University of Idaho Extension

Farm Scene

Nez Perce County, 1239 Idaho Street, Lewiston, Idaho Spring 2008

Noxious Weeds—A Threat to the Land We Call Home

A message from the Clearwater Basin Cooperative Weed Management Area and the Nez Perce County Weed Advisory Committee

"Do your part, control noxious weeds on your property"

Scientists in the know consider invasive plant species to be a serious threat, even more serious than global warming or ozone depletion. Detection and treatment of noxious weeds are key elements for successful control. County weed control departments wish to assist in these efforts by offering a number of free services including weed identification booklets, site reviews, control method alternatives, and loanable equipment. Contact your local county weed control superintendent for additional information about the services they offer.

1. Nez Perce County—Hugh Jacobs, 208-799-3060
2. Clearwater County—Dennis Williams, 208-476-4918
3. Latah County—Alan Martinson, 208-883-7210
4. Lewis County—Carol Furey-Werhan, 208-937-2380

More information about Idaho's noxious weeds can be found on The Idaho State Department of Agriculture website http://www.idahoag.us/Categories/PlantsInsects/NoxiousWeeds/indexnoxweedmain.php

The Idaho Weed Awareness Campaign is located at http://www.idahoweedawareness.org/

Weeds identified as major concern to Nez Perce County are listed on our website at http://extension.ag.uidaho.edu/nezperce/noxious_weeds.htm

Best regards,

Larry J. Smith
Extension Educator

Inside this issue:

Complete details of these results and other on-farm tests can be found on our website click on Crops: http://extension.ag.uidaho.edu/nezperce.

Web sites for more information:
UI Brassica Breeding & Research
http://www.ag.uidaho.edu/brassica/
UI North Idaho Extension Cereals Program
http://www.ag.uidaho.edu/cereals/nidaho/
WSU Cereal Variety Testing
http://variety.wsu.edu/

Farm Bill Meeting
with Senator Mike Crapo
Saturday, February 16, 2008
7:30 a.m. -- Lewiston Community Center
Breakfast hosted by
Nez Perce County Farm Bureau &
Nez Perce County Grain Producers
Please RSVP to Melanie @ 208-743-5533
by noon Friday

Taking Land Out of CRP

Due to recent inquiries for taking land out of CRP and moving it to a cropping system, the following information may be of value.

The information below is from the STEEP (*Solutions To Environmental and Economic Problems*) program tillage handbook. In addition, more related information is available at the STEEP website.

PNW Conservation Tillage Handbook Series
Chapter 2 - Conservation Tillage Systems and Equipment, No. 21, May 1997

CRP Take-Out: A Unique Opportunity for the Transition to Direct Seeding

Authors: Roger Veseth, WSU/UI Conservation Tillage Specialist, Moscow, ID; Baird Miller, WSU Dryland Cropping Systems Agronomist, Pullman; Tim Fiez, WSU Soil Fertility Specialist, Pullman

This chapter of the conservation tillage handbook can be found online at:
http://pnwsteep.wsu.edu/tillagehandbook/chapter2/022197.htm

A copy is also available in our office or from Hans Kok, WSU/UI Extension Conservation Tillage Specialist, P.O. Box 442339, Moscow, ID 83844-2339.

Although the publication is not new, it remains a viable resource for anyone considering CRP take-out.

Basic Soils

An update on basic soil knowledge and application of information for improving production and protecting our environment.

Information and handouts from the December 19 workshop are available online at http://extension.ag.uidaho.edu/nezperce/Crop/crops.htm

Basic Soils Presenters:

Tabitha Brown, NRCS Soil Conservationist, Moscow, Idaho

- Palouse Soil Quality Score Card
- Palouse Soil Quality Score Card Instructions

Wayne Olson, USDA-ARS Plant Introduction Station, Pullman, Washington

- Soils Presentation (PowerPoint)
- Soil Analysis Excel Spreadsheet

As defined by the Nez Perce County crop advisory committee and by class questionnaire results, the basic soils class and the presenters and their information were well received.

The class questionnaire results also indicate a need for more information about soils.

Meadow Voles

Information about voles from Oregon State University recently caught my attention and is perhaps worth sharing.

OSU reported that the vole population bust of 2005 and 2006 was breaking toward predictably increasing populations in 2007. The university also reported scattered fields had enough voles that a few growers treated (baited) for them last year. For this reason, a review of winter wheat fields for damage might possibly be useful when the snow melts.

Winter wheat producers are familiar with voles and will know their feeding symptoms. However, a quick summary for review . . . Runways are a sure sign of the presence of voles. The runways are constructed both through surface vegetation and below ground. Small surface holes lead to the underground passages and also to nesting areas.

Voles have a high reproductive capacity, breeding most of the year with population peaks in the spring and fall. There may be several litters with three to five young in each. Vole populations often vary dramatically throughout the year. Peak densities occur about every four years and may or may not be in regular cycles. A number of factors may contribute to these fluctuations, such as weather patterns, food and cover availability, and predation pressure. Large populations can result in considerable damage during winter foraging activity.

Triticale Forage P Uptake and N

We don't grow much triticale nor do we have much excess soil phosphorous in north Idaho, however, the following information about the relationship between nitrogen and phosphorous in triticale presented in Bradford Brown's ***Cereal Centennial*** newsletter for Treasure Valley cereal producers may be of interest.

Dairymen use boot stage triticale followed by silage corn to increase forage and total annual P removal. The P removal is important because their manuring rates are frequently limited by the amount of P removed. Last year I reported (***The Cereal Sentinel*** Issue 42 and 45) the boot stage triticale forage production and phosphorus uptake results from preplant incorporated and winter topdressed N at low and high available P. Briefly, preplant N consistently increased forage biomass and P uptake more than late winter topdressed urea, consistent with our understanding that preplant N promotes vegetative growth more than it does grain yield. While greater vegetative growth may be detrimental for the production of grain, it is essential for maximizing forage production and phosphorus (P) removal. The results for 2007 are reported here.

Optimum N for forage production was only 60 lb N/A. Phosphorus removal was highest at N rates higher than were necessary for forage yield. Maximizing P removal under high P conditions appears to require more N than is required for maximizing forage yield. Increased P uptake with higher N was due primarily to increased forage P concentrations. Similar to 2006, the timing of N application was not as critical for P removal as for forage production under limited P conditions. But with high P, moderate rates of fall preplant N resulted in higher P removal than with late winter topdressed N. The greater P uptake with fall preplant N was due primarily to increased forage production rather than higher forage P concentrations. Relative forage yield (percent of maximum) is related to protein concentrations. Maximum forage yield was associated with a minimum of 11% forage protein regardless of the available P present. Protein increased beyond 11% with N rates above 120 lb/A but forage yields peaked between 10 and 11% protein.

Triticale can accumulate excessive nitrates under some stress conditions with high available N. Triticale forage nitrates in this study measured as high as 890 ppm with the highest N rate (300 lb N/A) under non-stressed conditions. These levels are not likely a problem for most livestock particularly if fed with other forages.

The ***Cereal Sentinel,*** including issues back to 1996 can be viewed as PDF files on the Southwest Idaho Extension Cereals Homepage at http://www.ag.uidaho.edu/swidaho

Upcoming University of Idaho Extension/Nez Perce County Classes/Seminars/Workshops

For more information, call 208-799-3096

DIRECT SEED MEETING Featuring Kevin Matushka, Horsham, Australia & John Baker, New Zealand
February 12—Red Lion Hotel, 621 21st Street, Lewiston, 8:30 a.m.

EXTENSION CEREAL SCHOOLS
February 13—Lewiston, 7:30 a.m., Red Lion Hotel, 621 21st Street, Lewiston (1 ISDA pest credit, WSDA credit requested)
February 14—Greencreek February 15—Bonners Ferry

CAMELINA & ALTERNATIVE CROPS SEMINAR
February 25—Brammer Building, 8:00 a.m.

AGRICULTURAL TECHNOLOGY UPDATE
February 28—Brammer Building, 8:00 a.m.

PROFESSIONAL PESTICIDE APPLICATOR TRAINING & TESTING
March 5, 6, 7, & 10—Lewiston Elks Lodge, 3444 Country Club Drive, Lewiston, 9 a.m.—4 p.m.

2007 Sequential Herbicide Efficacy & Crop Response
Beyond and Affinity Tank Mix
Clearfield Wheat

Larry J. Smith, UI/Nez Perce County Extension

Cooperators: Allen & Millie Lansing, Lansing Farm, Cavendish, Idaho
DeWayne Ward, Primeland Cooperatives
Brian Sifers, BASF
Don Kambitsch, DuPont Crop Protection
Bob Brown, UI/Nez Perce County Extension

Application date: May 19 and May 30, 2007

Field planted to: ORCF-102 (a soft white Clearfield winter wheat)

Plot design: Large, on-farm replicated strips

Sprayer type: All treatments applied by Primeland Cooperatives—Case I.H. Patriot
- Nozzles: Tee Jet Nozzle, size 008 – 110 degrees
- Boom height of 30 to 40 inches

Purpose: Determine ORCF-102 (Clearfield wheat) crop response and percent weed control for sequential applications of Beyond and Affinity tank-mix herbicides.

Beyond and Affinity Tank Mix
Sequential Herbicide Efficacy & Crop Response
Reading: July 9, 2007

	Treatment	Rate /Acre	Rep I Weed Control	Rep I Crop Damage	Rep II Weed Control	Rep II Crop Damage	Rep III Weed Control	Rep III Crop Damage	Average Weed Control	Average Crop Damage
1	Untreated check Weed pressure*		15%		45%		30%		30%	
2	Affinity Tank Mix—May 19	1 oz/ac	95%	0	90%	0	95%	0	93%	0
3	Beyond—May 19 Affinity Tank Mix—May 30 & Headline—May 30	5 oz/ac 1 oz/ac 6 oz/ac	95%	0	97%	0	95%	0	96%	0
4	Beyond—May 19	5 oz/ac	97%	0	95%	0	98%	0	97%	0
5	Affinity Tank Mix—May 19 Beyond—May 30 & Headline—May 30	1 oz/ac 5 oz/ac 6 oz/ac	95%	0	90%	0	97%	0	94%	0

Observations and comments:

Sequential treatments were 11 days apart: First application on May 19, 2007; Sequential application on May 30, 2007

No crop damage observed in any of the treatments under a sequential treatment interval of 11 days.

Treatments provided acceptable levels of weed control.

This data supports effective weed control with the provision of crop safety to ORCF-102 when sequentially applying Beyond and Affinity tank-mix herbicides

*Weed pressure on the untreated check was 15%, 45%, and 30%, respectively, in replicates I, II, and III. Average weed pressure was 30%.

For sequential herbicide treatments in crop rotations, consult 2007 PNW 437, "Herbicide-Resistant Weeds and Their Management," by Donn Thill, Professor Weed Science, University of Idaho, et.al., for more information.

2007 Chickpea Blight Control
Fungicide Strip Application Comparison

Larry J. Smith, University of Idaho Extension, Nez Perce County
with
Kevin Hasenoehrl Farm, Cameron area, Kendrick, Idaho

Cooperators: Brian Sifers, BASF Company
Don Kambitsch, DuPont Crop Protection
Tom Chamberlin, Primeland Cooperatives
DeWayne Ward, Primeland Cooperatives

Blight level at fungicide application: 3% to 4% spotted throughout the trial area

Plot design: Strips were combine width by 1,000 feet long

Treatments: All treatments applied in tank mix with Assure II herbicide at 10 ounces per acre with prime oil (crop oil) at 1 gallon per 100 gallons water.

Sprayer type: All treatments applied by Case I.H. Patriot

- Nozzles: Tee Jet Nozzle, size 008 – 110 degrees
- Boom height of 35 inches
- Rate: 25 gallons per acre

2007 Chickpea Blight Control
Fungicide Strip Yield and Comparative Data

Treatment	Rate	Average Percent Blight Symptoms* June--July	Yield pounds per acre
Proline (Bayer)	5.7 ounces per acre	5.3%	1,230
Bravo Weather Stik (Syngenta)	1.3 pints per acre	5.5%	1,215
Untreated check drive through	applying Assure II and crop oil only	7.8%	1,290
Manex (Dupont)	1.5 quarts per acre	5.5%	1,275
Headline (BASF)	6 ounces per acre	4.0%	1,245
Quadris (Syngenta)	6.2 ounces per acre	4.15%	1,305
Quadris Opti (Syngenta)	1-2/3 pints per acre	4.15%	1,290
	Average	5.20%	1,264

*Blight symptoms were present but ambiguous to an extent being inter dispersed with yellowing lower leaves. No blight symptoms observed on the stems or leaf mass above the bottom third of plant canopy. Symptoms, although light, were mostly evenly distributed.

Summary and comments:

A low incidence of Ascochyta rabiei, chickpea blight, was evident early in the growing season and remained low as a result of summer drought. For this reason, any yield variances among the treatments of the non-replicated demonstration strips are more likely due to soil type and drought stress rather than differences among fungicide treatments. Moreover, during the next crop season, a replicated trial of this type would more amply define any significant differences among the fungicide products if normal rainfall patterns resume in tandem with significant disease pressure.

Spring Malt Barley Response to Varying Rates of 16-20-0-17 Fertilizer

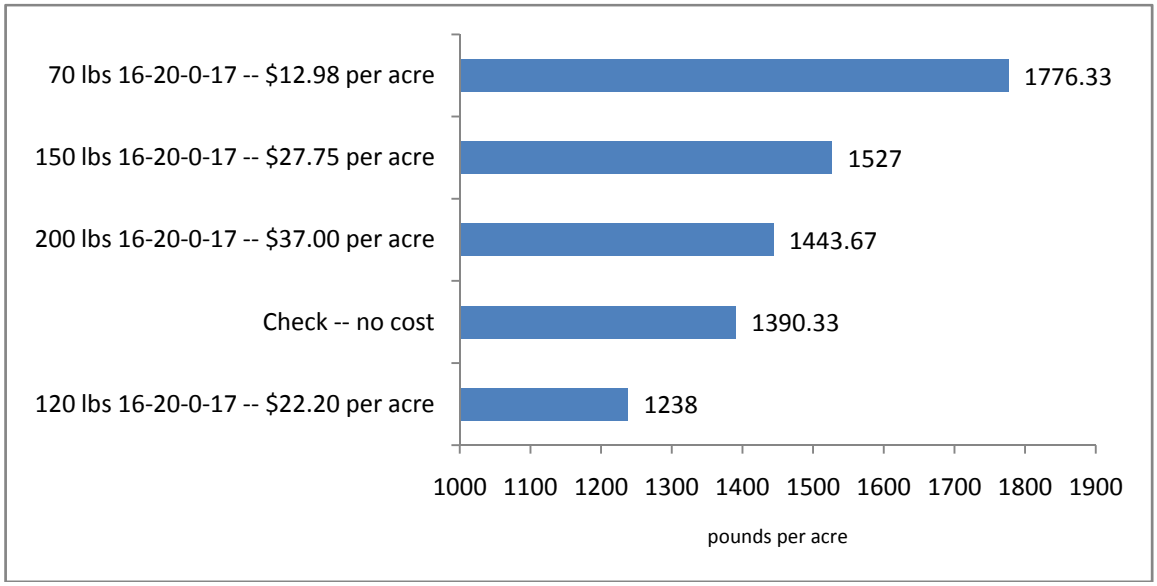
Larry J. Smith, UI/Nez Perce County Extension
with
Bruce & Milt Watson, Watson Farm, Peck, Idaho

Metcalf Spring Malt Barley Seed Yield Response to Varying Rates of 16-20-0-17 Fertilizer

Fertilizer treatment	Seed yield average		Fertilizer cost* per acre
	lbs/acre		per acre
120 lbs/acre 16-20-0-17	1,238.00	A	$22.20
Check	1,390.33	AB	------
200 lbs/acre 16-20-0-17	1,443.67	AB	$37.00
150 lbs/acre 16-20-0-17	1,527.00	AB	$27.75
70 lbs/acre 16-20-0-17	1,776.33	B	$12.98

*16-20-0-17 cost per ton = $370.95

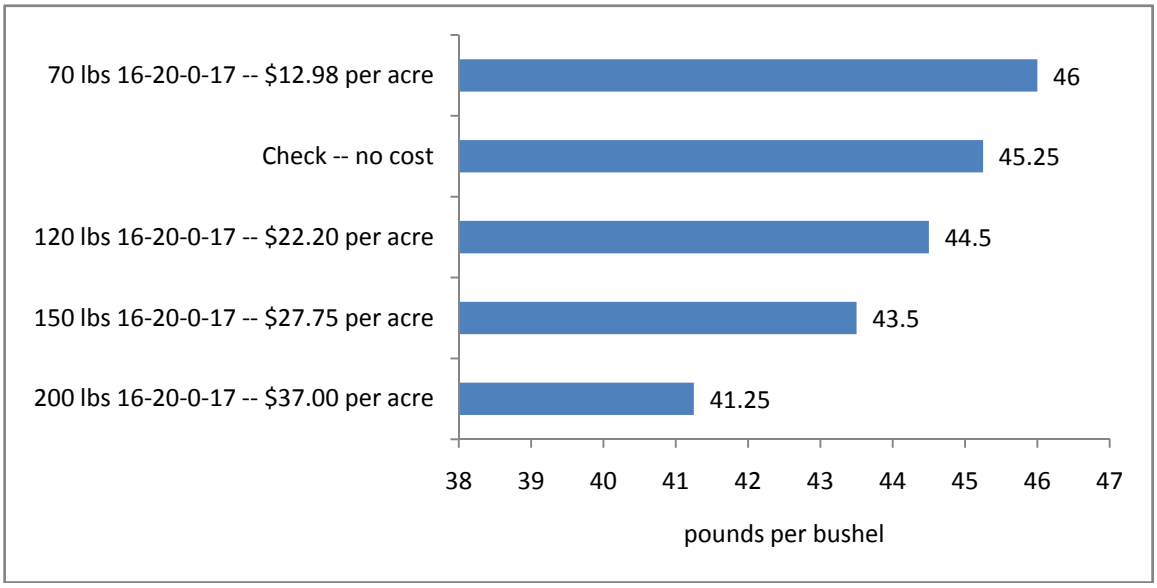
Metcalf Spring Malt Barley Seed Yield Response to Varying Rates of 16-20-0-17 Fertilizer



Metcalf Spring Malt Barley Seed Yield Test Weight Response to Varying Rates of 16-20-0-17 Fertilizer

Fertilizer treatment	Test weight		Fertilizer cost* per acre
	lbs/bushel		per acre
200 lbs/acre 16-20-0-17	41.25	AB	$37.00
150 lbs/acre 16-20-0-17	43.50	AB	$27.75
120 lbs/acre 16-20-0-17	44.50	A	$22.20
Check	45.25	AB	------
70 lbs/acre 16-20-0-17	46.00	B	$12.98

Metcalf Spring Malt Barley Seed Yield Test Weight Response to Varying Rates of 16-20-0-17 Fertilizer



Summary and comments:

The lowest fertilizer rate, 70 pounds nitrogen per acre of 16-20-0-17, provided significantly higher seed yield and test weight than other treatments evaluated. Moreover, the lowest fertilizer rate, 70 pounds nitrogen per acre of 16-20-0-17, achieved a seed yield, seed quality, and financial advantage over comparative treatments while maximizing fertilizer use efficiency and groundwater protection.

2007 Spring Safflower Seed Yield Trial

Larry J. Smith, UI/Nez Perce County Extension
with
Davern Riggers, Riggers Farm, Reubens, Idaho

Cooperators: Richard Cooley, Earthkeep, Inc., Carson, Washington
Dr. Gerald Bergman, North Dakota State University & Montana State University Plant Breeder
Tom Hickman, Cal/West Seeds, Woodland, California
Roeland Kapsenberg, Cal/West Seeds, Woodland, California
Kimberly Thompson, Cal/West Seeds—Artois Plant, Artois, California
Scotty Brammer, Brammer Farms, Lenore
George Brocke & Sons, Kendrick
Bob Brown, Tech Support, UI/Nez Perce County Extension

Field location: Reubens, Idaho

Planting date: May 18, 2007

Plot size: One acre per variety

Seeding rate: Hybrids 15 lbs per acre
Non-hybrids 20 lbs per acre
All varieties seed treated

Fertilizer: Same as spring wheat

Herbicides: Sonolan G-10 10 pounds per acre (labeled for use on safflower)

Notes:

June 6, 2007: Somewhat irregular stand of one-inch tall plants.
Rain is needed, not weedy, weeds may develop.

July 1, 2007: Irregular stand filled-in satisfactorily. Sonolan and safflower competition is managing weeds satisfactorily. Dry conditions are a concern although varieties show resilience.

August 1, 2007: Varieties continue to show resilience and vigor at full bloom in spite of area heading to 0-3 drought status.

September 14, 2007: Safflower varieties windrowed and allowed to dry for harvest due to preparations for winter wheat planting. Allowing safflowers to full maturity and direct harvest may have, to some extent, ultimately changed seed yield and oil yield ranking at harvest.

Seasonal pest problems: Weeds kept in check by Sonolan herbicide and crop competition. No insect or disease pressure recorded.

Variety	Seed yield**	Seed oil content*
	lbs/acre	%
MSU—NDSU Oleic 5	1133	38.22
CW 8807 – T05 – 1016	1052	35.49
CW 9907 – T06 – 1017	984	37.30
Seedtek S-344	975	38.04
Seedtek 1133	959	36.43
MSU—NDSU Hybrid 49	943	35.07
Seedtek S-345	905	38.53
MSU—NDSU Nutra Safflower	725	43.26
Average	959.5 lbs/acre	37.80%

Comparative soil tests take after harvest from the safflower plot and the adjacent spring wheat field resulted in the safflower plot retaining more soil nitrogen. Soil tests by University of Idaho Holm Research Analytical Sciences Laboratory.

*Oilseed content by Gerald Bergman, MSU/NDSU safflower breeder, Sidney, Montana. Standard oil content is 38%.

**Winter safflower lines comparatively planted on summer fallow land on the Bert Henriksen Farm in Tammany yielded as follows:

China-P2 – 1,271 pounds per acre
China-P1 – 1,396 pounds per acre
NK-144 – 1,485 pounds per acre
BJ-27 – 1,794 pounds per acre

Commercial safflower production is currently limited to spring planted varieties. Winter safflower varieties are not available commercially as per R.C. Johnson, agronomist, and W. Olson, farm manager, USDA-ARS Plant Introduction Station, Pullman, Washington.