera	0.58%
Navajo ³	0.37%	Riviera II	1.08%
Newlinn	5.85%	Roadrunner	2.53%
Nexus	2.01%	Rodeo II	2.47%
NightHawk	1.39%	Rosalin	3.26%
Nobility	7.53%	Rutgers 8000 (Inspire) ¹	0.38%
Nomad	1.03%	Saturn II	0.85%
Nova	1.00%	Secretariat	1.49%
Omega 3	0.73%	Seville ³	0.33%
Omni	0.51%	Sherwood	1.08%
Pageant	2.22%	Shining Star	0.10%
Pageant II ¹	3.32%	SkyHawk	2.09%
Palmer	1.04%	Sol	0.55%
Palmer II	1.51%	Sonata	1.20%
Palmer III	0.23%	Splendid	0.89%
Panther	1.18%	SR 4100 ³	0.89 %
i ailtiici	1.10 /0	311 + 100	0.57 /0

Perennial	Percent	Perennial	Percent
Ryegrass	Varietal	Ryegrass	Varietal
Variety Name	Fluorescence	Variety Name	Fluorescence
•		-	
SR 4200	0.34%	Wizard ³	2.57%
SR 4500 (SRX NJPR,		WVPB-PR-C-2, C-2 ¹	8.65%
SRX 4NJPR, SRX 4500)	0.24%	WVPB-93-KFK ¹	3.84%
Stallion Select	2.37%	WVPB-PR-Koos-95-9	
Stallion Supreme	1.16%	(Breeze II) 1	6.85%
Stardance	1.90%	WVPB-PR-RS-2 1	1.59%
Statesman	1.27%	WVPB-XB-2 1	26.71%
Statesman II	8.42%	WVPB-XP-6 1	21.69%
Summerset	0.41%	WX9-2000 (Seville II) 1	1.33%
Sunshine	2.65%	Yorktown III	1.42%
Superstar	3.46%		
Target ³	3.28%	Annual	Percent
Tonga	11.53%	Ryegrass	Varietal
TopGun	1.15%	Variety Name	Fluorescence
Top Hat	0.77%		
Topeka	2.34%	Florida 80	98.89%
Tove	17.48%	Grazer	99.78%
Twister	3.85%	Gulf	99.02%
Vail	0.82%	Jackson	98.80%
Vantage	2.19%	Magnolia ²	
Vibrant ¹	4.30%	Marshall	96.00%
Vivid	1.24%	Passerel Plus	98.83%
Vixen	2.53%	Rio ¹	98.97%
Wilmington	0.17%	Surrey	98.91%
Wind Dance	1.17%	TAM 90	98.45%
Wind Star	0.47%		

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*.

Additions and Deletions
Of
Plant Variety Protection
Certificates

PLANT VARIETY PROTECTION CERTIFICATES (Issued August 24, 2002 through October 31, 2002)

KIND VARIETY	APPLICANT	TITLE V (GEN.)	1994 PVPA	KIND VARIETY	APPLICANT	TITLE V (GEN.)	1994 PVPA
DEAN EIEID				DEA ETELD			
BEAN, FIELD Hooter	Seminis Vegetable Seeds,		Y	PEA, FIELD Ariel	New Zealand Institute for		Y
1100001	Inc.		_	711 1 0 1	Crop & Food Research Ltd.		_
ROG331	Syngenta Seeds, Inc.		Y	Cruiser	New Zealand Institute for		Y
BEAN, GARDEN					Crop & Food Research Ltd.		
Baby Bop	Seminis Vegetable Seeds,		Y		ProGene L.L.C.		Y
	Inc.			Journey	ProGene L.L.C.		Y
Castano	Syngenta Seeds, Inc		Y		Cebeco Seeds B.V.	Y (3)	Y
	Vegetables			SW BELFIELD	Svalof Weibull AB	Y (3)	Y
DORAL	Syngenta Seeds, Inc		Y		Svalof Weibull AB	Y (3)	Y
_	Vegetables			SW PARADE	Svalof Weibull AB	Y (3)	Y
Ebro	Seminis Vegetable Seeds,		Y	*	Svalof Weibull AB	Y (3)	Y
	Inc.			SW SALUTE	Svalof Weibull AB	Y (3)	Y
ESQUIRE	Syngenta Seeds, Inc		Y	POTATO			
	Vegetables			Sandy	Germicopa S.A.		Y
Hurricane	Seminis Vegetable Seeds,		Y	-1	Germicopa S.A.		Y
_	Inc.			RAPE		(0)	
Lynx	Seminis Vegetable Seeds, Inc.		Y	Plainsman	Kansas Agricultural Experiment Station	Y (2)	Y
Preakness	Seminis Vegetable Seeds,		v	SOYBEAN	Experiment Station		
TTCakiicss	Inc.		1	DP 5767 RR	D&PL Technology Holding		Y
Tapia	Seminis Vegetable Seeds,		Y	DI 3707 ICI	Corp.		_
14914	Inc.		-	S24-12	Syngenta Seeds, Inc.		Y
Warrior	Seminis Vegetable Seeds,		Y	Surge	South Dakota Agricultural	Y (3)	Y
	Inc.		-	24190	Experiment Station	1 (0)	-
COTTON	1.1.0 ·			TRITICALE			
BG 4740	Stoneville Pedigreed Seed	l	Y	Alzo	Plant Breeding and	Y (*)	Y
	Company				Acclimatization Institute	, ,	
MUSKMELON	1 1			Bobcat	Alberta Agriculture, Food		Y
м98	Abbott & Cobb, Inc.		Y		& Rural Development Field		
XLT-86	Abbott & Cobb, Inc.		Y		Crop Development Centre		
PEA				WHEAT, COMMON	-		
Galena	Syngenta Seeds, Inc.		Y	2145	Kansas Agricultural	Y (3)	Y
Jessy	Brotherton Seed Company,		Y		Experiment Station		
	Inc.			36803	University of Georgia		Y
Kennedy	Elsoms Seeds Limited		Y		Research Foundation, Inc.		
Solution	Seminis Vegetable Seeds,		Y		(UGARF) and University of		
	Inc.				Florida Agricultural		
Strike	Pure Line Seeds, Inc.		Y		Experiment Station		
Sugar Sprint	Syngenta Seeds, Inc.		Y		(UFAES)		

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

PLANT VARIETY PROTECTION CERTIFICATES (Issued August 24, 2002 through October 31, 2002)

KIND		TITLE V	1994	KIND		TITLE V 1994
VARIETY	APPLICANT	(GEN.)	PVPA	VARIETY	APPLICANT	(GEN.) PVPA
WHEAT, COMMON						
Above	Colorado Wheat Research	Y (3)	Y			
	Foundation	(-,				
AGS 2000	University of Georgia		Y			
	Research Foundation, Inc.					
	(UGARF) and University of	=				
	Florida Agricultural					
	Experiment Station (FAES)					
Avalanche	Colorado Wheat Research	Y (3)	Y			
	Foundation					
Dawson	University of Georgia		Y			
	Research Foundation, Inc.					
	(UGARF) and University of	-				
	Florida Agricultural					
	Experiment Station					
	(UFAES)					
DW	University of Idaho	Y (3)	Y			
Gary_	University of Idaho	Y (3)	Y			
Jagalene	Monsanto Company	Y (*)	Y			
Macon	Washington State		Y			
	University Research					
	Foundation	** (2)	17			
Stanton	Kansas Agricultural	Y (3)	Y			
m 2002	Experiment Station		37			
Tara 2002	Washington State		Y			
	University Research Foundation					
Walworth		V (*)	Y			
walworth	South Dakota Agricultural Experiment Station	T (.)	I			
	Experiment Station					

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

PLANT VARIETY PROTECTION CERTIFICATES (Expired August 24, 2002 through October 31, 2002)

KIND VARIETY	APPLICANT	TITLE V	1994 PVPA	KIND VARIETY	APPLICANT	TITLE '
		(/		-0040		,
BARLEY Bumper	Busch Agricultural Resources, Inc.	Y (3)		A2943 A6520 BSR 201	Asgrow Seed Company Asgrow Seed Company Iowa Agriculture and Home	Y (3)
BEAN, FIELD		(0)			Economics Experiment	
Snowball COTTON	Wilbur-Ellis Company	Y (2)		Hartz 5171	Station Jacob Hartz Seed Company,	
Bronco 625	Bronco Seed Company			naitz Ji/i	Inc.	
Deltapine 69	Delta and Pine Land Company	Y (3)			11101	
Germain's Acala GC-362	Acala Cotton Seeds, Inc.	Y (*)				
Terra SR-10 FESCUE, CHEWINGS	SeedCo Corporation					
Magenta FESCUE, HARD	D.J. van der Have B.V.					
Crystal FESCUE, IDAHO	Advanta BV					
Joseph	Idaho Agricultural Experiment Station	Y (2)				
Nezpurs	Idaho Agricultural Experiment Station	Y (2)				
FESCUE, RED	1					
Jupiter	W.W. Johnson and Son Ltd., U.K.	Y (3)				
MUSKMELON						
Top Net SR PEA	Harris Moran Seed Compan	У				
Perk	Seminis Vegetable Seeds, Inc.					
Stampede	Seminis Vegetable Seeds, Inc.					
RYEGRASS (LOLIUM X HY						
Agree RYEGRASS, ANNUAL	Pure Seed Testing, Inc.					
TT-80 RYEGRASS, PERENNIAL	Pure Seed Testing, Inc.					
Birdie II Gator	Pure Seed Testing, Inc. International Seeds, Inc					
Premier SOYBEAN	NPI Seed Inc.	•				

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

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