With the cool, wet weather, disease in pulse crops warrants some extra consideration this year. Scientists Weidong Chen, Sam Markell and Lyndon Porter were all kind enough to send in short articles about the current state of diseases in pulse crops.

**Sam Markell, NDSU Plant Pathologist**

Ascochyta is a constant source of problems for pulse growers. When we have ample rain for high yields, we often have ample rain for ascochyta. The ascochyta pathogens are crop specific – ascochyta on lentils is not the same pathogen as the ascochyta on chickpeas. Fungicide applications can reduce the disease in all the pulse crops, although the disease is most severe in chickpeas, and thus, the greatest benefit from fungicide applications is usually observed in that crop. Yield increases have been observed from fungicide applications in lentils in over half of the trials conducted at the North Central Research Extension Center in Minot, ND, over the last 6-8 years, usually when ascochyta pressure was high. In North Dakota, the ascochyta pathogen (*Ascochyta rabiei*) is resistant to strobilurin fungicides (Headline, Quadris), so application of another chemistry is necessary for control (Proline, Endura, Chlorothalonil). Strobilurins are

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Members from the USA Dry Pea & Lentil Council and the US Dry Bean Council flew to Washington DC to garner support for the Pulse Health Initiative - the team had close to 100 appointments with Congress members and government agencies.

**Back row (left to right):** Greg Johnson, Hal Cole, Larry Chesini. **Middle row (left to right):** Bob Green, Pat King, Chad Nickels, Tim Mcgreevy, Kenny Rhoades, Gordon Gregory, Jim Thompson, Kim Murray. **Front row (left to right):** Kim Monk, Cindy Brown, Sara Rose, Jeane Wharton, Joyce Earl.
still effective in lentils and field peas. In general, the best fungicide timing for management of ascochyta in pulse crops is early flower.

North Dakota experienced a very severe outbreak of white mold in 2009. Sunflowers, edible beans, and soybeans were all hit hard. Although there was not much white mold on the 2009 pulse crops (their early maturity allowed them to escape much of the infection), the amount of sclerotia (the small black survival structures the pathogen produces) deposited in the soil was very high. If the environment is favorable for disease (moist soil before flowering, moderate temperatures and high moisture during flowering) it is possible we will see white mold in the pulse crops. This is more likely to be true when pulses are planted on or next to a field where white mold was severe in previous year(s). White mold may be managed with a foliar fungicide, but it must be applied at the early bloom stage as a preventative. An application will not be economical if the soil is dry before the plant enters flowering or hot (90F) and/or dry conditions occur through flowering.

Weidong Chen, USDA-ARS Research Plant Pathologist

The recent unusual rainy and cool weather in the Palouse region provided good moisture for pulse crops but also provided ideal conditions for development of root rot and other foliar diseases like ascochyta blights. As usual we have seen samples of Ascochyta blight of pea caused by *Phoma medicaginis* var. *pinodella* and started seeing problems of Ascochyta blight of chickpea caused by *Ascochyta rabiei*. Noteworthy is observation of lentil root rot. USDA-ARS plant pathologists Tim Paulitz and Weidong Chen at WSU have identified *Rhizoctonia solani* causing lentil root rot in Spokane County, WA. The disease shows initial discoloration of the epicotyl and develops into sunken lesions and girdles the stem. General root rot is also being observed. There are no remedies available for root rots after planting. These foliar and root diseases are favored by low temperature and high moisture conditions. Continued cool and moist weather will worsen the diseases. Fungicide spray is recommended for managing Ascochyta blights. However, dry and warm conditions will help halt the disease development.

Lyndon Porter, USDA-ARS Research Plant Pathologist

Although it may be too late to do anything for root rots in 2010, it is very important to pay attention to the emergence of the crop. If the stand is poor or not uniform, certain spots in the field begin to die or are already dead, or if roots are diseased, make note of it. Lengthening a crop rotation or using a seed treatment the next time you plant pulses to that field may be beneficial. In Washington and Idaho, the present cool, wet conditions in general tend to favor the development of fungal root rot pathogens, especially Aphanomyces root rot on lentils and peas.

Aphanomyces root rot is a fungal-like disease on pea caused by *A. euteiches* (*Aep*) and is a major pathogen found in pea-growing areas of the U.S., northern Europe, Australia, New Zealand and Japan. Complete field losses have been reported at times in the Northeast and Pacific Northwest by this pathogen. *Aep* can persist in the soil up to 20 years. Spores called oospores germinate in response to pea root sugars or when they come into direct contact with roots, forming spores or zoospores (swimming spores). Initially, infected root tissues have a light brown appearance but later become distinctively soft and rotted and eventually slough-off to reveal only the central cord of the root tissue. The pathogen can cause both pre- and post-emergence damping off on peas, resulting in severe yield losses and is more prone to develop in fields with poor drainage and soil compaction than in well-drained fields. Genetic resistance in peas to *A. euteiches* is limited. Phosphorous acid has shown to be effective in greenhouse trials and some field trials to manage this disease when applied as a foliar application soon after emergence.
**Market News**

**GROWER PRICE CHART (Prices in U.S. Dollars/cwt) #1 Grade**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Pacific Northwest</th>
<th>North Dakota</th>
<th>California</th>
<th>Canada (Prices in U.S. Dollars/cwt)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Green Peas (Vine)</td>
<td>9.50</td>
<td>10.00</td>
<td>7.50</td>
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<td>Green Peas (Up-right)</td>
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<td>Yellow Peas</td>
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<tr>
<td>Lentils (Breuer)</td>
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<td>22.46</td>
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<tr>
<td>Lentils (Pardina)</td>
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<td>Chickpeas</td>
<td>30.00</td>
<td>27.33</td>
<td>23.68</td>
<td>23.44</td>
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</tbody>
</table>

**DEALER MARKET:** Trading activity was slow. Demand was light. PNW green peas were mostly steady. PNW lentils were steady with the last comparable trades, a weaker undertone has been noted. ND green peas, yellow peas, Austrian Winter Peas and ND lentils were not established. **PNW Chickpeas** were mostly steady. **CA Chickpeas** were not established.

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**USDA MARKET COMMENTS ("Bean Market News," Randy Hammerstrom, Market Reporter):**

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**USDA 2009 National Posted Price and Loan Rate Summary**

<table>
<thead>
<tr>
<th>Date</th>
<th>Dry Peas</th>
<th>Lentils</th>
<th>Large Chickpeas</th>
<th>Small Chickpeas</th>
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<tr>
<td></td>
<td>West</td>
<td>Midwest</td>
<td>West</td>
<td>Midwest</td>
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<tr>
<td>NPP</td>
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**Last Week**

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<th>Date</th>
<th>Dry Peas</th>
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<th>Large Chickpeas</th>
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**USDA Farm Service Agency**
2010 Crop Tours

June
15: OSU Pendleton Field Day
16: WSU Dryland Organic Field Day, Boyd Farm
17: MSU Central ARC Field Day, Moccasin
22: WSU Fairfield Crop Tour, Fairfield
24: USDA-ARS Conservation Farm, Pullman
29: U of I Camas Prairie, Craigmont
29: Crop Diagnostic Clinic, Pullman

July
1: NPGA Pulse Tour WREC, Williston
6: WSU/PNW Farmers Co-op Tour, Colton
7: NPGA Pulse Tour NREC, Minot
7: U of I Parker Farm, Moscow
7: WSU Farmington Tour, Farmington
8: NDSU Pulse Tour CREC, Carrington
14: Daniel County Crop Tour, Richmond
28: MSU Eastern ARC Field Day, Sidney

Calendar

June
14: Domestic Marketing
   Moscow, ID
21: USPLTA Meeting
   Worley, ID
22: National Board Meeting
   Worley, ID

July
5: Office closed for July 4th
12-15: USAEDC
   Baltimore, MD
19-21: IFT Show
   Chicago, IL

August
2-4: Food Aid Conference
   Kansas City, MO
20-21: National Lentil Festival
   Pullman, WA

Letter of Support for USDA Export Program Funding

The USA Dry Pea & Lentil Council recently signed on to a letter requesting support for the maintenance of important USDA export programs, including the Market Access Program (MAP) and Foreign Market Development (FMD), when the FY 2011 Agriculture Appropriations bill is reviewed.
Specifically, the USADPLC supports MAP funding of no less than $200 million as authorized in the 2008 Farm Bill and FMD funding of at least $34.5 million as provided in the Farm Bill.
Both the MAP and FMD programs are important to the pea and lentil industry in maintaining global market competitiveness.

An excerpt from the letter:
“Exports are a vital part of the U.S. economic engine, and agricultural exports continue to be its strongest component. Since its creation in 1985, MAP has proven to be highly successful in helping to boost U.S. agricultural exports, protecting and creating American jobs, and increasing farm income. Over this period, U.S. agricultural exports have increased by nearly 300 percent, and today nearly 900,000 Americans have jobs that depend on these exports. According to USDA, each $1 billion in agricultural exports supports 8,000 to 9,000 U.S. jobs.
A recent study by IHS Global Insight, commissioned by USDA and released in March, found that the increase in market development spending through MAP and FMD since 2002 increased U.S. export market share by 1.3 percentage points and the annual value of U.S. agricultural exports by $6.1 billion. The study also found that over the 2002-09 period export gains associated with the programs increased the average annual level of U.S. farm cash receipts by $4.4 billion and net cash farm income by $1.5 billion. For every additional $1 expended by government and industry on market development during this period, U.S. food and agricultural exports increased by $35, a 35 to 1 return on investment. At the same time, the study also found that U.S. domestic farm support payments were reduced by roughly $54 million annually due to higher prices from increased demand abroad, thus reducing the net cost of farm programs.”

Friday Funnies

Two farm wives were shopping and witnessed a man opening the car door for his wife. “Isn’t it nice that chivalry still exists in some women’s lives?” one of the wives commented.
“Hmph,” said the other, “I’ll bet you either the car is new or the wife is.”