

Pea Aphid Alert

Reports of pea aphid sightings have been communicated to the Northern Pulse Growers Association office over the past couple of days. It is important that producers are vigilant in checking fields for these pests as they can cause direct injury to the crop and reduce yields.

Information received last year of aphid infestations reports a 10-15 percent yield loss in some areas. Many producers did not discover the pest until damage had already occurred. Aphids are also capable of transmitting pathogenic plant viruses which will destroy plants and can cause extensive losses.



Aphids are pests to pea, lentil, alfalfa and clover. They survive by sucking sap from stems, leaves and pods which in turn deplete the plants resources required to set and fill seeds. Aphids can be easily detected in a field by inspecting plants. A mature pea aphid is small - approximately 1/8+ inch long and range from pale to dark green in color. They move slowly and do not hop.

Scouting for Pea Aphids

Aphid populations should be assessed during bloom to determine if potential yield loss is greater than the cost of control measures. Aphid populations can be evaluated by counting the number of aphids on the top eight inches of at least 20 plants sampled throughout the field or with a sweep net. If there are more than four aphids per plant or 15 aphids per sweep, a treatment is advised shortly after bloom.

For more information on pea aphids and other diseases visit our website at www.northernpulse.com.



Pulse News Harvest Edition



Volume 4 Issue 1

July 2010

Pulse Crop Harvest Tips

Buyers for peas, lentils and chickpeas are very demanding on quality. Proper harvesting can make the difference between getting a premium price as food grade or having them rejected. Taking the time at harvest to watch for the following grade quality factors can make a difference in getting a premium price:



Yellow and Green Food Peas Bleach

Bleach in green peas is caused by moisture and sunlight at maturity. Green peas should be harvested at high moisture (18%) and air dried to 13-15% (Depending what the processors wants the product at) for storage. Swathing or desiccation is recommended for speeding up harvest. Bleach in yellow peas is due to green (immature) seed at harvest. This can be avoided by harvesting when the seed has turned color or harvesting areas of the field as they mature.

Damage

Several types of damage can result in not meeting food grade standards, which include:

Chalkspot: This can be caused by lygus bugs stinging the immature seed or hail damage. Look for white spots on the seed—normally if its insect damage it should be most pronounced on the first outside rounds. Check your grain tank regularly and avoid mixing these damaged seeds with the rest of the crop.

Hail damage: Hail on immature seed can cause a lot of staining and spots on the

seeds. If you know you had hail on all or part of the field, keep it separate.

Staining: Staining or dirt tag is the result of weeds or moisture and dirt clinging to the seed. Avoid harvesting through wet weed patches or when there is dew on the plants.

Disease: Ascochyta and mildew can also discolor the seed.

Mechanical Damage

Fragile seeds of peas can easily be damaged if the combine and augers are not set or operated properly. The biggest problem in splitting or breaking the seed coats is harvesting too dry. Peas should be harvested at high moisture (18%) and air dried.

Combine settings: Slow cylinder speeds and concave openings large enough to allow the large seeded peas through is most often the method of preventing mechanical damage.

Welcome to the Harvest Edition of the *Pulse News*. The purpose of this special edition is to provide tips to assist producers in the harvest and marketing of the 2010 pulse crop.

According to recently released data by NASS, North Dakota & Montana has once again experienced a record increase in pea and lentil acreage for 2010. Total acreage estimates for ND peas for 2010 are 490,000 equalling 490,000 in 2009. MT peas for 2010 240,000 equalling 240,000 in 2009. ND lentils increased to 200,000 from 165,000 in 2009. MT lentils for 2010 is 195,000 versus 122,000 in 2009.

As harvest approaches, there are several techniques that can help improve the quality of your product. The following article offers tips in determining grade quality factors.



1710 Burnt Boat Drive
Bismarck, ND 58503
Ph: 701-222-0128 Fax: 701-222-6340
Email: info@northernpulse.com
Website: www.northernpulse.com

The *Harvest Edition* is a publication of the Northern Pulse Growers Association

Continued ...



Seed loss is most often associated with seed going over the straw walkers. This loss can be minimized by setting the concave closer in the front than in the back to try to dislodge the seed from the straw. If the straw is too tough, it might help to increase cylinder speed. If the loss is over 2-3 bus./ac. (8-12 seeds/sq.ft.) you might have to wait until the straw is dryer.

Maximize the wind speed for peas to remove as much inert material as possible. Peas are very hard to blow over.

Lentils

Lentils are very indeterminate in growth and normally require swathing or desiccation before harvest. If you are swathing lentils for the first time, it would be every helpful to talk to an experienced grower on how to set up your swather, as this can be an easy or a very frustrating experience. Harvesting lentils at 16% moisture is important to keep the mechanical damage to a minimum, then air dry to 14%.

Color is very important in green lentils, as with peas, be ready to harvest quickly and avoid immature areas of the field.

Damage

Again, like in peas, monitor your grain tank for any change in quality. Chalkspot, weed or dirt staining, disease, frost damage and hail are the most common causes of low quality.

Chickpeas

Like lentils, chickpeas are very indeterminate in maturity like lentils. They are also very late maturing so most of the time frost kills the plants. Straight cutting is the most common method of harvesting if the plants are standing. Kabuli (large seeded) chickpeas are the hardest to get quality. These are sold in individual lots and are

subject not only to grade but to buyer preferences. Quality could mean the difference of over one hundred dollars per acre. Not only do buyers want bright white seeds, but they also pay according to size. While you can't control the seed size at harvest you can improve the chances for bright white seeds by monitoring your grain tank often.

Damage

Avoid harvesting when the plants are wet with dew to avoid dirt tagging or if staining is occurring due to wet weeds. Keep all changes in sizes and quality separate.

Green seed in samples is to be avoided or reduced by harvesting only the areas of the field that are fully matured. This also applies to diseased areas, drowned out areas or on soil types that could reduce seed size or quality.

Mechanical Damage:

Because of the size of the seed of the Kabuli types, it's very important to reduce mechanical damage. Harvesting at 18% moisture and air drying to 15% will help reduce chipping and splitting. Make sure your concave has openings large enough to accommodate the seed size. Reduce cylinder speeds to the slowest operating speed without slugging the cylinder. Keep augers running full and slow when handling.

Like peas, you can use high wind speeds to keep the inert material to a minimum.

General Comments

The key is quality at every step of the production of these crops. Take the time at harvest to observe any change in quality in your fields. Plan on some surprises and have a plan to keep different grades separated. Your reputation with the buyers is at stake; discuss these quality issues with him. Taking samples of each truckload at harvest will help determine your marketing strategy. Once harvest is complete, don't forget to monitor the moisture or temperature in the bins.

Following are a few general comments

from experienced producers:

Storing Pulse Crops—Once harvest is done don't forget to monitor the moisture or temperature in the bins. Peas and lentils can heat up quickly. A bad bin bottom or top mixed in with good product can cost both the processor and you a lot of headaches and money. One recommendation from an experienced pea producer was to remove the top 1/4 to 1/3 from each bin when marketing your pulse crops. Instead of emptying one bin take the top product off in each bin before winter. This has helped prevent the molding in bins. Another bin storage problem could be grasshoppers. If you are experiencing high amounts of grasshoppers you will want to pay close attention to your bin in order to prevent the product from rotting.

Unloading Pulse Crops—When unloading peas from your combine you will want to slow the combine down to prevent cracking. When the peas are falling from the combine auger to the truck bed make sure that the peas fall freely without hitting any objects on the way down to the truck box.

Augering Pulse Crops—It is recommended by a fellow pea producer that you want to use a large auger with lots of power. The auger speed should be slow.

The main thing to remember when handling pulse crops is to handle them as little as possible and as careful as possible. Have a good harvest!



North Dakota & Montana Pea, Lentil & Chickpea Buyers

First Purchaser	City	State	Phone	Food Peas	Feed Peas	Lentils	Kabuli	Desi
The Rice Company	Roseville	CA	916-765-8853	x	x	x	x	
KC Trading	Boulder	CO	919-200-4006	x	x	x	x	x
NuVision Commodities Inc	Jean Baptiste	MB	204-758-3401		x	x	x	x
Roy Legumex Inc	St Jean Baptiste	MB	204-758-3597	x	x	x	x	x
Columbia Grain Ltd	Minneapolis	MN	612-349-9950	x				
Commodity Specialist Company	Minneapolis	MN	612-330-9160					
FGSI LLC	St. Louis Park	MN	952-852-2953	x	x	x	x	x
St Hilaire Seed Co	St Hilaire	MN	218-964-5407		x	x		
Thunderbird Commodities	Mohomen	MN	218-935-2772	x	x	x	x	x
American Pulses LTD	Hingham	MT	877-400-0230	x		x	x	x
CHS - Farmers Elevator	Glasgow	MT	406-228-4422	x	x	x	x	x
CHS - Farmers Elevator	Wolf Point	MT	406-653-2512	x	x	x	x	x
CHS - Farmers Elevator	Richey	MT	406-773-5758	x	x	x	x	x
Columbia Grain Ltd	Great Falls	MT	406-453-6506	x	x	x	x	x
Columbia Grain Ltd	Chinook	MT	406-357-2360	x	x	x	x	x
Columbia Grain Ltd	Plentywood	MT	406-765-1778	x	x	x	x	x
Columbia Grain Ltd	Wolf Point	MT	406-653-2810	x	x	x	x	x
Pro Co-op	Opheim	MT	406-762-3231	x	x	x	x	x
PS International Ltd	Chapel Hill	NC	919-933-7400	x	x	x	x	
ADM-Benson Quinn	Underwood	ND	701-442-3204	x	x			
Beach Cooperative	Beach	ND	701-872-3761	x	x	x		
Berthold Farmers Elevator	Berthold	ND	701-872-3761		x	x		
Botineau Farmers Elevator	Botineau	ND	701-228-2294	x	x	x		
Bowman Grain Inc	Bowman	ND	701-523-3173	x				
CHS - McVile	McVile	ND	701-322-4317	x	x			
Dakota Dry Bean Inc	Grand Forks	ND	701-398-3112	x	x			
Dakota Grain Company Inc	Elgin	ND	701-584-2660	x	x			
Dakota Quality Grain Coop	Parshall	ND	701-862-3113	x	x	x		
Falkirk Farmers Elev. Co.	Washburn	ND	701-462-8572	x	x			
Fessenden Coop	New Rockford	ND	701-947-5712	x	x			
Great Northern Ag	Plaza	ND	701-497-3082	x	x	x	x	x
Harlow Coop Elevator & Seed Co	Leeds	ND	701-466-2612	x				
Horizon Resources	Williston	ND	701-774-0228	x				
Hurdsfield Grain Inc	Hurdsfield	ND	701-962-3343		x			
JM Grain	Garrison	ND	701-463-7261	x	x	x	x	x
Legume Matrix LLC	Jamestown	ND	701-252-4757	x	x	x	x	x
Lone Prairie Grain Inc	Rugby	ND	701-776-6711	x	x	x	x	x
New Century Ag	Crosby	ND	701-965-6371	x	x			
North Central Grain Coop	Bisbee	ND	800-450-3263	x				
Paulson Premium Seed and Cond.	Bowman	ND	701-523-5392	x	x	x	x	x
Plaza-Makotii Equity Elevator	Plaza	ND	701-497-3707	x	x	x		
PNC Feed/Harvey Farmers Elevator	Harvey	ND	877-762-2697		x			
Premier Pulses Int	Minot	ND	701-837-4777	x	x	x	x	x
Renville Elevator Company	Tolley	ND	701-386-2457x	x	x	x		
Scranton Equity Elevator	Scranton	ND	701-275-8102	x	x			
SK Food International	Fargo	ND	701-356-4106	x	x	x	x	x
Souris River Grain Co-op	Newburg	ND	701-272-6179	x	x			
Souris River Grain Co-op	Antler	ND	701-267-3342		x			
Steele Farmers Elevator	Steele	ND	701-475-2334	x	x	x		
Stone Mill Inc	Richardton	ND	701-974-2106				x	
Sunprairie Grain	Minot	ND	800-735-4956	x				
United Pulse Trading Inc	Bismarck	ND	701-751-1623	x	x	x	x	x
Viterra	Ray	ND	701-568-3315	x	x	x	x	x
West Dakota Feed and Seed	Ross	ND	701-755-3207	x	x			
Wildrose C&D	Wildrose	ND	701-539-2338		x	x		
Wilton Farmers Union Elevator	Wilton	ND	701-734-6780	x	x			
Woodworth Farmers Grain Co	Woodworth	ND	701-752-4143	x				
Howe Seeds Inc	Mobridge	SD	605-845-5892	x	x	x	x	x
Fill-More Seeds Inc	Fillmore	SK	306-722-3353	x	x	x	x	x
Keyser Farms	Cupar	SK	306-723-4949	x		x		
Simpson Seeds Inc	Moose Jaws	SK	306-693-2132			x	x	
Guinn Trading	Brush Prairie	WA	360-896-3822	x				
Maviga NA, Inc	Spokane	WA	509-747-6000	x	x	x	x	x
Spokane Seed Co	Spokane	WA	509-535-3671	x		x	x	

Note: List established by the Northern Pulse Growers Association