



# CEREAL Newsletter

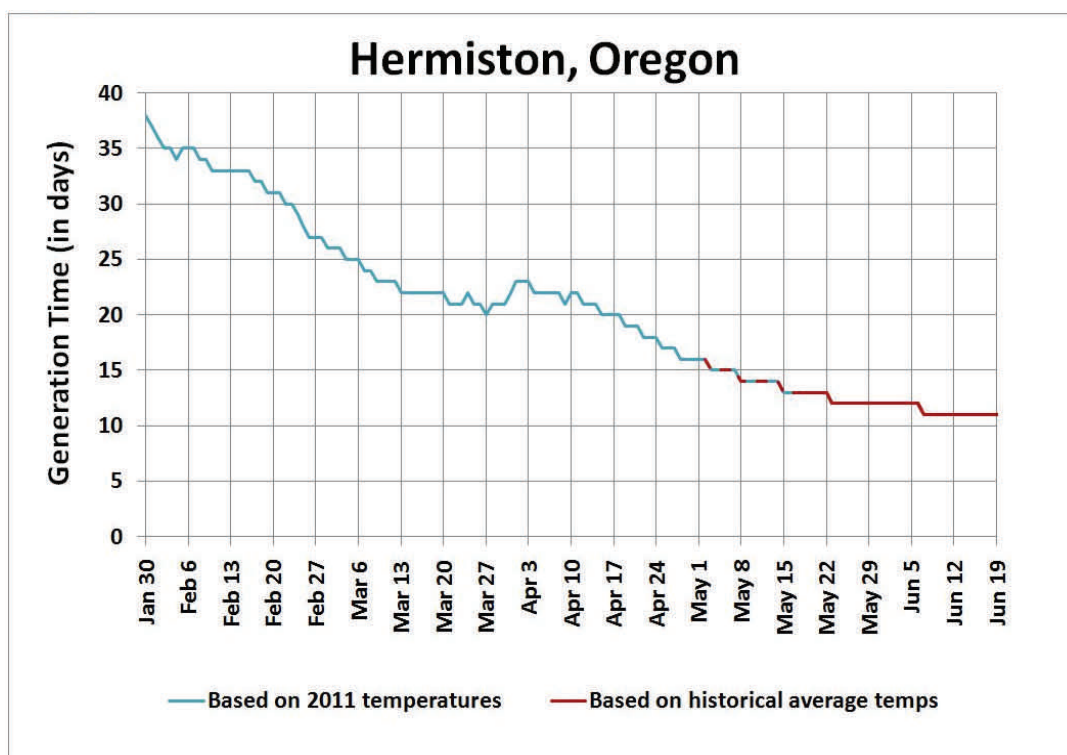
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May 2011

## Stripe Rust Modeling - best estimate of generation time

By Mike Flowers, Cereal Specialist & Chris Mundt, Pathologist, OSU, Corvallis as of 5/18/2011



projected forward for each date. For example, the model predicts that if it is now May 15 in Hermiston, it would take 12-13 days to pass through a single generation.

Portions of the graph prior to May 1 are based on estimates using temperatures that have already occurred during 2011. The portions of the lines after May 1 are projections based on historical temperature data and current data, if available. We plan to update these graphs weekly based on the 2011 temperatures from the previous week.

The above figures provide an estimate of the generation time of wheat stripe rust based on a degree-hour model. Generation time is defined here as the time (in days) that passes between infection by a stripe rust spore and the time when a new, sporulating

lesion appears from that infection. The generation time becomes shorter as temperatures rise during the season.

For each date (horizontal axis) shown on the graph, an estimate of generation time is provided on the vertical axis. Generation time is

Though not originally developed for making predictions in commercial fields, we are making the data available as our best estimate of generation time as the season progresses. The model seems to have worked well for research purposes last year.

## HAREC Cereal Field Day

2121 South 1st Street, Hermiston

**June 13, 2011**

**7:00 - 9:30 a.m.**

Come meet, listen, and greet: Dr. Patrick Hayes, Barley Breeder; Dr. Mike Flowers, Extension Cereals Specialist; and Mathias Kolding, Emeritus Faculty Cereals Specialist and get the latest information on irrigated cereal crops!

### Pendleton Ag Research Center Cereal Field Day Schedule for June 14, 2011

The research center is located 6 miles northeast of Pendleton, 1 mile east of Hwy 11

Time	Activity	
<b>7:45</b>	Registration	
<b>8:10</b>	<b>Welcome and Introduction</b>	
	Group 1 Tour	Group 2 Tour
<b>8:15</b>	Load Busses	
	<b>5 minutes is allowed for transition to the next presentation</b>	
<b>8:20</b>	<i>Spring planted winter canola</i> Don Wysocki, OSU Extension Soil Scientist, Jack Brown, UI Plant Breeder	<i>Winter safflower, a potential alternate dryland crop,</i> Steve Petrie, OSU Soil Scientist, and R.C. Johnson, USDA-ARS Agronomist
<b>8:45</b>	<i>Updates on disease situation and resistance screening,</i> Chris Mundt, OSU Plant Pathologist	<i>Winter barley,</i> Pat Hayes, OSU Barley Breeder
<b>9:10</b>	<i>Recent evaluation of wheat varieties regarding stripe rust,</i> Mike Flowers, OSU Cereals Specialist	<i>USDA-ARS club wheat breeding and variety trials,</i> Kim Campbell, USDA-ARS Wheat Breeder, and <i>Overview of the OSU wheat breeding program,</i> Bob Zemetra, OSU Wheat Breeder
<b>9:35</b>	<i>Guidelines for Diagnosing Wheat Diseases in the Field,</i> Richard Smiley, OSU Plant Pathologist	<i>Soil organic carbon dynamics in the Pendleton long-term experiments,</i> Stephen Machado, OSU Agronomist
<b>10:00</b>	Break ( <i>refreshments available</i> )	<b>Break</b> ( <i>refreshments available</i> )
<b>10:20</b>	<i>Molecular diagnosis of wheat root diseases,</i> Guiping Yan, OSU Molecular Plant Pathologist	<i>Soil microbiology: life underground,</i> Kate Reardon, USDA-ARS Microbiologist
<b>10:45</b>	<i>Enhancing control of downy brome with pre-emergence herbicides ,</i> Dan Ball, OSU Weed Scientist	<i>Can cropping intensification improve Soil organic carbon accretion?,</i> Hero Gollany, USDA-ARS Soil Scientist
<b>11:10</b>	<i>Winter safflower, a potential alternate dryland crop,</i> Steve Petrie, OSU Soil Scientist, and R.C. Johnson, USDA-ARS Agronomist	<i>Spring planted winter canola</i> Don Wysocki, OSU Extension Soil Scientist, Jack Brown, UI Plant Breeder
<b>11:35</b>	<i>Winter barley,</i> Pat Hayes, OSU Barley Breeder	<i>Updates on disease situation and resistance screening,</i> Chris Mundt, OSU Plant Pathologist
<b>12:00</b>	<b>Hosted Lunch</b>	
<b>1:00</b>	Load Busses	
	<b>5 minutes is allowed for transition to the next presentation</b>	
<b>1:05</b>	<i>USDA-ARS club wheat breeding and variety trials,</i> Kim Campbell, USDA-ARS Wheat Breeder, and <i>Overview of the OSU wheat breeding program,</i> Bob Zemetra, OSU Wheat Breeder	<i>Recent evaluation of wheat varieties regarding stripe rust,</i> Mike Flowers, OSU Cereals Specialist
<b>1:30</b>	<i>Soil organic carbon dynamics in the Pendleton long-term experiments,</i> Stephen Machado, OSU Agronomist	<i>Guidelines for Diagnosing Wheat Diseases in the Field,</i> Richard Smiley, OSU Plant Pathologist
<b>1:55</b>	<i>Soil microbiology: life underground,</i> Kate Reardon, USDA-ARS Microbiologist	<i>Molecular diagnosis of wheat root diseases,</i> Guiping Yan, OSU Molecular Plant Pathologist
<b>2:20</b>	<i>Can cropping intensification improve Soil organic carbon accretion?,</i> Hero Gollany, USDA-ARS Soil Scientist	<i>Enhancing control of downy brome with pre-emergence herbicides ,</i> Dan Ball, OSU Weed Scientist
<b>2:45</b>	Ice Cream Social (courtesy of the Oregon Wheat Growers League)	

## Sherman Experiment Station Field Day June 15, 2011

Time	The Station is located 0.5 miles south of Moro, Oregon.
7:00	Assemble at Sherman High School; located 0.5 miles SW of Moro on Hwy 97
7:25	Depart from High School
7:40	Agronomic Comparisons and Economic Analysis of Conventional and Direct Seeded Cropping Systems in the Moro Long-term Experiment: First 6 Years, Stephen Machado, OSU Agronomist and Doug Young, WSU Economist
8:05	Potential of biodiesel from oilseed crops in eastern Oregon, Don Wysocki, OSU Extension Soil Scientist,
8:20	Club Wheat Breeding and Variety Trials, Kimberly Garland Campbell Research Geneticist/ Wheat Breeding, USDA-ARS
8:40	Updates on Disease Situation and Resistance Screening, Chris Mundt, Dept. of Botany and Plant Pathology, OSU, Corvallis
9:05	Recent evaluation of wheat varieties regarding Stripe Rust, Mike Flowers, OSU Cereal Extension Specialist.
9:30	Update on the OSU Wheat Breeding Program, Bob Zemetra, OSU Wheat Breeder
9:45	Break
10:05	Molecular diagnosis of wheat root diseases, Guiping Yan OSU CBARC, Research Associate
10:30	Guidelines for Diagnosing Wheat Diseases in the Field, Richard Smiley, OSU, Professor of Plant Pathology
10:55	Reducing Tillage Can Increase Summer Fallow Water Storage and Seed Zone Moisture, Stewart Wuest and Steve Petrie Soil Scientist, USDA Agricultural Research Service, Pendleton OR OSU-CBARC, Superintendent
11:20	Potential for Beyond herbicide to carryover and injure non-Clearfield wheat, Daniel Ball, Professor of Weed Science, OSU Columbia Basin Ag. Res. Ctr.
12:00	Lunch

# Announcements

Oregon Wheat Growers League  
Research & Technology Committee -  
Statewide Research Funding and Structure

**June 2nd, Noon - 3:00 p.m. Port of Morrow, Boardman.**

OSU College of Ag Dean Sonny Ramaswamy will provide a brief update on Statewide Funding and Structure and invite grower comments and questions regarding the budget shortfalls of Extension and Experiment funds.



**Oregon Wheat Growers League  
Luncheon & Board Meeting**

June 16, 2011

The Dalles, Oregon



Please RSVP to Sally Christensen  
schrist@owgl.org      541-276-7330

OSU/Umatilla County Extension Service  
2411 NW Carden, Umatilla Hall, PO Box 100  
Pendleton, OR 97801

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# CALENDAR

## June

June 2      **OWGL Research & Tech Committee**  
12:00 -      **Location:** Port of Morrow, Boardman, OR  
3:00 p.m.    **Contact:** Sally Christensen    541-276-7330

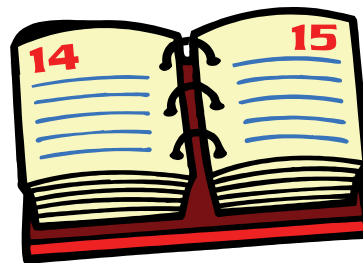
June 13      **Cereal Field Day**  
7:00 -      **Location:** HAREC, Hermiston, OR  
9:30 a.m.    **Contact:** Annette Teraberry    541-567-8321

June 14      **Pendleton Field Day**  
7:40 a.m.    **Location:** CBARC, Pendleton, OR  
              **Contact:** CBARC                    541-278-4186

June 15      **Moro Field Day**  
7:00 a.m.    **Location:** Sherman Exp. Station, Moro, OR  
              **Contact:** CBARC                    541-278-4186

June 16      **OWGL Luncheon & Board Meeting**  
**Location:** The Dalles, OR  
**Contact:** Sally Christensen    541-276-7330

June 22      **Potato Field Day**  
**Location:** HAREC, Hermiston, OR  
**Contact:** Annette Teraberry    541-567-8321



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