

CROP and SOIL NEWS/NOTES

March, 2008
Vol. 22, No. 2

- * 2007 Seed Production Research Report
- * Goetze - Soft White Winter Wheat
- * Herbicide Resistant Weeds Publication
- * New Application and Inspection Report
- * OSU Seed Lab Now an ISTA Member Lab

August 26 – Malheur Experiment Station Onion Variety Field Day, 9 a.m. to 1 p.m. For information, please contact Janet Jones (541-889-2174; email – janet.jones@oregonstate.edu)

October 21-22 – Oregon Society of Weed Science Annual Meeting, Hood River, OR. Please contact Rich Affeldt (541-475-7107; email: Rich.Affeldt@oregonstate.edu) for details.

DATES AND PLACES

April 22 – Earth Day Hoo Haa, Corvallis. Please see details on page 11.

May 28 – Hyslop Farm Field Day, Corvallis. Details to be announced at a later date.

May 29 – Barley and Wheat CAP Meeting, 8 AM – 5 PM, LaSells Stewart Center, OSU Campus. For details, contact Mike Flowers (Mike.Flowers@oregonstate.edu or 541-737-9940).

June 5 – Malheur Experiment Station 2008 Treasure Valley Weed Tour, 9 a.m. to noon. Pesticide recertification credits are being requested for Oregon and Idaho. For further information, please contact Janet Jones (541-889-2174; email – janet.jones@oregonstate.edu)

June 6 – Golden Jubilee Dinner, Crop Science Building, OSU Campus. For details, see page 12.

June 10 – CBARC Field Day, Pendleton, OR. Please contact the Research Center office (541-278-4186) for further information.

June 11 – CBARC Field Day, Moro, OR. Please contact the Research Center office (541-278-4186) for further information.

July 9 – Malheur Experiment Station Annual Field Day, 8:30 a.m. to 1 p.m. Contact person is Janet Jones (541-889-2174; email – janet.jones@oregonstate.edu)

SEED PRODUCTION

Bill Young

2007 Seed Production Research report

The “2007 Seed Production Research” report will soon be available for distribution. This annual report summarizes current research of interest to the Oregon seed industry. Special recognition is due to the Oregon Seed Council, the organization that for 26 years has supported this publication with a grant to cover printing costs and distribution of the report to their mailing list of 1,350 seed growers throughout the state. A copy of this year’s report cover is shown on page 13. If you are interested in receiving a copy (or copies) please e-mail Barb Reed at Barbara.J.Reed@oregonstate.edu or call 541-737-5854.

As in previous years, the report will also soon be available via internet access on the Extension Seed Program web site. The direct link to the report will be: <http://cropandsoil.oregonstate.edu/seed-ext/Pub/2007/index.htm>. Look for it there soon.

WEED CONTROL

Andy Hulting

Herbicide Resistant Weeds Publication

In the January 2008 addition of Crop and Soils News and Notes I summarized some information on glyphosate resistance and stewardship forums held in the Midwest in the past year. This month I wanted to again bring up the topic of herbicide resistant weeds a little closer to home by calling your attention to a very popular extension publication that we have recently revised.

That publication is *Herbicide-Resistant Weeds and Their Management* or *PNW 437*. Some of you may have heard me talking about this revised publication at various winter meetings across the state when I talked about herbicide mode of action (MOA). It is a collaborative effort between the weed scientists at OSU and the University of Idaho that was first published in 1993 and has since been revised in 1999, 2002 and now December of 2007.

The publication describes in detail the current status of herbicide resistant weed populations in the PNW with respect to herbicide MOA. In other words, what weed species are resistant to which herbicides and herbicide modes of action in the three PNW states. The publication also explains the difference between cross resistance (resistance to different chemical families with the same site of action) and multiple resistance (resistance to herbicides with different sites of action). Definitions of true herbicide resistance and natural tolerance to herbicides by weed species are also provided.

Our best recommendations on planning your herbicide program, preventing and delaying herbicide resistance, recognizing herbicide resistance in the field, dealing with herbicide resistance if you already have problem populations and managing herbicide resistant crops are also given in the publication. Perhaps the best feature of this publication is that it contains the fold out reference poster or "Guide for Herbicide Rotation". Of all the com-

ments I receive from growers and fieldmen about our publications, this color coded poster gets some of the most positive feedback. The poster is broadly organized by herbicide group number (MOA) with individual herbicide products further classified by their chemical family, common chemical name and finally by their current trade name. If you are like me and often have a hard time keeping all of the current industry trade names straight, this poster can be a very valuable reference tool to look up modes of action of various products by their active ingredient common name (i.e. clethodim vs. Select Max®, Envoy®, several others...). The reference poster contains information on 19 different herbicide modes of action and about 100 different herbicide active ingredients. Use this reference poster to think through some of the various chemical weed management strategies you are planning for the crop rotations/weed populations on your farm or those you manage.

The publication can be viewed online at:

<http://info.ag.uidaho.edu/pdf/PNW/PNW0437.pdf>

A hard copy of the publication and poster is available from OSU Extension and Experiment Station Communications:

<http://extension.oregonstate.edu/eesc/>

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CEREALS

Mike Flowers

I frequently get request for information on new varieties. So for the next few News and Notes newsletters I thought I would share some recently developed publications on the wheat varieties Goetze and Norwest 553. Both varieties were released from OSU in 2007.

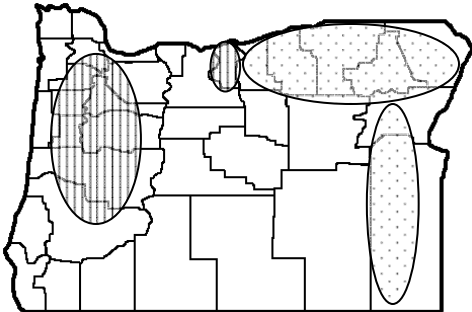
Goetze - Soft White Winter Wheat

Michael Flowers and C. James Peterson

Variety Description:

'Goetze' is a common soft white winter wheat developed by Oregon State University in cooperation with USDA-ARS. It is an awned, short-statured, semidwarf variety with moderately early maturity and high yield potential. Goetze is resistant to stripe rust and moderately resistant to Septoria leaf blotch. The name Goetze was chosen to recognize the leadership and contributions of Norm Goetze, former OSU Cereal Extension Specialist, to the Oregon wheat industry.

Area of Adaptation:



Goetze is best adapted to western Oregon and areas where the variety Gene is currently grown (striped regions). Goetze is also adapted to a larger production region in Oregon (dotted regions). In this region OSU variety testing has shown Goetze to be adapted but at risk for winter damage due to the colder winter temperatures.

Year Released: 2007

Agronomic Characteristics:

Height and Lodging Resistance

Trials over 24 site-years have shown Goetze is approximately 2 inches shorter than Stephens, 5 inches shorter than Tubbs or Tubbs-06, and about 1 inch taller than Gene (Table 1). These

height differentials are exaggerated slightly in the high rainfall environment of western Oregon where Goetze may be closer to 6-7 inches shorter than Tubbs or Tubbs-06 and 3 to 4 inches shorter than Stephens and Madsen. Straw strength is excellent and lodging has not been observed in any production environment.

Maturity

Goetze is a moderately early maturing variety, similar to Gene. It heads 2 days earlier than Stephens and approximately 6 days earlier than Madsen (Table 1).

Vernalization and Cold Tolerance

Goetze is a facultative winter wheat, meaning it requires little to no vernalization to initiate flowering. Crown freezing tests conducted by the USDA-ARS suggest that Goetze has less cold tolerance than Stephens or Tubbs, similar to Gene. These factors increase the risk of winter damage when growing Goetze in the north east region of Oregon. The vulnerability of Goetze to cold temperatures was confirmed in the 2005 WSU variety trials.

Disease Resistance

Goetze is resistant to stripe rust and moderately resistant to septoria leaf blotch. Both are important diseases of wheat in western Oregon. Goetze also is moderately resistant to leaf rust and strawbreaker footrot. Goetze is moderately susceptible to Cephalosporium stripe and fusarium crown rot. Goetze is susceptible to take-all root rot and dwarf bunt. A seed treatment is recommended to control bunt and other seedling diseases (Table 2).

Yield

Goetze has shown excellent yield potential across a range of environments in Oregon. Over 33 site-years of OSU variety testing, Goetze has averaged 91.4 bushels per acre, similar to Tubbs and 4 to 5 bushels per acre higher than Stephens and Madsen (Table 1). Goetze excels in the high yield environment of western Oregon where it averages 16 to 23 bushels per acre more than Madsen. In areas where Gene is commonly grown, Goetze has shown a yield advantage of 3 to 6 bushels per acre compared to Gene.

Test Weight and Quality

The test weight of Goetze averaged 58.9 pounds per bushel similar to Stephens, Tubbs, and Tubbs-06 (Table 1). However, Goetze has slightly lower kernel weights than Stephens, similar to Madsen and Tubbs. Grain protein of Goetze averaged less than Stephens, Madsen and Gene. Across Oregon environments,

Goetze averaged 9.7% grain protein, around 0.5% point lower than Stephens and equal to Tubbs and Tubbs-06 (Table 1).

Milling and baking evaluations from the Western Wheat Quality Laboratory and the Wheat Quality Council suggest that Goetze is similar to Stephens and acceptable for a soft white winter wheat. Grain hardness values for Goetze averaged 6 points higher than Stephens and 3 points less than Tubbs when measured with the Pertin Single Kernel Characterization System (SCKS). Average break flour yields were similar to Stephens and Tubbs. Cookie baking performance is similar to Stephens and average 0.2 centimeters wider cookie spread than Tubbs. Goetze has lower water absorption than Stephens or Tubbs. Flour swelling volume tests suggest Goetze has normal starch properties (Table 3).

Development

Goetze is a semidwarf soft white winter wheat from the 1995 cross 'OR8303765/E81FR'. OR8303765 has the pedigree '6720-11//Ministerio de Agri 38/ WRM (Weique/Red Mace)'. Selection 6720-11 is a sister of CI17576 with the pedigree 'Cappelle Desprez/Pullman sel. 101//Druchamp'. The origin and pedigree of E81FR are unknown. Goetze is an F₅-derived line which was identified as a headrow in 2000 by HybriTech Seed International, Inc., a division of the Monsanto Company. Goetze was among the HybriTech germplasm donated by Monsanto to Oregon State University in 2000. In 2001, it was selected as a single F6 plot grown in Pendleton, OR, and given the experimental number ORH010920.

Breeder and Foundation seed will be maintained by Washington State Crop Improvement Association (WSCIA). Goetze is an open release protected under U.S. Plant Variety Protection without the Title 5 option. Certification classes recognized for Goetze include Foundation, Registered and Certified.

Acknowledgements

Appreciation is extended to the Monsanto Company for their contributions to development of Goetze and for the donation of germplasm developed by HybriTech Seed International, Inc., to Oregon State University. Appreciation also is extended to the Oregon Wheat Commission for financial support. Financial support provided by the Washington Wheat Commission and Idaho Wheat Commission for initial screening and evaluation of the HybriTech germplasm is gratefully acknowledged.

Variety Authors

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R. Smiley, Columbia Basin Agricultural Experiment Station, Oregon State University, Pendleton, OR, 97801; C. Mundt, Dep. of Botany and Plant Pathology, Oregon State University, Corvallis, OR, 97331; X. Chen, D. Skinner, and K. Campbell, USDA-ARS, Johnson Hall, Washington State University, Pullman, WA, 99164; J. Robinson, Foundation Seed Service, Washington State Crop Improvement, Washington State University, Pullman, WA, 99164.

Management Guidelines:

Planting Date

Planting date studies have documented that yields of Goetze in early plantings may be reduced up to 20 bushels per acre compared to common varieties such as Tubbs (Table 4). These yield reductions are likely due to the facultative nature and poor cold tolerance of Goetze. Early plantings also increase the risk of insect vectored diseases such as Barley Yellow Dwarf Virus, dryland root rots, and Cephalosporium stripe in Oregon. For these reasons, planting of Goetze prior to October is not recommended.

Goetze has shown excellent yield potential in its adaptation zones for "on-time" plantings (Tables 1, 4). Plantings in early to mid-October are considered "on-time" for much of Oregon. In late plantings, yields of all varieties will be reduced compared to "on-time" plantings. However, among varieties Goetze is an excellent choice for late plantings. Studies have shown that Goetze is among the highest yielding varieties when planted late with yields similar to Tubbs, Tubbs-06 and ORCF-102. Goetze averages 5 to 14 bushels more per acre than Stephens, Madsen and ORCF-101 in late plantings (Table 4).

The facultative nature of Goetze also makes it an option for January and February plantings, as compared to other varieties where there is a risk of failure if the vernalization requirement is not met.

Seeding Rate

The recommended seeding rate for soft white winter wheat in Oregon is 22 seeds per square foot. For late planted wheat it is recommended that the seeding rate be increased to 33 seeds per square foot. Seeding rate trials have confirmed that these general recommendations are valid for Goetze. Increased seeding rates in late plantings have resulted in a yield increase of up to 17 bushels per acre for Goetze (Table 5).

Seeding rates for most equipment are adjusted in pounds per acre. To avoid heavy or light plantings, it is important that growers determine the proper seeding rate using the number of seeds per pound. This conversion can be found in Table 6. The number of seeds per pound is dependent on seed size and varies based on variety, production environment, and year. Research

has shown the Goetze will have a higher number of seeds per pound compared to Stephens and Tubbs due to its lower kernel weight. The seeds per pound may be obtained from your seed dealer or determined by weighing a 50 seed sample and using Table 6.

Fertility

Goetze has been grown across a wide range of environments and no special fertility requirements have been observed. Therefore, it is recommended that growers follow the recommended fertility guidelines for soft white winter wheat in their area.

Herbicide Applications

Wheat varieties may have differential sensitivity to commonly applied herbicides. To date, no adverse effects of herbicide application have been observed with Goetze. Many, but not all, of the current herbicides labeled for wheat in Oregon have been applied to Goetze without visible herbicide damage. Herbicide applications should be made in accordance to label directions and all applicable state and federal regulations.

Fungicide Applications

In western Oregon growers routinely apply fungicides to control septoria leaf blotch. In 2004 and 2005, growers also applied fungicides to control stripe rust on the variety 'Foote' after a

stripe rust race changed occurred. Goetze is resistant to current races of stripe rust and moderately resistant to septoria leaf blotch (Table 2). Therefore, it is recommended that growers scout fields of Goetze to confirm that the disease is present and above the economic threshold level prior to fungicide application. If a fungicide application is required to control septoria leaf blotch it should be made at flag leaf emergence (Feekes 8). Fungicide applications should be made in accordance to label directions and all applicable state and federal regulations.

Yield Components:

Wheat yield can be broken down into three components; head number, kernels per head, and kernel weight. Both head number and kernels per head are determined early in wheat development, Feekes 2 – 5. Kernel weight is determined later in the growing season, Feekes 10.1 – 10.5. While environment plays an important role in yield determination, genetic factors heavily influence the way in which the three components combine to determine final wheat yield. In as such, total grain yield of Goetze will be determined more by early factors influencing head number and size than kernel weight. Goetze, as compared with widely grown varieties such as Tubbs and Stephens can be characterized by high head numbers, a large head size, average to high head fertility, and lower average kernel weights (Table 7).

Table 1. Grain yield and agronomic data for six soft white winter wheat varieties grown across a range of environments in Oregon.

Variety	Grain Yield						Agronomic Data			
	Corvallis		Sherman County		OWEYT		Test Weight	Grain Protein	Plant Height	Heading Date
	2-Year Mean	3-Year Mean	2-Year Mean	3-Year Mean	24-Site Years	33-Site Years	24-Site Years	21-Site Years	22-Site Years	8-Site Years
	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	lbs/bu	%	in	DOY
Goetze	122.1	118.4	82.2	84.4	87.7	91.4	58.9	9.7	31.8	141.9
Stephens	110.5	97.0	78.1	80.5	86.6	87.4	59.0	10.2	33.7	143.9
Madsen	105.5	95.1	77.4	78.1	84.9	86.0	59.2	10.3	34.1	147.5
Gene	109.1	97.9	75.4	81.2	78.0	83.3	57.9	10.5	30.4	141.6
Tubbs	116.3	102.0	73.3	74.6	89.8	90.4	58.7	9.6	36.7	146.1
Tubbs-06	123.4		77.8		91.8		58.8	9.6	37.0	145.7
Mean	114.5	102.1	77.4	79.8	86.4	87.7	58.8	10.0	34.0	144.4
LSD (0.05)	12.5	8.1	5.9	5.3	3.1	2.6	0.5	0.3	0.6	0.8

Table 2. Agronomic and disease ratings for six soft white winter wheat varieties grown in Oregon.

Variety	Maturity	Winter Hardiness*	Rust [†]		Septoria [†]	Crown Rot [†]	Cephalosporium Stripe [†]	Strawbreaker Foot-Rot [†] <i>Pseudocercospora</i>
			Stripe	Leaf				
Goetze	Early-Mid	2	R	MR	MR	MR/MS	MS	MR
Stephens	Early-Mid	3	R	S	S	S	S	S
Madsen	Mid-Season	5	R	MR	MS	MR/MS	MR	R
Gene	Early	2	MR/MS	S	S	MR	MS	MS/MR
Tubbs	Mid-Season	5	MS	MS	MS	S	S	R
Tubbs-06	Mid-Season	5	MR/MS	MS	MS	S	S	R

* Scale: 1 to 10, with 10 being excellent and 1 being poor.

† Scale: R = Resistant; MR = Moderately Resistant; MS = Moderately Susceptible; S = Susceptible

Data is compiled from the following sources: Winter Grain Varieties for 2003, Special report 775, Oregon State University Extension Service; 2004 through 2007 Oregon Winter Elite Yield Trial Disease Ratings; and variety Characteristics, Washington State Crop Improvement Association.

Table 3. End-use quality analyses of Goetze soft white winter wheat in paired comparisons with Stephens and Tubbs. Data provided by USDA-ARS Western Wheat Quality Lab.

Variety	Kernel Hardness	Break Flour Yield	Flour Yield	Flour Ash	Milling Score	Flour Protein	Mix Absorption	Cookie Diameter
	SKCS	%	%	%		%	%	mm
Goetze	41.7*	48.3	68.8	0.42	80	9	54.8	9.3
Stephens	35.1	48.3	70.3*	0.45*	84.3*	9.3	55.7*	9.3
Goetze	40.6	47.9	67.8	0.44	79.2	8.4	55.1	9.4*
Tubbs	43.6*	48.4	68.5*	0.44	80.2	8.2	56.4*	9.2

* indicates a statistically significant increase (p < 0.05) based on a paired t-test.

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Table 4. Grain yield of seven soft white winter wheat varieties in a planting date study at Pendleton Oregon in 2006 and 2007.

Planting Date	Variety							LSD _(0.05)
	Stephens	Madsen	Tubbs	Tubbs-06	ORCF-101	ORCF-102	Goetze	
	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac
2006								
September 12	94.2	86.6	103.9		88.9	93.3	83.9	10.0
October 3	91.7	101.2	102.4		98.7	105.9	105.6	8.8
November 20	83.6	74.8	89.1		78.6	88.7	88.7	6.8
2007								
September 12	81.7			83.3	82.1	84.1	80.7	11.5
October 3	80.9			76.7	79.9	75.5	84.5	12.2
November 20	48.0			62.2	49.0	57.8	62.1	7.1

Table 5. Grain yield of Goetze for planting date studies at Pendleton and Moro Oregon in 2007.

Planting Date	Seeding Rate (seeds/ft ²)			LSD _(0.10) bu/ac
	11 bu/ac	22 bu/ac	33 bu/ac	
Moro				
October 3	89.1	92.6	102.6	18.9
November 20	54.9	69.6	68.0	12.6
Pendleton				
October 3	85.1	89.3	79.0	18.4
November 20	58.8	55.4	72.1	12.1

Table 6. Seeding rate conversion from seeds per square foot to pounds per acre.

Seeds per Pound	Weight of 50 Seed Sample (g)	Seeding Rate (pounds/ac)	
		22 seeds/ft ²	33 seeds/ft ²
8,000	2.84	120	180
9,000	2.52	106	160
10,000	2.27	96	144
11,000	2.06	87	131
12,000	1.89	80	120
13,000	1.75	74	110
14,000	1.62	68	103
15,000	1.51	64	96

Table 7. Yield component comparison of Goetze, Stephens and Tubbs/Tubbs-06.

Yield Component	Variety Comparison
Head Number	Tubbs/Tubbs-06 < Stephens = Goetze
Head Size	Stephens < Tubbs/Tubbs-06 < Goetze
Head Fertility	Tubbs/Tubbs-06 < Stephens = Goetze
Kernel Weight	Goetze < Tubbs/Tubbs-06 < Stephens

SEED CERTIFICATION

Dennis Lundeen

New Application and Inspection Report

Some recent changes in our database have allowed for an update of a very old form. The Application and Inspection (Seedling) Report, has been unchanged for many years. This is the report that seed growers use to enter new fields into the seed certification program. The form was then used by the certification specialist to record field information during the initial inspection of the field. The old reports were 4-part forms that were separated and mailed to the grower, county extension office, contractor, and a copy was held at the certification office. Sometimes these handwritten forms were difficult to interpret, as the print on the copies often did not come through very well. We trust the new report entitled “Annual/Perennial Crops Seedling Final Report” will be much easier to read. In addition to clearer print the new form has additional information not found on the old report. The “Unresolved Application Issues” section will list anything known at the date of printing which may hold-up final certification of the field. On the example form there are two issues listed: Source Eligibility, which indicates there is some unfinished requirement regarding the seed used to plant with—In this case no tags were submitted with the application. The second issue listed is Overseeding, indicating there was no information submitted regarding overseeding of the field that was observed at inspection time. This additional information is meant to help inform those receiving the report what must be completed to certify the field. In addition to the Seedling Final Report the following reports will also be in this updated format: Modified Land History, Preplant, Small Grains, Establishing Crop History, and Pre-Variety Germplasm. With anything “new” sometimes adjustments need to be made, so if you have suggestions of how to improve these forms, or make them more useable, please let me or anyone else at Oregon Seed Certification know of your suggestion. Personally, I want to thank the entire certification staff including, Computer Programmers, Office Staff, and Certification Specialists for their parts in creating and adopting this new process.

SEED LABORATORY

Adriel Garay and Sabry Elias

OSU Seed Lab is Now an ISTA Member Lab

The OSU Seed lab became a member of the International Seed Testing Association (ISTA) as of February 1, 2008. ISTA, which was founded in 1924, is an association of 176 member labs from 74 countries that develops and publishes the International Rules for Seed Testing and provides research in seed testing and sampling. ISTA also provides oversight of its accredited labs.

The Oregon seed industry has encouraged the OSU lab to become members, since international seed trade is a vital part of the Oregon economy. The lab’s next goal is to become an ISTA Accredited Lab. An ISTA accredited lab will have the authority to sample, test and write international Orange Certificates, which allows some seed lots easier entry into some countries. It would also allow easier shipments into Canada from the USA.

For the OSU Seed Lab to be ISTA accredited, a quality system must be developed and employed. The quality documentation will then be review by ISTA and finally, a complete audit of the quality system will take place. On the average this process takes 18 to 24 month of intensive work to complete. The OSU lab has made a great start by developing much documentation of their quality system. By becoming an ISTA accredited lab, the OSU lab hopes to expand its level of services to the Oregon seed industry.



SEED CERTIFICATION
31 CROP SCIENCE BLDG.
CORVALLIS, OREGON 97331
(541)737-4513

Annual/Perennial Crops SEEDLING FINAL REPORT

REPORT DATE: 03/28/2008
APPLICATION DATE: 12/11/2007
COUNTY: Benton

Extension Service

FIELD ID: 99999		FIELD NUMBER: 07-99		VARIETY AND CROP: Fawn Tall Fescue	
DATE PLANTED: 10/12/2007		LAST YEAR ELIGIBLE: 2017		ACRES: 50	
GENERATION: Certified		FIELD LOCATION: 1/2 mile East of 5185 Country Road			
TOWNSHIP: 17		RANGE: 3		SECTION: 16	
OREGON QUADRANT: SW		VARIETY CLASS: Public			
Seed Producer 122 Grass Lane Any City, OR 12345					
CONTRACTOR/CC:			COMPANION CROP: none		
TOTAL LBS. PLANTED: 250		HERBICIDE USED: Glyphosate		IRRIGATED: No	
SOURCE GENERATION: Foundation			SOURCE LOT: Z100-4-TT2		OECD CODE:
Fallow		Unc. Annual ryegrass		Fallow/Oats	
01-4 Fawn TF		01-4 Fawn TF		01-4 Fawn TF	
2007 Crop		2006 Crop		2005 Crop	
				2004 Crop	
				2003 Crop	
UNRESOLVED APPLICATION ISSUES: Source Eligibility, Overseeding					
<u>PLANT COUNT</u>					
N/A - Annual/Perennial Crop Seedling.					
<u>OTHER VARIETIES</u>					
N/A - Annual/Perennial Crop Seedling.					
<u>VOLUNTEER PLANTS</u>					
None observed. Large corners & guess rows free of Tall Fescue.					
<u>VOLUNTEER OLD CROWNS</u>					
N/A - Annual/Perennial Crop Seedling.					
<u>STAND</u>					
Full.					
<u>ISOLATION</u>					
Appears OK.					
<u>COMMENTS</u>					
Field was spot-sprayed for off-types. No tags submitted.					
<u>PROHIBITED WEEDS (-T=Trace -M=Many -E=Excessive)</u>					
None Observed					
<u>RESTRICTED WEEDS (-T=Trace -M=Many -E=Excessive)</u>					
Bedstraw-T Dock-T					
<u>WEEDS (-T=Trace -M=Many -E=Excessive)</u>					
Black mustard-M Little bittercress-M Annual bluegrass-T Bull thistle-T Dandelion-T Dogfennel-T Fireweed-T Groundsel-T Pineappleweed-T Spotted cat's-ear-T Wild carrot-T					
<u>OTHER CROPS (-T=Trace -M=Many -E=Excessive)</u>					
Annual ryegrass-M					
STATUS: Passed on Condition		PASSED ACRES: 50		INSPECTION DATE: 03/06/2008	
		PASSED GENERATION: Certified		INSPECTOR: Joe Friday	

FOR YOUR INFORMATION

OSU Professor Recognized for Work in Weed Science

Tiffany Woods, OSU Public Service Communications Specialist

A weed science professor at Oregon State University has received the Weed Science Society of America's (WSSA) highest honor for her contributions to the profession.

Carol Mallory-Smith, an associate department head at OSU's Department of Crop and Soil Science, was named a WSSA Fellow on Feb. 4 at the nonprofit professional society's 48th annual meeting in Chicago.

"It's a very select group that receives this award each year. It's available to only 0.25 percent of the membership. This year there were three recipients," said Jill Schroeder, 2007-2008 president of the WSSA. She added that about 200 people have been named WSSA Fellows since the award was created in 1964.

Schroeder is familiar with Mallory-Smith's research. "I've always been impressed at the quality of her work. She's a strong researcher," Schroeder said. "She's best known for her work on gene flow and herbicide resistance. She continues to do some unique research about gene movement out of weeds and into crops or vice versa."

Mallory-Smith is currently studying how genes from canola contaminate vegetable crops. She's also looking at how substances from Juniper trees might be able to inhibit the germination of weeds. In the past, she has studied *Orobanche minor*, a parasitic weed that attaches to clover and snuffs the life out of it. Found in Oregon in 1998, it could destroy the state's clover industry if not controlled, said Mallory-Smith, who helped identify other plants that attract the weed as well as herbicides that kill it.

Additionally, her work with Italian ryegrass gave growers additional options for controlling the plant with herbicides. She and other OSU researchers also found that crop rotations can be used to reduce California brome in wheat production because California brome seed lasts only two years in the soil.

Mallory-Smith, who was born in Troy, Ore., began teaching at OSU in 1994 after earning a doctorate in plant science at the University of Idaho in 1990.

She enjoys the variety of work that her job offers. "On any day I can be working with five or six different crops and all of the weeds that accompany them. I am never bored," she says and adds, "The best part of my job is working with graduate students and growers."

Respected by students in her department, they named her an Outstanding Teacher in Crop and Soil Science in 1997 and again in 2007.

Mallory-Smith has been a member of the WSSA since 1987 and presided over it in 2005-2006. Founded in 1956, the WSSA is made up of about 1,100 members and promotes research related to weeds, provides science-based information to the public and policymakers, and fosters awareness of weeds and their impacts on ecosystems.

OSU Organic Farm to Celebrate Earth Day With Food, Music

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The public is invited to enjoy free organic food and live music at the sixth annual Earth Day Hoo Haa on a student-run organic farm on the outskirts of Corvallis on April 22.

The festivities, sponsored by Oregon State University's Organic Growers Club, will take place from 3-7 p.m. Attendees will be able to tour the farm, watch draft horses plow soil, check out an electric tractor, and see how chickens in a mobile coop are used to till the earth. In addition, attendees are invited to bring a turning fork to help till the ground and plant beet seeds, lettuce and 10,000 onions.

"You line up 50 people on a 100-foot-long bed and say, 'Go!' Then you move to the next bed. If you have enough people, nobody breaks a sweat," said the club's faculty adviser, James Cassidy, adding that about 600 people attended last year.

Two bands will provide entertainment: Deadwood Revival (www.deadwoodrevival.com) will bring their banjo and bass, and the homegrown Future Roots (www.future-roots.com) will return for a third year with their mix of jam rock, folk rock, reggae, blues and bluegrass.

Attendees are encouraged to bring their own bowl and silverware but to leave their dogs at home.

A free shuttle van to the farm will depart from the OSU Bookstore every 20 minutes. To drive to the farm, take state Route 34 east after crossing the Willamette River, then turn left onto an unnamed dirt road after the Trysting Tree Golf Club.

For more information on the Organic Growers Club, go to http://cropandsoil.oregonstate.edu/organic_grower.

Golden Jubilee Dinner

The following letter has been sent to 50 year CSS alumnus, but all are welcome to attend.

Based on expressed interest by some Crop and Soil Science alumni, we will hold an alumni reunion dinner on Friday, June 6, 2008, at 6:30 pm in the Crop Science Building. This dinner will coincide, but not conflict, with Golden Jubilee activities planned by the OSU Alumni Association for that weekend (June 6-8).

We will have a buffet dinner and organize short tours of the Crops, Ag Life Science and Seed Lab buildings. The cost will be \$10 per person. "Significant others" may also participate. We ask that you contact Barb Reed **BY MAY 16** if you are interested in participating in this event. We will need a reasonably accurate head count in order to place our food order. Barb can be contacted by phone at 541-737-5854 or via email at barbara.j.reed@oregonstate.edu.

Our CSS event is open to all. If you know of other CSS alumni or friends who may be interested in attending, please pass this letter on to them or provide Barb Reed with their contact information.

There are many exciting things happening in the department and we look forward to seeing you in June and telling you about them.

2007
SEED PRODUCTION RESEARCH
AT OREGON STATE UNIVERSITY
USDA-ARS COOPERATING
Edited by William C. Young III

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