NORTHARVEST

BeanGrower

Flying Planes, Farming Plains: Jason and Sara Hinkle, Cavalier ND

Volume 13, Issue 4 www.northarvestbean.org Summer 2007

Cushion Shank 12 Row-30 w / Semi-end Delivery

Adjustable hydraulic gauge wheels for precise rod depth (adjust on the go).

Maneuverability w / the new Swivel Gear Box and Swing Tongue. Move your Combine into position on the go at Full RPM.

PICKETT EQUIPMENT

Ask your local authorized Pickett Dealer for Pre-season early buy in November & December

www.pickettequipment.com
1-800-473-3559

High Clearance, 18,500 lbs, High Capacity Dump Bin

Twin Master Combine

Built with the capacity you've been looking for.

NORTHARVEST
BeanGrower

OFFICIAL PUBLICATION OF THE NORTHARVEST BEAN GROWERS ASSOCIATION

Volume 13, Issue 4 Summer 2007

Features

Departments

Dry Bean Fact

After hitting a recent low in 2004, disappearance (also known as net domestic use, which is a proxy for consumption) of dry edible beans increased for the second consecutive year in 2006 (calendar year estimate) to 1.9 billion pounds. Despite the smaller crop in 2006, larger carry-in stocks from the 2005 crop, greater imports, and restraint in dry bean price gains helped support increased demand from both foreign and domestic consumers. Per capita net domestic use of dry beans increased 4% to 6.4 pounds—up 0.4 pound from the low of 6.0 reached in 2004 after 5 consecutive annual declines in per capita use.

COVER: Jason and Sara Hinkle, Cavalier, N.D. (*photo: Tracy Sayler)*

The Northarvest Bean Grower is published five times a year by the Northarvest Bean Growers Association, 50072 E. Lake Seven Road, Frazee, MN 56544, Phone: (218) 334-6351, Website: www.northarvestbean.org, Email: nhbean@loretel.net.

Send advertising materials and questions about the magazine, to Marlene Dufault, Prairie Ag Communications, 2607 Wheat Drive, Red Lake Falls, MN 56750, 218-253-4391. Email: mdufault@gvtel.com. Send editorial information to Tracy Sayler at tsayler@casselton.net.

BeanBriefs

Northarvest to form bean health advisory council

Northarvest is in the formative stages of establishing a Scientific Advisory Council, a body of experts that would advise the association on health benefits of dry edible beans and recommend further research into the benefits of increased bean consumption. The Association would benefit from this effort by improving its health communications leading to FDA-approved statements regarding edible beans, aiding consumers in making healthier choices to include edible beans in their daily foods. The effort is designed to be a two state cooperative project, involving both North Dakota and Minnesota. The state of N.D., under the federal subsidized Specialty Crop Grant process, has approved nearly $20,000 for the project, and similar funding from Minnesota is anticipated. Upon full funding, the project is expected to get underway later this year.

Northarvest, MN ND Councils set leadership

Gary Paur, Gilby, N.D., was recently reelected as president of the Northarvest Bean Growers Association. Jon Ewy, Deer Creek, Minn., was reelected as vice president, and Mark Streed, Milan, Minn., as treasurer.

Tim Smith, Walhalla, has been reelected director representing District 1 (Towner, Cavalier, Pembina Counties) of the N.D. Dry Bean Council. Jason Mewes, Colgate, was elected to the board of directors representing District 4 (Griggs, Steele, Traill), replacing Mike Beltz, Hillsboro.

Paul Johanning, Park Rapids, has been elected to the board of the Minnesota Dry Bean Research and Promotion Council, representing Area 2 (north central and northeastern Minn). He replaces Mike Beelner, Menahga.

Kandel named NDSU extension agronomist

Hans Kandel has been named extension agronomist at North Dakota State University, replacing Duane Berglund, who recently retired. Like Berglund, broadleaf crops will be Kandel's primary outreach emphasis. Kandel is well known in his previous position as University of Minnesota regional extension educator in northwest Minnesota. Kandel's email: hans.kandel@ndsu.edu

Markell new NDSU extension plant pathologist

Sam Markell is the new NDSU extension plant pathologist, replacing Carl Bradley who left last year for his native Illinois. Markell will focus his outreach efforts on broadleaf crops. Markell is a Minnesota native, who did his undergraduate work at NDSU (where he was also an offensive lineman for the Bison). He received his Ph.D. in plant pathology at the University of Arkansas. His email address is samuel.markell@ndsu.edu

NDSU hires pulse/bean pathologist

Rubella Goswami has been hired assistant professor of plant pathology at NDSU, focusing on pulse and bean research. She earned her BS degree at the Institute of Agricultural Sciences, Banaras Hindu University, India; MS at the University of Nottingham, UK; and Ph.D. from the Department of Plant Pathology, University of Minnesota. Her background in plant pathology includes experience in molecular biology as well as plant tissue culture and transformation.

Concerned Cuban Leader: "Can you produce ethanol from beans?"

During a trade mission to Cuba this spring led by Nebraska's governor and including over two dozen agribusiness representatives from Nebraska, ethanol came up during a discussion. Ricardo Alarcon, president of the Cuban People's Congress, and widely regarded as the number three man in the country, had heard about Nebraska's booming ethanol industry, and wanted to make sure Nebraska couldn't use dry edible beans to make the renewable fuel. There is concern, since beans are a staple part of the Cuban diet. "I just asked him (Neb. Gov. Dave Heineman) a very specific and direct question: 'Can you produce ethanol from beans?'" explained Alarcon. "And I was happy to learn, so far, that's impossible." Nebraska is the top producer of Great Northern beans in the U.S. *(reported by Peter Shinn, of the Brownfield Network)*

Beans for batting practice

In a Newsday (New York) article at Mothers Day, Mets catcher Paul Lo Duca related the pain of losing his mother and biggest fan, Luci Lo Duca, to ovarian cancer in 1996, two years before he made it to the big leagues. The Lo Ducas lived in Phoenix, where baseball is played year round, Newsday's Barbara Barker writes, and Luci constantly was reading and talking to people about ways to help her sons excel. Her most brilliant drill involved pinto beans.

Barker writes that Luci got the idea that if her sons could learn to hit tiny, irregularly shaped beans, making contact with a regulation baseball would be a cinch. The only downside was that the beans were hard and stung her when Paul hit them back. Luci eventually solved the problem by wearing oversized sunglasses and an old fur coat for protection, which had to be quite a sight in the Arizona desert.

Psychology Today: Beans a good source of brain-boosting copper

Psychology Today pointed out in its April issue that pinto beans don't just make a delicious seven-layer dip – they may be good for your brain, too. According to new USDA research, store-bought pinto beans are a good source of dietary copper, with a cup providing almost 20% of your daily needs. The nutrient is known to be important for transporting oxygen in blood, and findings from the Washington University School of Medicine in St. Louis suggest copper might also play a role in learning and memory. Scientists found that copper is partly responsible for controlling the strength of connections between neurons. These findings bolster previous research showing that copper deficiency can impair brain development and function, and may also be associated with the development of Alzheimer's disease. *(Lydia Fong/Psychology Today)*

USDBC urges Congress to maintain food aid

USDBC president Cindy Brown, who grows and processes edibles with her family near Menomonie, Wis., recently testified before the Senate Ag Appropriations Committee, urging lawmakers to maintain the current system of international food aid, rather than convert it to a cash-based assistance program.

"My purpose in testifying is to strongly support continuation of time tested and effective in-kind U.S. produced commodity donations; to strongly oppose the ill-conceived proposals that would diminish our present programs by transferring scarce program funds for the purpose of overseas commodity purchasing; to strongly support maintaining the structure and delivery of our existing food aid programs; and to ask that they be funded at levels, which, at a minimum, will maintain historical tonnage volumes," she said.

Brown testified that some (such as U.S. export competitors) want the U.S. to move away from in-kind food aid donations, alleging that in-kind food aid is inefficient and can lead to wasted food aid resources. However, she pointed to an analysis by Joel Toppen of Hope College (Michigan) which suggests that a policy shift could in fact result in fewer food aid dollars – that politically, there is more support for direct food aid rather than a cash handout.

In-kind commodity donations have been at the core of U.S. food aid programs since their inception, she said, a win-win for both American growers and much of the world's hungry, as well as victims of natural disasters and other emergency situations.

"Annual commodity availability determinations by USDA and in-country determinations to avoid commercial displacement ensure that little, if any, commercial market impact occurs due to the use of U.S. grown and processed agricultural products for in-kind humanitarian Donation," Brown testified. "Farmers, processors, shippers, and the taxpaying public have long strongly supported the U.S. being the leader in international humanitarian food aid, in large part because of the visability of our in-kind donations. ■

USDBC Approves New Promotional Logos

The U.S. Dry Bean Council Board of Directors in May approved new logos for use in domestic and international promotion efforts. The logos were developed by a subcommittee of Health and Promotions Committee and International Programs Committee members.

Old Logo

UNITED STATES DryBean Council
Quality Grown in the U.S.A.

New Logos

US DRY BEAN Council

BEANS FOR HEALTH

The Fight for FAV

Dry bean leaders are optimistic about the industry's number one farm bill priority – retention of the fruit and vegetable (FAV) planting restriction for non-program crops on program crop acres.

By Tracy Sayler

U.S. and Northarvest dry bean leaders are optimistic about the dry bean industry's number one farm bill priority – retention of the fruit and vegetable (FAV) planting restriction for non-program crops (including dry beans) on program crop acres. Particularly in light of the stalled World Trade Organization ag negotiations.

The FAV provision is a carryover of the 2002 Farm Bill, stemming from the 1995 "Freedom to Farm Act." The planting flexibility provision permits any commodity to be grown on contract acreage, except fruits and vegetables, including dry edible beans and potatoes. Some exceptions are made for fruits and vegetables, with an acre-for-acre loss of payment.

There were some concerns that continuing the FAV provision in the new farm bill may be challenged as trade distorting in the WTO – since it restricts the planting of certain crops on direct payment acreage, critics claim, it thus influences production decisions.

However, the U.S. dry bean industry asserts that there is no determinative ruling about planting restrictions within the WTO. How rules applying to the farm bill concur within the context of the WTO is further muddled by the impasse of the current Doha Round of negotiations.

It's an impasse that doesn't look to be resolved soon. A dozen national farm and commodity groups sent a letter to the Bush Administration in early June, urging the President to remain firmly in support of the U.S. proposal that reductions in domestic support for U.S. agriculture must be met by commensurate gains in market access and reductions in trade-distorting policies by trading partners. The groups reminded U.S. negotiators that the agriculture community will not support deeper cuts than already proposed.

Photo: House Committee on Agriculture

House Agriculture Chairman Collin Peterson of Minnesota addresses members of the media alongside Ranking Member Bob Goodlatte of Virginia at a May 17, 2007, press conference to kick off the Farm Bill drafting process. The current farm bill was written in 2002, and many of the provisions in that bill will expire in September of 2007. Updates on establishing a new farm bill can be found on the House Ag Committee's web site, http://agriculture.house.gov.

Mike Beltz, a Hillsboro, N.D., dry bean grower and vice chair of the U.S. Dry Bean Council's agricultural issues/government affairs committee, says that while the FAV planting restriction has been beneficial to all non-program and specialty crops in the Northern Plains, it is most important to dry bean growers, since dry beans are typically grown in rotations with or in areas where major program crops are grown.

Further, unlike other non-program crops or specialty crops, there are very few, if any, economic barriers to entry in converting program crop acres to dry bean production. Other non-program or specialty crops, most of which are perishable, typically require high levels of investment in equipment to plant, maintain, harvest, and store the crop, along with technical expertise, marketing channels, and specialized labor needs. Such economic barriers to entry do not exist with dry bean production. Any existing farmer with equipment to plant and harvest grains, such as soybeans and corn, can use the same equipment to plant, tend and harvest dry beans.

Eliminating the planting restriction would disadvantage the historical dry bean grower by subsidizing a likely new significant level of dry bean production on program acres, the U.S. dry bean industry asserts. Further, stripping the farm bill of the FAV provision would permit unfair competition from subsidized program crop acreage against unsubsidized non-program crop acreage, and would likely result in a severe disruption of the present delicate supply/demand balance and the present open and competitive market for dry beans.

Key farm state lawmakers are aware of and are supportive of maintaining the FAV provision, says Beltz, including House Ag Committee Chair Collin Peterson.

Other specialty crops support preserving FAV

It helps that the dry bean industry isn't alone in its fight to maintain the FAV provision – other specialty crops are concerned too, including the potato, fruit, and vegetable industries. Over a dozen state and national specialty crop groups commissioned the market research firm, Informa Economics, to analyze the effect of removing planting restrictions on program crop base.

Given the inelastic demand conditions that tend to characterize most specialty crop markets, even modest increases in supply can have proportionately much larger impacts on prices and total revenues, concluded authors of the Informa analysis, completed in February.

For all specialty crops, even small changes in supply – given the small acreage already devoted to specialty crop production – could have large market impacts. With over 220 million acres of land currently enrolled in the Direct and Counter-Cyclical program, if only 1% of this land shifted to specialty crops, it would translate into a more than 20% increase in specialty crop acreage.

The Informa analysis found that removal of the planting restrictions is expected to at-

Continued on Next Page

tract about 1.03 million acres into production of specialty crops. While this accounts for less than one half of 1 percent of the total program crop acreage base, it represents a 10% increase in total specialty crop acreage. The 15 states where the greatest expansion of acreage is expected alone account for about 88% of the new specialty crop acreage.

Informa concluded that the greatest potential for new specialty crop acreage is in California, reflecting the already large and diverse specialty crop industry that resides there. However, the states with the largest percentage increase in specialty crop area include Idaho and Colorado. Especially in Idaho, this represents almost entirely new potato acreage.

With the possible exception of Illinois, there is little specialty crop acreage expansion expected in most Corn Belt states, reflecting the competitive dominance of program crops in these areas and limited existing acreage and infrastructure for specialty crops.

Using conservative methods, Informa found that the estimated increase in supply would reduce the revenues of existing specialty crop producers by slightly over $3.1 billion per year, relative to levels with the planting restrictions remaining in place. This represents solely a decline in revenue to existing producers of specialty crops, and does not consider the increases in specialty crop revenues expected by those program crop producers expected to enter the industry or expand existing specialty crop production.

USDA analysis on dry beans

A USDA analysis projects that if planting restrictions in the U.S. farm program were eliminated, program participants would expand dry edible bean plantings by about 83,000 acres. Non-participants would reduce dry bean plantings by 56,000 acres, leaving a net increase of about 27,000 acres.

The price of dry edible beans would subsequently decline, reducing gross returns per acre, while prices and gross returns per acre would rise slightly for other crops. "Dry beans are unique for two reasons," the authors of the USDA analysis wrote: "1) they have more area devoted to them than area for any other fruit and vegetables, and 2) many producers could easily expand production because they already have the experience and equipment needed to produce dry beans."

The USDA authors say several points emerge clearly from their analysis:

- Eliminating planting restrictions induces a shift in planting of dry edible beans. Dry bean acreage would expand for program participants and decline for non-participants.
- A net increase in dry bean acreage would push down the average return per acre. Plantings of other crops simultaneously would decline slightly, and prices would increase slightly.
- Program participants would not necessarily gain market revenue from the policy change. Price declines for dry beans would negate some of the potential gain from planting flexibility. The effect on non-participants would also be ambiguous, with losses in revenue from dry beans offset (in part) by gains in revenue from other crops.

The USDA Economic Research Report (No. ERR-30, 54 pp, Nov 2006) can be found online at www.ers.usda.gov/publications/err30.

In the event that the U.S. FAV would be eliminated, the dry bean industry (and likely other specialty crops) would seek some sort of offsetting direct economic compensation to dry bean producers with a proven history of production. But industry leaders hope it doesn't come to that.

"There's no sure thing when it comes to politics," says Beltz, "but there seems to be a sense that we can maintain the fruit and vegetable provision." ■

Anthracnose on Leaf

Anthracnose on pods

Rust

White Mold Apothecia

White Mold

Scouting and Managing the "D Word"

It's been a wet start to the growing season, so keep an eye on what may be the most dreaded D word in dry edible bean production – disease

Was it just last summer that we were talking about the dreaded "D" word – drought? For many in the Northarvest growing area, rain this spring has resulted in opposite D words – drizzle, dampness, downpours, delays, and a few D-lettered cuss words we won't get into here.

We don't know what the rest of the growing season will bring, but the way things are starting off, we'll need to keep an eye on what may be the most dreaded D word in dry edible bean production – disease.

Keep in mind that seed treatments will help protect the plant from root rots during germination and early growth, but generally do not offer protection against foliar diseases. As well, be extra vigilant about scouting for diseases when planting bin-run seed. Using bin-run/saved seed may increase your risk of seed-borne diseases, and may leave a crop more vulnerable to key diseases such as anthracnose.

Here's a run-down of key diseases that can affect dry beans:

Anthracnose

Anthracnose can cause symptoms on the foliage, pods, and seeds. Symptoms on leaves appear as reddish-brown lesions that occur on the leaf veins on the underside of the leaf. Pod symptoms appear as sunken tan lesions with dark borders.

Avoid cultivating plants when wet; this helps prevent spread of pathogens, especially bacterial pathogens and anthracnose.

Fungicides labeled to control anthracnose include Bravo, Echo, Amistar, Quadris, Quadris Opti, Headline, and Thiophanate methyl products (Topsin).

Common blight

Common blight can be spurred in part by hail and damaging winds. Because common blight is caused by a bacteria, only the copper-hydroxide bacteriacides (Basicop, Champ, Kocide) will provide some control of this disease. In regular production fields, protection against common blight may not be needed; however, in seed production fields, an application of a copper-hydroxide compound may help reduce the number of pods with common blight lesions.

Common bean rust

Common bean rust can be a problem on susceptible varieties if conditions are right for the disease. Because new races can be introduced or can evolve that might be able to overcome these resistant genes, it is a good idea to keep an eye out for rust even in fields planted to resistant varieties. Many resistant varieties are available in common market classes such as pinto and navy, however, few to none of the varieties in special market classes such as small red and pink are resistant.

A fungicide may be needed to control common bean rust on susceptible varieties. All fungicides registered for rust control on dry bean should be applied prior to onset of disease for maximum efficacy. Many of the same products labeled for control of anthracnose are labeled for rust control as well, with the exception of thiophanate methyl products.

The same fungicides used to control common bean rust are also effective against Asian soybean rust. Asian

Continued on Next Page

soybean rust is primarily a soybean disease; however, dry bean is also a known host, although preliminary USDA research indicates dry beans as a whole appear to be less susceptible than soybeans. Asian soybean rust causes much smaller lesions and pustules compared to common bean rust.

White Mold

Weather is the key factor that determines how bad white mold will be in a given year. Soil moisture is needed for the small mushroom structures, known as apothecia, to emerge from the soil and release ascospores. Wet foliage provides a conducive environment for disease progression to occur more rapidly. If conditions around the time dry bean plants are flowering are cool and wet, then the potential for white mold problems is increased.

Keeping an eye on the weather and scouting just prior to and during bloom will help with spray decisions. The apothecia that release ascospores grow from sclerotia in the soil after the top 3 to 4 inches of soil have remained moist for 10 to 14 consecutive days.

Fungicides can help manage white mold, but timing is critical – protect the flowers where infection occurs. Research conducted at the University of Minnesota to determine the potential for a fungicide to be profitable on dry bean when total moisture (rainfall and irrigation) from June 1 until 10 days into bloom was recorded showed that:

- 3 to 5 inches = fungicide profitable 20% of the time
- 5 to 7 inches = fungicide profitable 67% of the time
- 7+ inches = fungicide profitable 85% of the time

Fungicides can be applied by air, ground, or fungigation. For ground application, a pressure of 100 psi along with the use of drop nozzles may allow for better coverage and control. For application by air, spray volumes of 7 to 10 gallons per acre may provide for the best coverage and control. See labels and/or consult with an agronomist for more specific application details.

Fungicides registered for control of white mold on dry bean include:

Endura – Apply at the beginning of flowering, prior to disease onset. Use higher rate for extended protection. Make a second application at full bloom if conditions continue to be favorable for disease development.

Switch 62.5 WG – Make first application at 10-20% bloom. A 2(ee) label allows Switch to be applied in tank mix with Thiophonate-methyl for improved white mold control.

Rovral 4F – Apply at first bloom (10% of plants with 1 open blossom) and again at peak bloom, if needed. Do not apply after full bloom. Use 50-100 psi and 3 nozzles, 1 over the row and one on each side. If pH of spray water exceeds 7.0, buffer it to phH 5.0-7.0.

Thiophanate-methyl products (such as Topsin M) – Ap-

Preventative vs Curative Fungicides

Foliar fungicides labeled for use in dry beans are preventative, used as protectants to prevent disease spore germination, before the disease begins to develop. Labeled preventative products include the strobilurin fungicides (ie Quadris, Headline) and chlorothalonil fungicides (Bravo, Echo). Preventative fungicides work differently than curative fungicides which can be applied immediately after spores germinate and begin to develop. Preventative fungicides help protect against infection but do not cure established infections. They should be used to prevent infection or at the first sign of disease to prevent additional infections. The strobilurin fungicides have both preventative and curative fungicidal properties. ■

ply 1.5-2 lbs once when 70-100% of the plants have at least one open blossom. Or apply 1-1.5 lb twice with the first application when 10-30% of the plants have at least one open blossom and the second application 4-7 days later.

Proline 480 SC – Apply at first sign of disease. Use higher rate when conditions are favorable for severe disease pressure and/or when growing less disease resistant varieties.

The Effect of Headline on Dry Bean Plant Health

There have been some observations that Headline fungicide (pyraclostrobin) may offer improved plant health benefits that go beyond disease control. BASF, maker of the fungicide, explains in its product literature for soybeans that the product improves plant health by:

Improving plant growth efficiency – more efficient use of carbon and nitrogen within the plant.

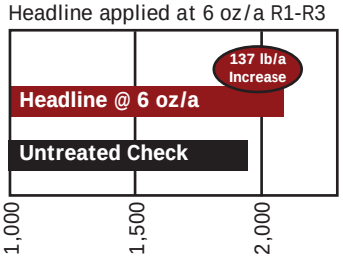
Increased tolerance to stress – helps the plant protect itself from stress, which can reduce yield by triggering a survival mechanism in which plants respond by concentrating on reproduction at all costs – resulting in fewer and smaller seeds. Headline suppresses ethylene, a plant hormone responsible for early leaf drop and accelerated maturity.

Disease control – helps prevent energy loss from disease.

BASF has conducted on-farm trials which indicate that Headline has a variable but overall positive effect on plant health and yield in dry beans (see graphic below).

Continued on Next Page

Dry Edible Beans
2004-2006 BASF Data
64 on-farm locations (ND/MN).
Headline applied at 6 oz/a R1-R3



Dry Bean Growth Stages

Knowing and anticipating the growth stage of your dry bean crop will help in making treatment and management decisions.

Stages of vegetative and reproductive development in determinate bush (Type I) and indeterminate (Type III) dry bean.

Stage Number	GENERAL DESCRIPTION* Vegetative Stages	Days from Planting**
V1	Completely unfolded leaves at the primary (unifoliolate) leaf node.	10
V2	First node above primary leaf node. Count when leaf edges no longer touch.	19
V3	Three nodes on the main stem including the primary leaf node. Secondary branching begins to show from branch of V1	29
V(n)	n nodes on the main stem, but with blossom clusters still not visibly opened.	A new node each 3 days
V5	Bush (determinate) plants may begin to exhibit blossom and become stage R1.	50
V8	Vine (indeterminate) plants may begin to exhibit blossom and become stage R1.	40
	Determinate BUSH (Type I) Reproductive Stages	
R1	One blossom open at any node.	50
R2	Pods ½-long at first blossom position. Usually node 2 to 3.	53
R3	Pods 1 inch long at first blossom position. Secondary branching at all nodes, so plant is becoming denser but not taller, ½ bloom.	56
R4	Pods 3 inches long — seeds not discernible. Bush types may be shorter.	59
R5	Pods 3-4 inches. Seed discernible.	64
R6	Seeds at least ¼ inch over long axis.	66
R7	Oldest pods have developed seeds. Other parts of plant will have full length pods with seeds almost as large as first pods. Pods will be developed over the whole plant.	72
R8	Leaves yellowing over half of plant, very few small pods and these in axils of secondary branches, small pods may be drying. Point of maximum production has been reached.	90
R9	Mature, at least 80% of the pods showing yellow and mostly ripe. Only 40% of leaves still green color.	105
	Indeterminate VINING Plant (Type III) Reproductive stages	
R1	One blossom open at any node. Tendril will begin to show.	40
R1	Pods ½ inch long at first blossom position (node 2 to 5 most plants). Blossom would have just sloughed.	43
R3	Pods 1 inch long at first blossom position. Pods are showing at higher nodes when blossom sloughs, ½ bloom.	46
R4	Pods 2 inches long at first blossom position.	50
R5	Pods 3 plus inches long, seeds discernible by feel.	56
R6	Pods 4.5 inches long with spurs (maximum length). Seeds at least ¼ inch long axis.	60
R7	Oldest pods have fully developed green seeds. Other parts of plant will have full-length pods with seeds near same size. Pods to the top and blossom on tendril, nodes 10-13.	70
R8	Leaves yellowing over half of plant, very few small new pods/blossom developing, small pods may be drying. Point of maximum production has been reached.	82
R9	Mature, at least 80% of the pods showing yellow and mostly ripe. Only 30% of leaves are still green.	94

* Adapted from: Growth stages according to Marshall J. Lebaron (University of Idaho, College of Agriculture, Current Information Series No. 228, April 1974).
** Approximate number of days. This will vary from season to season, variety to variety and location.

Effect of Headline
from page 11

BASF research on the effect of Headline on plant health continues this summer. NDSU extension plant pathologist Sam Markell cautions against applying Headline or any other strobilurin fungicide for the sole purpose of attempting to improve plant health – the intention of the product is to prevent disease, and in the absence of disease, the expense of a fungicide may not be justified. Markell says little data on fungicide applications for plant health on dry bean exist, and replicated trials with Headline and/or other strobilurins would have to be conducted before such an application could be recommended. ■

The Northarvest Bean Grower magazine is interested in hearing from bean growers who might have observations this summer on this issue. Take a digital photo or two if you can, and jot a few notes down about application timing, rate, and plant stage. Email us at nhbean@loretel.net – we'll do a follow-up feature in a future issue.

Online Dry Bean Production Links

NDSU Crop Production Page - with links to 2007 NDSU Herbicide, Fungicide, and Insecticide Guides, as well as other crop production bulletins and NDSU's weekly crop/pest report: www.ag.ndsu.nodak.edu/cropprod.htm

Northarvest Bean Growers Association Research & Production Library: www.northarvestbean.org/html/research.cfm

U of M Northwest Research and Outreach Center – see link to crop pest report updated weekly during the growing season on the home page: http://nwroc.umn.edu (click on 'Cropping Issues of NW Minnesota') ■

What We've Learned about the Bean Industry and Other Things (So Far)

Flying Planes, Farming Plains
Jason and Sara Hinkle, Cavalier, N.D.

By Tracy Sayler

If you think it gets hectic on your farm, try operating an aerial spray business too, as well as substitute teaching, selling real estate, and raising three children – Daniel, Trevor and Levi – all under the age of five.

Jason and Sara Hinkle farm about 2,200 acres of wheat, soybeans, pinto beans, and sugarbeets near Cavalier, N.D. Jason's younger brother Justin farms some additional land with them, and operates one of the two planes the Hinkles have in their spraying business.

Jason and Sara have operated Hinkle Airspray Inc. since 1993. Their successful balancing of a young family and two farm businesses has earned them recognition: The North Dakota Department of Agriculture and the North Dakota Agricultural Association recognized the Hinkles with the Outstanding Pesticide Applicator of the Year Award in 2005.

Sara was recognized as Red River Valley Farm Woman of the Year at the 2005 Harvest of Knowledge Agri-Women convention. Last year, she was a finalist for Farm and Ranch Guide's "Country Woman of the Year." The kicker is that Sara didn't even grow up on a farm. She grew up about 15 miles away, and was introduced to farming when she started worked summers for Jason's aerial spraying and farming operation. In Sara's words:

Jason and Sara Hinkle (and their dog Sasha) in the hangar of their business, Hinkle Airspray of Cavalier, N.D.

It's tough this time of year (with the kids). When we're farming and have airplanes going, it's just too dangerous for them around here. We have daycare during the day and both sets of grandparents are around in the evening, so that's really nice. We don't see them much when it gets busy but we have to work when we can work and spend quality time with them when we can.

I drive truck, cultivate, and everything in between (Sara has a commercial driver's license). I do the bookwork (she has a college background in business education and business management), Jason's brother Justin handles all the row crop, and Jason the wheat and soybeans, the crops we solid seed. On the spray side, I take customer orders, and load the planes with fuel and chemical.

Jason and Justin fly the planes. Their dad had his own plane to spray his crops, and Jason always wanted to be a spray pilot. Then Justin got into it too. They both studied ag aviation at the University of Minnesota

Continued on Next Page

Crookston.

I used to worry, but not anymore. They both have medicals every year and the planes are annualized, and inspected every 100 hours. They run good equipment from a respectable company and the planes are well maintained.

Our customers are our first priority. This is a pretty important business for us, so the customer's crop gets sprayed first, then we do ours. We just work really hard to get it all done.

The key to balancing it all is in the help that you get. Ours is a family operation, and we can depend on each other to get things done. We also have a farm hand and another who helps mix chemical for spraying. They're both trained in Worker Production Standards.

We've had to adjust our per acre rate because of fuel. I don't feel that we overcharge. The guys understand, because they have the higher fuel prices too.

There's more ground spraying by farmers themselves. That's a trend we're seeing, with less applied by air. It will get even more interesting when Roundup Ready beets come out. I think that will really affect the aerial applicator in the Valley.

But we can go when ground sprayers can't. You can keep up with timely treatments and get a treatment on fast. There are still pluses with aerial spraying.

We need to know what's around that crop. We depend on the customer to let us know about their crop and surrounding crops. If there's an opposing crop on the east side that we would kill with spray drift, we need to know that so Jason or Justin can make adjustments for wind direction.

I'm a substitute teacher and sell real estate. I enjoy being busy I guess. Jason's busy fixing things in the winter.

Jason's dad grew pintos for a long time, and Jason has continued with it. He picks things up about the crop from the bean guys in town and from other farmers. He's good about asking questions and tries to do things right. For the most part, it's been a good crop for us.

The farming or the spraying, I can't pick a favorite. The spraying business is more intense, and sometimes it's nice to have some solitude in the tractor for awhile. I really enjoy them both. We're surrounded by family every day, so it's pretty great. ■

Bush's Beans organizes 'Moms and Kids' Panel

Bush's Beans recently launched a national search for 50 moms and kids to test recipes and share their best veggie tips. The goal? Figure out what pleases both in the mission to bring good health and great taste together on the plate.

The panel's founding member is registered dietitian and mom Connie Guttersen, instructor at the Culinary Institute of America and author of "The Sonoma Diet." As a working mother of two, she brings firsthand experience to this effort. Guttersen created bean recipes with her children, and will turn them over to the panel to make, taste and rate.

"My children are 6 and 10. One of the biggest challenges has been getting my 6-year-old son to like eating vegetables. I know how important it is to feed my family healthy, tasty foods – especially vegetables – that they will actually eat and enjoy," said Guttersen. "That's why beans are so great!"

Beans really are "The Vegetable with More™." They are packed with nutrients including fiber, folate, potassium and antioxidants, are low-fat, cholesterol-free and an affordable source of protein. With their great taste and versatility, they add variety to any healthy diet.

Members of the Moms and Kids Panel will receive a grocery allowance in exchange for participation, with an application deadline by June 28 at www.bushbeans.com.

Founded in 1908, Bush Brothers & Company is based in Knoxville, Tenn. ■

The Pros and Cons of Dry Bean Desiccants

A dry bean desiccant can help evenly dry down the crop and weeds to hasten harvest. For some growers, desiccation permits direct harvesting, allowing them to skip the steps of knifing and windrowing.

However, keep in mind that a desiccant doesn't speed up crop maturity; it just shortens the time between maturity and harvest. Thus, the crop must be physiologically mature (ready to swath) before a desiccant is applied.

There are three products currently labeled for preharvest application in the Northarvest region, and all three have their drawbacks.

The drawback with Roundup (glyphosate) is that it's labeled for late season weed control in edible beans, and is not labeled for use as a crop desiccant. NDSU notes to apply glyphosate after dry bean pods have turned yellow and leather in texture; at hard dough bean seed stage and 30% or less seed moisture. Allow a 7 day preharvest interval, and do not apply to dry beans grown for seed, because reduced germination/vigor may occur.

The drawback with paraquat (Gramoxone Max, Gramoxone Inteon) is that it's a restricted use pesticide. Aim (carfentra-

Continued on Page 16

NDSU 2002 Desiccant Trial Results

	Leaf desiccation			Vine desiccation	
Treatment	3*	7	10	7	10
			%		
Gramoxone Max	79	82	89	71	74
Glyphosate	68	73	74	71	74
Aim	73	73	74	63	68
Untreated	55	65	68	51	55
LSD (0.05)	7	3	4	3	3

*Days after application
Experimental/unlabeled products not listed

NDSU 2003 Results: Hatton and Prosper

	Leaf desiccation			Vine desiccation		Moisture
Treatment	3*	7	10	7	10	7
			%			
Gramoxone Max	71	77	83	40	60	14.1
Glyphosate	68	75	82	39	58	16.8
Untreated	67	71	75	34	54	20.5
LSD (0.05)	3	2	2	4	3	3.5

*Days after application
Experimental/unlabeled products not listed

2005 Results, NDSU Tests with Aim

	Leaf desiccation			Vine desiccation	
Treatment	5*	7	14	7	14
			%		
Aim + PO - 1 oz.	60	62	79	15	27
Aim + PO - 2 oz.	66	64	73	17	23
Aim + PO - 3 oz.	70	71	78	22	33
Aim + PO - 1/1 oz.	61	63	71	12	25
Aim + MSO - 1 oz.	65	67	75	17	28
Aim + MSO - 2 oz.	73	74	75	18	30
Aim + MSO - 3 oz.	77	79	83	22	35
Aim + MSO - 1/1 oz.	65	67	85	13	29
Untreated	35	37	55	16	20
LSD (0.05)	2	2	2	9	3

NDSU 2006 Results - Hatton

	Leaf desiccation			Vine desiccation	
Treatment	3*	7	10	7	10
			%		
Gramoxone Max	86	93	96	53	73
Glyphosate	66	78	84	18	35
Aim + MSO - 2 oz.	71	77	79	25	30
Aim + Renegade	68	73	78	20	30
Aim + Dyne-Amic	72	77	81	20	33
Untreated	43	53	58	5	9
LSD (0.05)	4	5	13	7	5

zone, + MSO adjuvant) is not a restricted use pesticide, but the drawback with Aim is that it does poorly with vine desiccation (see tables, from NDSU data).

NDSU extension weed specialist Richard Zollinger notes that research trials with Aim in 2005 indicated that the product at 1 oz/ac usually gave similar desiccation as paraquat at 1 pt/ac, but Aim at 2 oz/ac + MSO gave around 5% greater desiccation than paraquat.

Other observations from the trials in 2005:

Aim applied with MSO at 1 qt/ac usually increased desiccation as compared to adding petroleum oil (COC) at 1 qt/ac.

Aim at 2 oz/ac gave about 10% greater desiccation than 1 oz/A at 5, 7, and 14 days after application (DAA) (61/73, 63/74, and 71/75).

All experimental treatments with Aim did not dry vines down much better than the untreated check.

NDSU advises applying both paraquat and Aim when at least 80% of pods are yellow/brown. Apply when no more than 40% (bush type beans) or 30% (vine type) of the leaves are still green.

Sequential applications may be needed, and thorough coverage is essential. Allow a seven day pre-harvest interval for paraquat and three days for Aim.

Zollinger notes that the desiccants can be expected to perform more effectively in warm, sunny conditions compared to cloudy, cool conditions.

Consult with an agronomist well before harvest about the pros and cons of using a desiccant. ■

One more year without Valor

The good news is that a label for Valor (flumioxazin) is anticipated to be registered for dry bean desiccation use in 2008. The bad news is that a label isn't expected for use during the 2007 growing season.

With other desiccant products (Aim, paraquat) already available, Section 18 'emergency' label exemption can't be justified, says Jim Gray, pesticide registration coordinator with the N.D. Department of Agriculture.

At the last Northarvest Bean Day, Gray warned growers tempted by off-label use of Valor this season. "Remember, there's no tolerance, no acceptable level of active ingredient established yet. If a batch of beans is tested, by a processor elevator or FDA, and they find any detectable flumioxazin (the product ai), those beans are deemed unsafe to be used as a food or feed source," he says. "So think not only about the risk as an individual farmer, but what it could do to the reputation of the dry edible bean industry."

Gleanings from Recent U.S. Dry Bean Council Trade Missions

Angolan buyers express appreciation for U.S. quality -- U.S. pinto beans have been successfully gaining market share in Angola (west Africa) over the past two years as Chinese light speckled kidney beans became scarce and expensive. All trade sources concur that pinto beans are the preferred bean type in Angola because they cook more quickly than other beans. One Angolan bean buyer who usually buys half of his needs from China and half from North America says the market is very quality conscious, and that while price is important, quality is even more important. He likes working with Americans because of their "rigorous respect for contract conditions."

Opportunities in South Africa -- About 80% of beans sold in the Republic of South Africa are dry and 20% canned. The red speckled sugar bean (a long, narrow cranberry bean) is the bean type preferred by South Africa's black consumers and constitutes about 85% of South African bean consumption. Higher Chinese prices and limited supplies of preferred types from other sources means a good opportunity for building U.S. market share here. There is a 10% import duty on dry beans to South Africa. However, there is no duty on imported canned products.

Countering UK/Irish canner concerns about U.S. ethanol -- The purpose of a recent trade visit with leading UK and Irish canners of navy beans was to discuss the possible impact of U.S. corn-based ethanol on the 2007 U.S. dry bean crop, and beyond. The message of the trade team was that, while the growth of corn production for ethanol may affect some U.S. dry bean growing areas, the U.S. will continue to be a major supplier of navy beans, as well as dry beans of other classes. However, the global reality of the ethanol phenomenon, which stretches from North America through China, is that customers must expect and prepare themselves for higher dry bean prices. At the same time, the trade team wished to encourage UK buyers to open up their purchasing structures and increase their supplier base, so that U.S. farmers may feel more assured about planting navy beans.

Dutch, Belgium buyers want more direct contact -- Although small markets, Belgium and the Netherlands lie at the heart of Europe and are import-export centers. Importing companies and canners here are looking for high quality dry beans and reliability of supply. They are well aware that the increase in corn production for ethanol in North America may affect dry bean prices in markets around the world. Buyers are interested in establishing more direct contact with U.S. exporters; they want to be kept abreast of U.S. production numbers and market trends, and to be informed about product price and availability. ■

NORTHARVEST

MarketOutlook

Dry Bean Acreage Expected to Decline Slightly In 2007

Planting intentions? As one person in the heart of the Northarvest bean growing area quipped about what has been a wet start to the growing season for many, "planting intentions are changing every day."

When all is said and done, however, dry bean acreage in the Northarvest area is still expected to be down slightly from last year. USDA's March 30 Prospective Plantings report estimated that U.S. area planted to dry edible beans is expected to decline 8% this spring from last year's 1.63 million acres (table 1). With the exception of California, dry bean acreage was expected to decline in all major dry bean producing states, with area down in 12 of the 18 surveyed states.

Prospective dry bean area was projected down largely because of the broad price strength for most competing field crops, with the primary driving force coming from field corn demand by a burgeoning ethanol industry. Planting delays in the Northern Plains may affect corn intentions somewhat, but most likely by switching to earlier maturity hybrids or to soybeans.

Observations by state, from USDA's March Prospective Plantings Report:

California dry bean area was projected to rise 4% to 70,000 acres, the third consecutive annual increase in California since hitting a record low in 2004.

North Dakota, the leading producer of all dry beans (including pinto and navy), indicated just a 1% decline in area planted; Minnesota plans a 7% reduction in dry bean area to 135,000 acres – just below the state's average dry bean area over the past five years.

Michigan, the second-leading producer in 2006 and the top source for black beans, plans to reduce seeded area just 2%.

Colorado indicated a 29% decrease in dry bean area for 2007. Compared with the 1990s, Colorado dry bean area has dropped by half, to an annual average of 92,000 acres this decade.

Idaho expects to plant 85,000 acres of dry beans in 2007, down 19% from a year ago. Although Idaho is diversified in terms of bean classes produced, garbanzo beans surged to 42% of the state's seeded area in 2006.

Nebraska, the leading source of Great Northern beans and the second leading pinto bean producer, indicated a 29% decline in total 2007 dry bean area.

Since planting does not finish until June in some areas, further adjustments to acreage projected in the March report are likely to take place. The next acreage estimate for dry beans and other spring planted crops will be released in the June 29 USDA Acreage Report. Find it online at www.nass.usda.gov/Publications.

Acreage competition driving prices

The preliminary 2006/07 season-average grower price for all dry beans was estimated at $20/cwt – up 8% from a year earlier but 22% below 2 years ago. The rise in dry bean prices this marketing year is a result of both the basic supply and demand forces within the dry bean complex as well as the external pressure coming from crop markets competing for acreage. Given rapidly rising demand for corn from the ethanol industry, this same competitive scenario is expected to play out again in 2008, although perhaps at a more intense level.

Grower prices are averaging above a year earlier for virtually every class of dry bean covered by Market News data (table 2). At $23 to $24 per cwt (upper Midwest origin), grower prices for pintos are averaging about 73% above those of the previous year, with Great Northern bean prices up by 49%. Under normal market conditions, grower prices may not be as strong as they are today for classes like navy and black beans, which may have slightly weaker stock positions than other classes due to larger crops a year ago. However, prices have been bid up

Continued on Next Page

Table 1 -- Dry edible beans Projected Planted area[1]

Item	2003	2004	2005	2006	2007[f]	Change 2006-07[2]
	1,000 acres					Percent
California	77.0	60.0	66.0	67.0	70.0	4
Colorado	80.0	75.0	90.0	70.0	50.0	-29
Idaho	75.0	80.0	100.0	105.0	85.0	-19
Michigan	170.0	190.0	235.0	225.0	220.0	-2
Minnesota	115.0	115.0	145.0	145.0	135.0	-7
Montana	13.0	13.0	18.0	19.5	22.0	13
Nebraska	155.0	120.0	175.0	140.0	100.0	-29
New York	25.0	24.0	25.0	19.0	20.0	5
N. Dakota	540.0	560.0	620.0	670.0	660.0	-1
Texas	50.0	20.0	17.0	20.0	10.0	-50
Washington	27.5	30.0	49.0	61.0	55.0	-10
Wyoming	30.0	25.0	34.0	29.0	25.0	-14
Others	48.6	42.3	56.0	59.3	52.5	-11
U.S.	1,406.1	1,354.3	1,630.0	1,629.8	1,504.5	-8

[f]Prospective area. [1]Excludes garden seed.
Source: USDA, National Agricultural Statistics Service, March Prospective Plantings.

Table 2 -- U.S. dry beans: Monthly grower prices for selected classes, 2006-2007

Commodity	2006 March	2006 April	2007 March	2007 April[1]	Chg. prev. yr: March	Chg. prev. yr: April
	Cents per pound				Percent	
All dry beans	17.10	18.90	25.70	--	50.3	--
Pinto (ND/MN)	13.50	13.50	23.50	23.33	74.1	72.8
Navy (pea bean) (MI)	19.25	19.50	21.41	22.58	11.2	15.8
Gt. Nor. (NE/WY)	16.00	17.50	24.75	26.00	54.7	48.6
Black (MI)	21.88	21.63	23.63	25.92	8.0	19.8
Lt red kid. (MI)	21.25	21.50	25.50	25.83	20.0	20.1
Dk red kid. (MN/WI)	20.75	21.00	25.50	27.83	22.9	32.5
Small red (ID/WA)	19.50	19.50	22.50	23.50	15.4	20.5
Baby lima (CA)	35.25	35.63	44.50	48.00	26.2	34.7
Large lima (CA)	45.25	45.88	63.50	--	40.3	--
Blackeye (CA)	--	47.00	--	--	--	--
Pink (ID/WA)	19.50	19.50	21.63	22.33	10.9	14.5
Garbanzo (ID/WA)	--	--	29.50	29.50	--	--

-- = not available. [1]Partial month estimate.
Source: USDA, AMS, *Bean Market News* except "All beans" from USDA, NASS, Agricultural Prices.

somewhat to prevent acreage from declining too far for these bean classes.

Per capita use up in 2006

After hitting a recent low in 2004, disappearance (also known as net domestic use, which is a proxy for consumption) of dry edible beans increased for the second consecutive year in 2006 (calendar year estimate) to 1.9 billion pounds. Despite the smaller crop in 2006, larger carry-in stocks from the 2005 crop, greater imports, and restraint in dry bean price gains helped support increased demand from both foreign and domestic consumers.

Per capita net domestic use of dry beans increased 4% to 6.4 pounds—up 0.4 pound from the low of 6.0 reached in 2004 after 5 consecutive annual declines in per capita use.

In 2006, gains in per capita net domestic use were noted for both white (up 14%) and nonwhite bean (up 1%) classes. White beans (navy, Great Northern, lima, and small white) accounted for 21% of all dry beans available domestically – up from 19% a year earlier but down from 31% a decade ago. Most of the gain in white beans in 2006 came from increased use of navy beans. With a larger crop and higher carry-in stocks, per capita use of navy beans increased in 2006 for the second consecutive year. Although apparent market share was lower in 2006, nonwhite beans (e.g., pinto, dark red kidney, black, etc.) remained dominant, led by pinto beans, black beans, and the surging popularity of garbanzo beans (mostly kabuli chickpeas).

In 2007, domestic dry bean use will be hard pressed to continue the gains experienced the past two years due to current expectations for a smaller crop, higher dry bean prices, and generally lower carry-in stocks from 2006. Domestic disappearance could be enhanced in 2007 if exports weaken and imports strengthen from current expectations.

Exports off from previous year's pace

During the first 6 months of the marketing year (Sept 2006-Feb 2007), U.S. exports of dry beans declined 7% from a year earlier to 3.8 million bags (cwt). Among the leading dry bean export classes, exports of navy (up 5%), black (up 51%), and baby lima beans (33%) posted increases. With rising U.S. prices and dwindling exportable stocks, exports of large lima, pinto, and Great Northern beans declined.

Despite higher prices, export volume remained strong among many of the top export destinations, including Mexico (up 9%), Japan (up 10%), and Canada (up 7%). However, shipment volume was lower to the United Kingdom (down 27%), France (down 55%), and Haiti (down 35%). For all dry beans, the September-February 2006/07 average U.S. dry bean export unit value was up 3% from the previous year to 28 cents per pound.

Dry bean market data courtesy Gary Lucier, USDA ERS economist. See more U.S. dry bean market information in the USDA ERS Dry Bean Briefing Room online: www.ers.usda.gov/Briefing/DryBeans

Canadian dry bean acreage, supply expected to decrease

For 2007-08, production and supply of dry beans in Canada are forecast to decrease because of a projected 6% lower seeded area and lower yields, according to Agriculture Canada. Production is expected to decrease for all major classes of dry beans: white pea, pinto, black, dark and light red kidney, cranberry, Great Northern, pink and small red. Canadian exports are forecast to decrease due to the lower supply. Carry-out stocks are expected to decrease, while the average price, over all types and grades, is forecast to increase because of the lower U.S. and Canadian supply. See more Canadian market analysis online at www.agr.gc.ca. ■

Table 3 -- U.S. planted acreage, 1994-98 average, 1999-2007

State	Average 1994-98	1999	2000	2001	2002	2003	2004	2005	2006	2007[f]	Change from 2006 to 2007
					-- 1,000 acres --						Percent
N. Dakota	624.0	630.0	610.0	440.0	790.0	540.0	560.0	620.0	670.0	660.0	-1.5
Michigan	347.0	350.0	285.0	215.0	270.0	170.0	190.0	235.0	225.0	220.0	-2.2
Nebraska	203.0	210.0	165.0	160.0	185.0	155.0	120.0	175.0	140.0	100.0	-28.6
Minnesota	170.0	205.0	165.0	115.0	170.0	115.0	115.0	145.0	145.0	135.0	-6.9
Colorado	169.0	155.0	120.0	115.0	92.0	80.0	75.0	90.0	70.0	50.0	-28.6
California	130.8	135.0	115.0	88.0	92.0	77.0	60.0	66.0	67.0	70.0	4.5
Idaho	110.0	105.0	90.0	75.0	95.0	75.0	80.0	100.0	105.0	85.0	-19.0
Wyoming	35.2	40.0	36.0	27.0	32.0	30.0	25.0	34.0	29.0	25.0	-13.8
Washington	39.2	36.0	32.0	34.0	44.5	27.5	30.0	49.0	61.0	55.0	-9.8
Texas	19.6	50.0	20.0	30.0	37.5	50.0	20.0	17.0	20.0	10.0	-50.0
New York	35.6	31.0	25.0	23.0	25.0	25.0	24.0	25.0	19.0	20.0	5.3
Others[1]	76.8	80.5	104.7	115.4	96.7	61.6	55.3	74.0	78.8	74.5	-5.5
U.S.	1,960.2	2,027.5	1,767.7	1,437.4	1,929.7	1,406.1	1,354.3	1,630.0	1,629.8	1,504.5	-7.7

[f]NASS prospective plantings forecast. [1]Includes Kansas, Montana, New Mexico, Oregon, Utah, and Wisconsin. South Dakota was added in 2000. New Mexico was dropped in 2000 and reinstated in 2001. Wisconsin was dropped after 2004.
Source: USDA, National Agricultural Statistics Service, Crop Production, 2006 Summary.

TheBeanScene

Northarvest at N.D. State Capitol

At Ag Day held during the N.D. legislative session at the state capitol in Bismarck, dry bean growers Mike Beltz (middle), Hillsboro and Don Streifel, Washburn, assisted Northarvest home economist Lynne Bigwood in handing out educational materials to state lawmakers. The day's events were coordinated by the North Dakota Agriculture Department and included a lunch featuring products from each of the exhibitors, including baked beans from Northarvest.

Beans have major role in WIC program

The Women, Infant, and Children program serves low income, pregnant, postpartum and breastfeeding women, and infants and children up to age 5 who are at nutrition risk. Nationally, WIC serves over 8.2 million mothers, infants and children, with nutrition services the centerpiece of WIC's program mission.

In fact, the Minnesota Department of Health even has a FAQs section on its web site, with bean cooking and nutrition information (www.health.state.mn.us/divs/fh/wic/wicfoods/beanfaqs.html).

Lynne Bigwood represented Northarvest at the Minnesota Department of Health WIC Staff Conference held this spring in Brooklyn Center, Minn. She helped people seeking information and ways to help their clients learn to use dry beans, sharing Northarvest's new pinto and dry bean class posters along with 250 of the "ever popular" bean cookbook.

Bigwood also represented Northarvest at the National WIC Staff Conference in Pittsburgh this spring, distributing educational materials. She notes that over 2,000 cookbooks were ordered after the conference to be used at local sites.

One of the National WIC leadership's goals has been to change the basic USDA food package, including canned beans rather than just dry beans. They believe that their clients would be more likely to purchase and use canned beans. Lifestyles have changed, and

Continued on Next Page

canned beans would be more in line with the food products that a majority of the U.S. population uses.

Beans for breakfast?

The importance of breakfast is often stated, but exactly what you eat for breakfast is understated, and was an issue discussed at the N.D. Nutrition Council and N.D. Dietetic Association spring meeting, in which Northarvest's Lynne Bigwood participated.

For example, eating a cereal breakfast with 1 cup of Wheaties or Cheerios, ½ cup skim milk, ½ cup strawberries, 1 cup orange juice equals 280 calories. A bagel breakfast consisting of ½ of a large bagel, 1 tablespoon cream cheese and 1 tablespoon jam is also 280 calories. The cereal breakfast delivers the same calories, but is rich in nutrients and fiber in every food, while the bagel breakfast has very little fiber, no fruit and is higher in fat.

It was noted that in China and Israel, it is common for veggies to be eaten at breakfast. Fruit is more likely to be eaten at an American breakfast compared to veggies, yet Americans eat an average of 1½ servings of fruit a day, less than half of what's recommended.

Nutrient rich foods help start the day off right. In fact, "Live Well! Enjoy Nutrient-Rich Foods" is a message that has been developed by a coalition of "nutrient-rich" food promotion groups to help interpret the message of MyPyramid and Dietary Guidelines to everyday eating. It is a consumer-friendly way to describe nutrient dense foods such as colorful fruits and vegetables, whole, fortified and fiber-rich grain foods, fat-free and low-fat dairy products, and lean meats, poultry, fish, eggs, beans and nuts.

The term 'nutrient dense' has been used by nutrition educators in the past to define food quality, but hasn't really registered with consumers. 'Nutrient rich,' however, is a change in semantics that registers better with consumers. Expect to see more references in the future to nutrient-rich foods – which include beans – that pack nutrition and make calories count. ■

RRV Living Ag Classroom attracts over 2,000

The Living Ag Classroom held this spring at the Red River Valley Fairgrounds in West Fargo was attended by over 2,000 fourth graders from 42 area schools. Ginger Knutson, retired elementary teacher, assisted Lynne Bigwood with a 'Bean Crazy' game directed at kids.

Branston baked beans enhanced with omega-3

Premier Foods, the UK's biggest food producer, recently gave a line of its canned baked beans a makeover, enhancing the product's healthy profile by adding omega-3 fatty acids. According to the American Heart Association, Omega-3 fatty acids benefit the heart of healthy people, and those at high risk of — or who have — cardiovascular disease. Omega-3 is one of the fastest growing areas of nutritional product development.

FoodNavigator.com/Europe reported that Premier's launch of a new line of its branded Branston baked beans with fish oils will be called "Branstein" baked beans, a nod to the supplement's benefit to cognitive development, amongst other benefits.

According to Frost & Sullivan, the European omega-3 market is expected to grow at rates of 8% on average to 2010. The packaged goods market has been left wide open for health and wellness trends to make their mark following the demise of the low carb trend in recent years, according to ProductScan Online.

Branstein baked beans taste like the regular version of the product, but a 210g serving contains 17% of UK's recommended daily intake of omega-3. An entire can of Branstein beans contains 34%.

Holy Buckets of Bean Caviar!

by Lynne Bigwood, Northarvest Home Economist

Bean caviar or salsas have been around for many years and summer seems like the perfect time to feature them in a cooking column. Black beans are the perfect base to build an inexpensive, nutrient-rich, vibrant-colored vegetable appetizer to go with a cookout or any summertime party.

I took them both to a friend's retirement party recently and was deluged with requests for the recipes. The adults liked "that olive one" (Texas Caviar) and whipped out plastic containers to take the leftovers home. One person provided stamps so I could mail the recipes to her. That was a first!

Salsa and caviar calorie counts will vary according to the amount of sugar and oil added to the vegetables. Both of these recipes use ½ cup of sugar; Splenda can be substituted in either one.

The Black Bean Fiesta Salsa recipe only has 3 tablespoons of oil in 8 cups of vegetables, so it is low calorie and includes lots of vibrant-colored vegetables that are high in nutrients and naturally fat-free.

The Texas Caviar has the most beans and ¾ cup oil or 3 times as much in 11 cups. The oil in the caviar recipe could be cut back to 4 tablespoons to keep the good taste and lower the fat and calorie content. It is wise to use a little fat so that the dish has good flavor (we taste for fat as well as salt, sweet, sour, etc.) but a little will do just as well as a lot. If you are concerned about keeping your sodium low, choose a recipe without olives or use them as a topping so they can be easily removed.

Remember that the "carrier" for the dip or salsa has calories. Choose baked chips, use taco shells cut in pieces, baked and eaten warm; pita bread or other low fat crackers. Be a little conservative when you help yourself; use a small serving spoon and take more vegetables than high fat chips.

If you have any leftovers, use them as a marinated salad with any meal. ■

Black Bean Fiesta Salsa

First place winner in Northarvest's Black Bean Fiesta contest. Festive, slight sweet, fresh tasting vegetable salsa.

7 – 8 cups (2 quarts) - 16 ½ cup servings

Ingredients:

- 2 15.5-ounce cans black beans, drained and rinsed
- 1 cup frozen corn, rinsed under warm water and thawed
- ½ pound jicama, peeled and diced (two 8-ounce cans of water chestnuts rinsed and diced may be substituted for jicama)
- 1 sweet red pepper, remove seeds and dice
- 5 whole green onions, cleaned and chopped
- 2 fresh tomatoes, diced
- 2 teaspoons minced garlic (refrigerated or fresh)
- ½ or whole bunch fresh cilantro, finely chopped

Dressing:

- ½ cup lemon juice (fresh or bottled)
- ¼ cup lime juice (fresh or bottled)
- ½ cup sugar or Splenda
- 1 teaspoon salt
- 3 tablespoons olive oil

Method:

1. Combine vegetables, garlic and cilantro in 2-quart covered bowl.
2. Measure dressing ingredients into a pint jar. Cover jar tightly, shake until sugar is dissolved. Pour dressing over vegetables and stir thoroughly.
3. Marinate in refrigerator overnight or at least 2 hours to blend flavors.
4. Use a slotted spoon to move vegetables to serving bowl to reduce amount of dressing. Serve, with slotted spoon, as a condiment with chips, tacos, fajitas or as a salad.
5. Salsa may be refrigerated up to 2 weeks.

Texas Caviar

11 cups - 22 ½-cup servings

Ingredients:

- ½ cup sugar or Splenda
- ¼ to ¾ cup oil
- 1 cup vinegar
- 1 15.5-ounce can pinto beans
- 1 15.5-ounce can black beans
- 1 15.5-ounce can navy beans
- 1 15.5-ounce can black-eyed peas
- 1 11-ounce can Shoepeg corn
- 1 5.75-ounce can black olives
- ½ cup green olives
- 1 4-ounce can diced green chilies
- 3 stalks celery
- 2 pickled jalapeno peppers
- Black pepper
- "Scoop" tortilla corn chips

Method:

1. Dressing: Combine sugar, ¼ cup oil and vinegar in a medium saucepan. Bring to a boil. Pour into a 3 or 4 cup refrigerator container and chill.
2. Caviar: Drain and rinse four cans of beans and peg corn. Pour into a large bowl.
3. Slice the black and green olives. Finely chop celery and jalapeno peppers.
4. Add olives, celery, peppers, chilies and dressing to the beans and corn. Stir to combine. Season with black pepper. Taste and add more black pepper and oil, if desired.
5. Serve with scoop corn chips. Cover and refrigerate leftovers.

The Last Word

Fall-Out from the Chick Flick King Aero-Bean Incident

By Tracy Sayler

I've never been much of a Hugh Grant fan; maybe it's the celebrity smugness or that I don't care for chick flicks, every one of which seems to feature this guy. Not exactly boy scout behavior either. There was that little incident with a Hollywood hooker (which gave Jay Leno the quote of his career: "what the hell were you thinking?") and just recently, he assaulted paparazzi trying to snap his picture, throwing a tub of baked beans at the photographer.

Of course, the media ate it up – er, so to speak – and the incident became comedy fodder. Datelinehollywood.com (which mockingly prides itself as living up to its founding motto: 'to cover with unerring integrity that which matters least') did a spoof headlined: *Bean Farmers Burning Hugh Grant in Effigy.* Excerpt from the satire:

Bean farmers around the world have risen up to protest Hugh Grant, who threw a can of baked beans at paparazzi in London. "Baked beans are a sacred vegetable to our cultures and we are deeply offended that Mr. Grant would use a food of peace as a weapon," said Michigan bean farmer Roy Sager, who was burning two cardboard cut-outs of Grant in his front yard.

The "Four Weddings and a Funeral" star has apologized, calling his use of a baked beans can to assault a paparazzi photographer "a naive misreading of the reverence millions of farmers have for beans." But bean farmers from the U.S. to Europe to South America have not accepted Grant's apology. "When you pick up a can of baked beans,

you have a responsibility to understand the culture where it came from," said Brazilian bean farmer Alejandro Cunha, just after he set fire to a giant poster of "Music and Lyrics" (another Hugh Grant chick flick).

In Brazil, the world's leading producer of beans (wow, give them credit for accuracy: Brazil is indeed the largest producer, followed by India, China, Burma, Mexico, and the U.S.) *a warrant has been issued for Grant's arrest. "Hugh Grant has offended the Brazilian people and bean farmers around the world," said Brazil's minister of beans Silas Costa. "We demand that the United Kingdom extradite him so that he can face justice."*

Robert St. John, a self-described author, chef, restaurateur and world-class eater, wrote in his 'blow by bowl account' that "it struck me as odd that a stuffy Brit such as Grant would not only have eaten baked beans but enjoyed his serving so much that he asked the restaurant for a doggie bag." St. John also related his own aero-bean story:

"During my college years, while waiting tables in one of those brass-and-fern restaurants, I spilled an 8-ounce bouillon bowl of baked beans on a woman's foot. I had just arrived at her table and the serving tray was still in a position high above my head. The beans fell from a height approximately 7 feet above the floor and landed upside down and squarely on her instep.

An 8-ounce bouillon bowl, filled with beans, probably approaches 1 pound. Pardon my physics, but a 1-pound bowl, falling from a height of 7 feet, traveling at a velocity of ... Well, you get the picture. The woman let out a shrill shriek and then a series of low-pitched sobs and moans.

"She was wearing sandals and I stood speechless as I watched the steaming hot beans ooze through her toes. I almost lost my job because of the leguminous pedicure, but was saved by the woman's graciousness. Her husband, on the other hand, gave me the evil eye. When I asked if I could bring his wife another side order of beans, he asked for a towel, the manager and a baked potato instead."

David Holsted, writing for the Daily Times in north Arkansas, wondered how beans of all things could become a WMD – weapon of mass dyspepsia. Holsted wrote that "beans are for shucking, shelling, spilling, counting, mixing with cornbread, selling to foolish boys named Jack, increasing the profit sharing of the company that makes Beano and for nicknames," but "if I'm going to use food as a weapon, I'm going to throw something like a coconut, or at the very least, a nice, ripe watermelon or a can of Spam. When is the last time you heard anyone say 'You can have my baked beans when you pry them from my cold, dead hands' or 'If they outlawed baked beans, only outlaws will have baked beans?'"

"The real role models for the proper use of beans as a weapon," Holsted writes, "are the Three Stooges. Fans of the knuckleheads will recall their classic short in which they fired beans from a cannon, a truly American use of the ammunition instead of the pansy British method of hurling them from a plastic tub."

Holsted contemplates tongue-in-cheek what might happen next, now that the king of chick flicks has popularized baked beans as a weapon.

"Because of the irresponsible actions of some British actor, all those bleeding heart liberals are going to institute baked bean control laws. The next time you order a side of baked beans to go with your chicken, don't be surprised if you have to wait three days while they do a background check." ■

ROGERS®

Making Superior Vegetables a Reality™

We're responsible...

...for Saving You Time and Money.

Our high-yielding AmeriSeed dry bean varieties will save you both time and money. Higher yields means more product and because fewer chemicals are required due to resistances that are built into our seed, you'll spend less money on chemicals. Our varieties are also highly adaptable, which means more planting options.

ROGERS® brand is known for its excellent products and services and its innovative vision to deliver superior vegetable seeds. We are socially responsible and employ environmentally sound agricultural practices that protect the land.

Ask for any of these great ROGERS varieties:

- Black Onyx
- Black Shadow
- Dark Red Kidney ROG802
- Dark Red Kidney ROG847
- Great Northern Beryl R
- Great Northern 99118
- Light Red Kidney Foxfire
- Navy Ensign
- Navy Navigator
- Navy ROG331
- Navy ROG417
- Navy Schooner
- Pink Floyd
- Pink ROG312
- Pink ROG922
- Pinto Remington
- Pinto Topaz R
- Pinto Winchester
- Small Red Ryder

Ask about other AmeriSeed varieties, including Pinto 99195, Pinto La Paz, and new Navy varieties.

For more information, please contact your ROGERS dry bean dealer or visit www.rogersadvantage.com

www.rogersadvantage.com

Syngenta Seeds, Inc. • P.O. Box 4188 • Boise, ID 83711-4188 U.S.A.

Northarvest Bean Growers Association
50072 East Lake Seven Road, Frazee, MN 56544

Return Service Requested

Non-Profit Organization
US Postage Paid
Fargo, ND 58102
Permit 1570

Black Bean Fiesta Salsa and Texas Caviar: Bean caviar or salsas have been around for many years and summer seems like the perfect time to feature them in a cooking column. Black beans are the perfect base to build an inexpensive, nutrient-rich, vibrant-colored vegetable appetizer to go with a cookout or any summertime party. For the recipe, see page 25.