THE BEAN BAG

Published by
The Nebraska Dry Bean Growers Association
4502 Avenue I - Scottsbluff, NE 69361
Lesli Howell, Editor

Cross-Pollinating Bean Plants at the PREC Bean Research Greenhouse

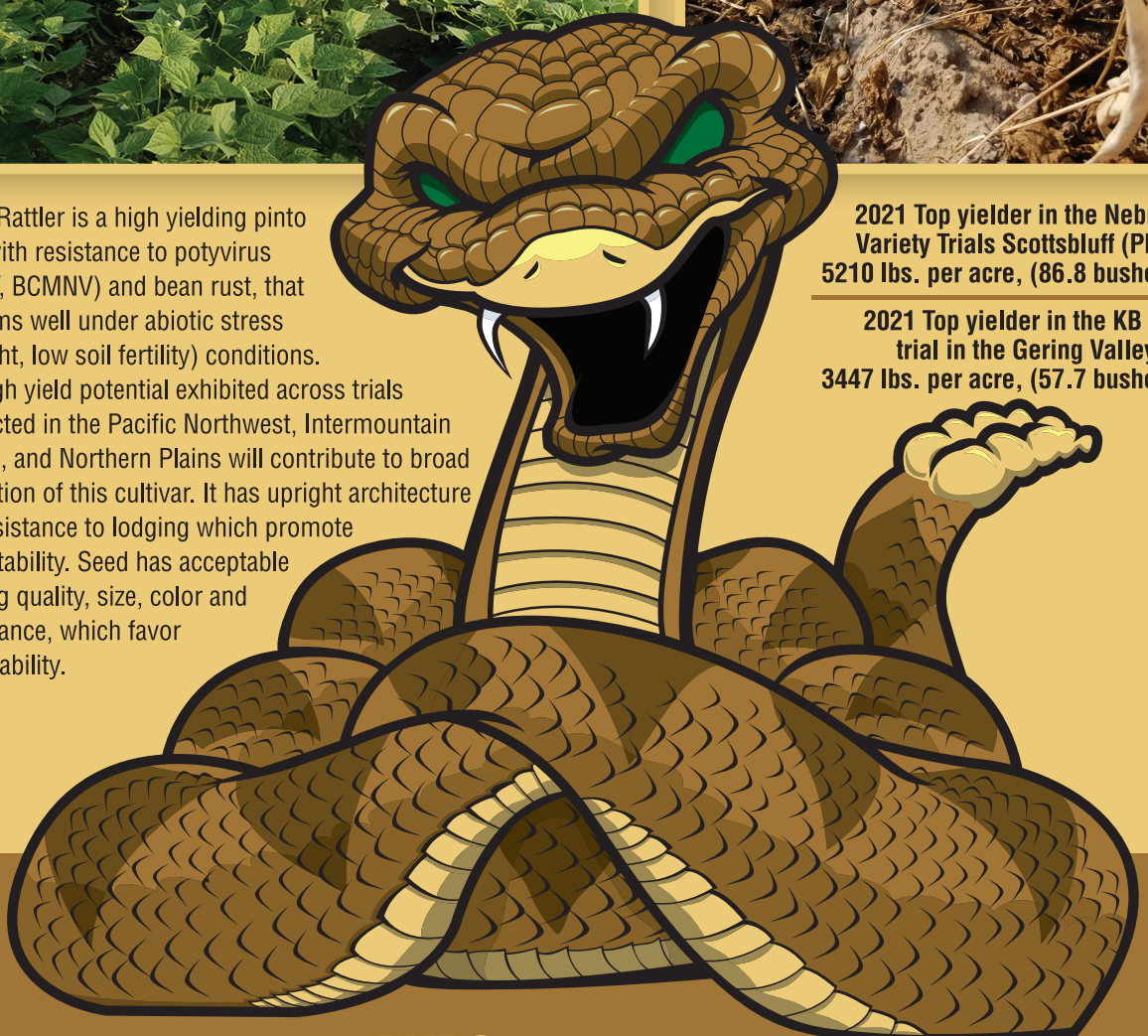
Performed approx. 1,000-2,000 time per year

USDA Rattler

USDA Rattler is a high yielding pinto bean with resistance to potyvirus (BCMV, BCMNV) and bean rust, that performs well under abiotic stress (drought, low soil fertility) conditions. The high yield potential exhibited across trials conducted in the Pacific Northwest, Intermountain Region, and Northern Plains will contribute to broad adaptation of this cultivar. It has upright architecture and resistance to lodging which promote harvestability. Seed has acceptable canning quality, size, color and appearance, which favor marketability.

2021 Top yielder in the Nebraska Variety Trials Scottsbluff (PREC): 5210 lbs. per acre, (86.8 bushels/acre)

2021 Top yielder in the KB strip trial in the Gering Valley: 3447 lbs. per acre, (57.7 bushels/acre)



PVPC# 202000255

THE USDA/ARS HAS APPLIED FOR PLANT VARIETY PROTECTION FOR USDA RATTLER | USDA RATTLER IS LICENSED TO KELLEY BEAN CO. INC.
UNAUTHORIZED PROPAGATION OF THIS VARIETY IS PROHIBITED

Spilling the Beans!

By Dan Hinman
NDBGA Board President

Spring is arriving once again and we are gearing up to start another growing season. The NDBGA held our annual meeting and Bean Day recently and I was glad to see many of you there. I hope you gained some valuable insight to take home.

I recently attended the Bean Summit in Denver, Colorado put on by the Colorado Dry Bean Committee. It was a great event that brought together people from all aspects of dry bean production and use. There were growers, processors, nutritionists, chefs and restaurateurs, and food distribution representatives along with many interested individuals from the public. I enjoyed meeting many people who were excited and passionate about their role in dry bean production and use. It was also great to sample some bean dishes prepared by some great award winning chefs.

Attending these recent events has me anticipating and looking forward to the next bean growing season and I am hoping you are too. I wish everyone a great spring.

About the Bean Bag

"The Bean Bag" is a regional publication for the dry bean industry targeted to growers and decision-makers involved in the production and sales of Nebraska-grown dry edible beans.

"The Bean Bag" is published four times a year: Winter, Spring, Summer, and Autumn editions by the Nebraska Dry Bean Growers Association, a nonprofit organization of dry edible bean growers in Nebraska.

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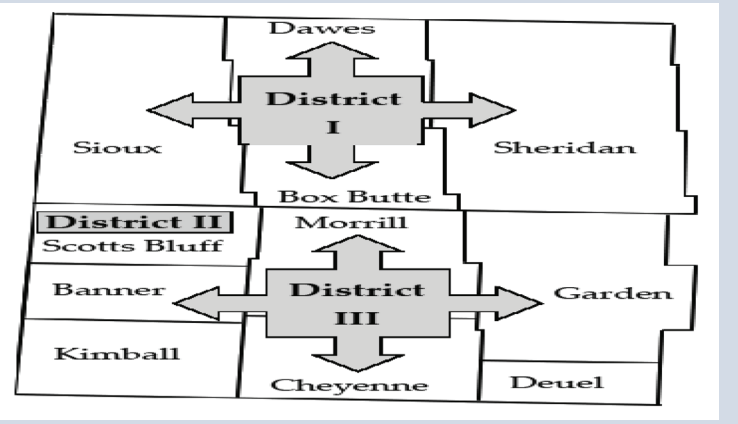
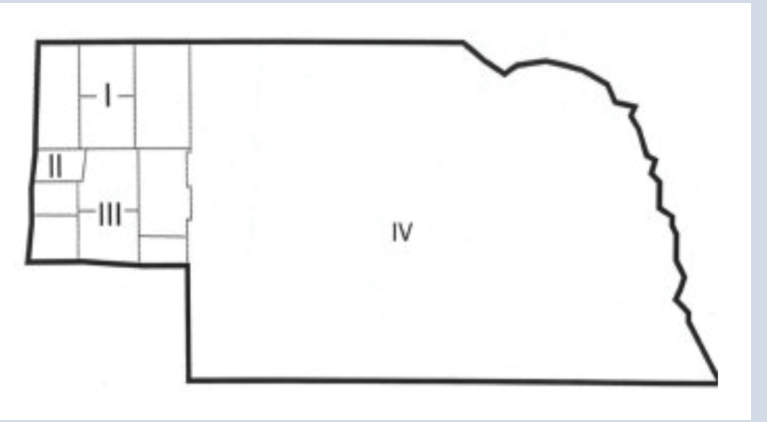




www.beangrower.com nebeangrower@allophone.com Facebook - NE Dry Bean Growers Association

Lesli's ByLines

We hope you enjoyed the 2023 Bean Day and Annual Meeting! I'd like to take this time to thank all of those who volunteered, attended, participated, and sponsored this year's event. We couldn't do it without all your support! If you were unable to attend, please mark your calendars for February 13th next year! This is a great time to learn more about what's going on in our industry and to network and share ideas with those who are also involved in growing dry edible beans.

Our office gets tons of correspondence and I thought I'd call attention to a couple of the latest issues that have come across my desk. First, there has been an email scam circulating regarding the purchasing of beans that looks very legitimate. RMBDA (Rocky Mountain Bean Dealers Assoc) brought it to our attention with the caution that you should verify everyone beforehand in regards to business transactions. Second, we received a request from an organization to support their efforts on including more beans in the new USDA school lunch program. At first glance, the request seemed feasible, but if you read between the lines, they were promoting "*totally replacing"* beef and dairy protein with plant proteins. Again, caution as to what comes across your desks. NDBGA would never promote our commodity at the elimination of another agricultural product. Thankfully, NDBC (Nebr. Dry Bean Commission) has notified several individuals in our government and industry regarding this matter. As always, stay SAFE for the upcoming planting season!

THE BEAN BAG ADVERTISING RATES

AD SIZE	Black/White	COLOR
1/6 page	$112	$190
1/4 page	$157	$267
1/3 page	$200	$340
1/2 page	$280	$476
2/3 page inside	$350	$595
2/3 outside	$392	$667
Full page inside	$392	$667

TAKE NOTES!

NEBRASKA DEPARTMENT OF AGRICULTURE

Press Release

NEBRASKA
Good Life. Great Roots.

Christin Kamm — Communications Director
402-471-6856
christin.kamm@nebraska.gov

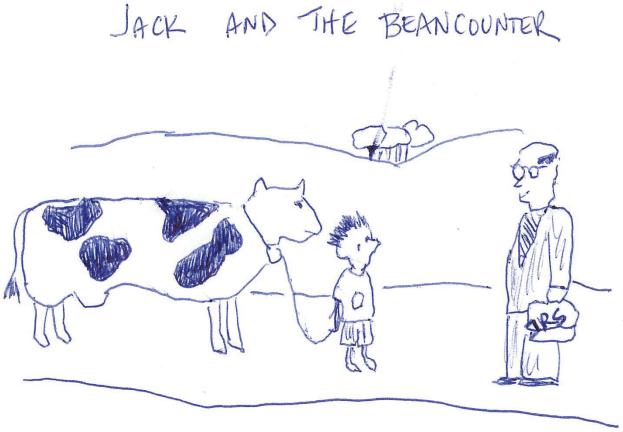
For Immediate Release

LINCOLN—Nebraska Department of Agriculture (NDA) Director Sherry Vinton recently sent a letter to the U.S. Environmental Protection Agency (EPA) objecting to a label revision for the herbicide dicamba and a proposed early cutoff date for its use. Today, ***NDA was notified that the cutoff date for dicamba products in Nebraska will remain as June 30.***

"At this late date, Nebraska producers have already made their 2023 planting decisions and have likely purchased seed and pesticide products to implement their plans," said NDA Director Sherry Vinton. *"The proposed early cutoff date of June 12 for dicamba use would negatively impact this growing season for many farmers in Nebraska. We appreciate the EPA retaining the June 30 cutoff date for this year."*

Nebraska was one of six states that the EPA discussed the use of an early cutoff date with. NDA is responsible for the administration and enforcement of the Nebraska Pesticide Act. Under the Act and a cooperative agreement with EPA, NDA registers all pesticides used in Nebraska.

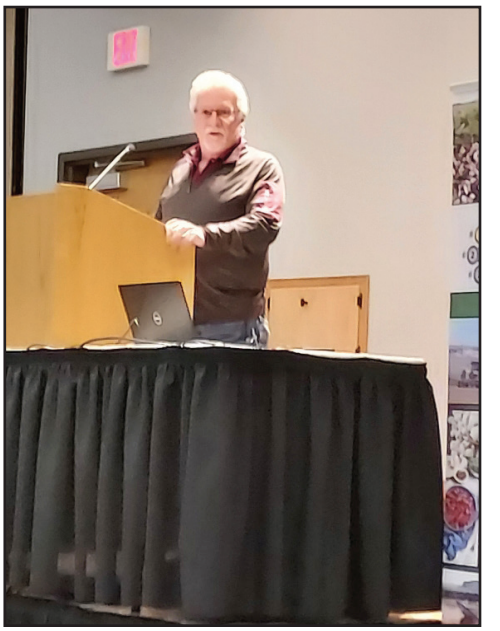
Yonts Water Conference
April 12, 2023
Panhandle Research & Extension Center



"We'll make the cow tax deductible."

2023 Bean Day

This year's donation went to the Scottsbluff/Gering Soup Kitchen Board, which serves several churches and soup kitchens in our community.



Sam Peck, from Jack's Bean International, spoke about the *"Current Challenges of the International Bean Markets"*

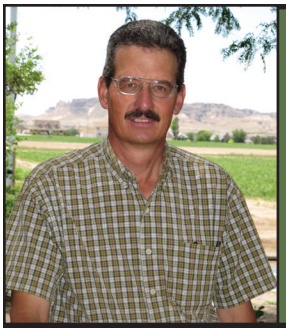
Darin Aagard from Trinidad Benham Corp, spoke about the *"Domestic Bean Markets"*

Dr. John Westra, UNL PREC Director, spoke about his vision for PREC

Our 2023 scholarship winners:

Bernadette Pieper, who is currently attending Casper College

Jonathan Pieper, who is currently attending the University of Wyoming



Pinto Bean Variety, Nitrogen Rate and Pod Ceal® Studies for Direct Harvest, 2022

John Thomas, Crops Extension Educator, Box Butte County
Gary Stone, Water Extension Educator, Scottsbluff County
Laura Thompson, On Farm Research Coordinator, Statewide
University of Nebraska, On Farm Research Network

As we move through these cold snowy winter months, spring is around the corner, and we will be in the fields before you know it. In the past couple of months, we have had a chance to evaluate the data from the 2022 On Farm Research studies. We want to share the data and results from our 2022 growing season dry bean variety study, fertility studies, and Pod Ceal® study. Included are the four studies, all of which were which were direct harvested. In times of continued financial struggle in agriculture, it is important to consider where money may be lost or saved. These studies allow you to see various pinto varieties, nitrogen fertility levels, and the use of the Pod Ceal® product and the resulting yields, harvest losses and the associated marginal net returns.

The variety study in 2022 included four pinto bean varieties. Rattler had the highest yield (62 bu/ac) and yielded significantly better and had a higher marginal net return than the other varieties, followed by Cowboy, Cancun and 33503-14. Harvest loss was about 4 bu/ac for all the varieties. Big thanks to Kelley Bean for providing seed and assistance for this variety trial!

The nitrogen fertility studies looked at the impact of three nitrogen rates applied with strip till on pinto bean production. The grower was also interested in the impact of strip till so a fourth treatment was added to evaluate no-till. Good stands of beans were not established due to excessive planting depth and reduced yields occurred because of this. The no-till treatment had the lowest stands and lower yields, and no significant differences were noted among the nitrogen treatments. Harvest loss was much better than expected considering the low pod height.

Pod Ceal® by Miller® is a product applied on dry edible beans to reduce moisture intrusion into the pod. The intent is to prevent pods from popping open during natural wetting and drying prior to harvest, and reduce harvest loss due to shelling. Data did not look very good for Pod Ceal® this year but more than one study and one year are necessary to evaluate its' effectiveness on dry edible beans. See the detailed reports on each study below in this report.

For further information and results from Nebraska studies visit the On-Farm Research

website: https://cropwatch.unl.edu/on-farm-research or the results finder on the On-Farm Research website http://resultsfinder.unl.edu/ to connect with On-Farm Research and access other dry bean studies from the past few years.

Pinto Bean Varieties for Direct Harvest

County: Box Butte
Planting Date: 6/16/22
Seeding Rate: 90,000
Hybrid: 4 varieties
Previous Crop: Corn
Soil Type: Keith loam 0-1% slope; Keith loam 1-3% slope
Harvest Date: 10/10/22
Row Spacing (in): 15
Reps: 4
Tillage: Disked and rolled before planting
Herbicides: Pre: 30 oz/ac Prowl® H2O, 15 oz/ac Outlook®, and 32 oz/ac Roundup® on 6/9/22. **Post:** 4 oz/ac Raptor®, 30 oz/ac Basagran®, and 15 oz/ac Select® on 7/13/22; 25 oz/ac Basagran® and 15 oz/ac Select® on 7/13/22; 3 oz/ac Sharpen®, 2 oz/ac Valor®, 2 pt/ac Gramoxone®, and 10 oz/ac crop oil applied for desiccation on 9/21/22
Seed Treatment: Apron® XL, Maxim®, Rancona®, and Vibrance®
Foliar Insecticides: None
Foliar Fungicides: 28 oz/ac Praiz®, 1 lb/ac Nu-Cop® HB, 1 qt/100 gal InterLock®, and 1 pt/100 gal Preference® on 8/12/22
Fertilizer: 30 lb N/ac, 30 lb P/ac, and 1 lb Z/ac applied 6/7/22
Irrigation: Pivot, Total: 8-10" / **Rainfall (in):** ~8.5”

Baseline Soil Samples, 0-8” (November 2021):

						---------- Melich III ----------				CEC	Zn	Fe	Mn	Cu
	pH	OM LOI %	Nitrate - N ppm N	Bicarb - P ppm	Sulfate S ppm S	K	Ca	Mg	Na	me/100g		(DTPA ppm)		
Sample	7.7	1.4	10	10	9	488	1860	291	68	13.3	2.7	3.6	1.1	0.3

Introduction: This study evaluated four different pinto bean varieties in a direct-harvest bean production system, looking at both yield and harvest loss. Currently, most dry beans in western Nebraska are harvested in a two-step process starting with a cutting-windrowing operation, then combining. Direct-harvest is simply one pass through the field with the combine. A well-suited upright bean variety, planting on a level field surface, and a combine header suitable for direct harvest are essential to minimize harvest loss and economically justify direct harvest.

This study evaluated varieties Rattler, Cancun, 33503-14, and Cowboy. The target population for the study was 90,000 plants/ac. Because of the inaccuracy of drills as a result of seed size and flow through the machine, actual plant populations determined by early season stand counts were 84,729 plants/ac for Rattler, 74,819 for Cancun, 71,769 for 33503-14, and 91,372 for Cowboy. Actual seeding rates were therefore assumed to be 10% greater than the stand counts with approximately 93,202 seeds/ac for Rattler, 82,301 for Cancun, 78,946 for 33503-14, and 100,509 for Cowboy.

Samples from each plot were analyzed for bean quality parameters. Low-hanging pods are a major cause of harvest loss in the direct-harvest process; therefore, pod height measurements were taken to determine the percent of pods greater than 2" above the ground just before harvest. The field was harvested with a Case IH 7088 combine with a MacDon® 30-foot FlexDraper® head. The temperature at harvest was 73° F with 18% relative humidity. Hot and dry weather conditions at harvest generally result in greater harvest loss through

pod shattering. Harvest loss estimates were determined by taking counts in one-square-foot frames randomly chosen in the harvested area, but equally representing the left, center, and right side of the header area behind the combine.

Results:

	Stand Count (plants/ac)	Pods > 2" Aboveground (%)	Harvest Loss (bu/ac)	Yield (bu/ac)†	Marginal Net Return‡ ($/ac)
Rattler	84,729 AB*	75 AB	4 A	62 A	1,326 A
Cancun	74,819 BC	65 BC	4 A	48 BC	1,013 BC
33503-14	71,769 C	61 C	4 A	42 C	893 C
Cowboy	91,372 A	79 A	4 A	52 B	1,095 B
P-Value	0.002	0.015	0.897	0.0001	0.0001

*Values with the same letter are not significantly different at a 90% confidence level.
†Bushels per acre corrected to 14% moisture.
‡Marginal net return based on $38/cwt ($22.80/bu at 60lb/bu). Cost for the bean seed was $90/100,000 seeds. Seed costs for each treatment were adjusted to represent the estimated actual seeding rate based on stand counts: $83.88/ac for Rattler, $74.07/ac for Cancun, $90.46/ac for Cowboy, and $71.05/ac for 33503-14.

Summary:

- There were significant differences in stand counts among the treatments. Cowboy and Rattler had the highest stand counts, whereas Cancun and 33503-14 had the lowest stand counts.
- Pod height varied among varieties as well, with Cancun and 33503-14 having the lowest percent of pods above 2", which may be due to lower stand counts. Cowboy and Rattler had the highest percent of pods above 2", which corresponded to the highest stand counts.
- Despite pod height differences, all varieties had harvest losses of approximately 4 bu/ac.
- Yields varied by 20 bu/ac among the varieties. Rattler had the highest yield, with a 10 bu/ac advantage over the next highest yielding variety (Cowboy).
- Correspondingly, Rattler had the highest marginal net return, $232/ac higher than the next most profitable variety (Cowboy).

Evaluating Nitrogen Rates and Strip-till for Pinto Beans

County: Banner
Soil Type: Altvan-Eckley complex 3-9% slopes; Satanta fine sandy loam 1-3% slope; Satanta-Altvan complex 3-6% slopes; Duroc loam 1-3% slope
Planting Date: 6/2-3/22 **Harvest Date:** 9/27-28/22
Seeding Rate: 90,000 **Row Spacing (in):** 30
Hybrid: Radiant slow-darkening pinto **Reps:** 4
Previous Crop: Corn then rye cover crop 12-24” tall at termination **Tillage:** Strip-till, no-till
Herbicides: Pre: 15 oz/ac Prowl® H2O, 7 oz/ac Outlook®, 1 oz/ac Vida®, and 15 oz/ac Envy™ Six Max with ammonium sulfate and crop oil concentrate on 6/4/22 **Post:** 3 oz/ac Outlook®, 7 oz/ac PHT® Persist® Ultra, 3.14 oz/ac Assure® II, 9.41 oz/ac Varisto®, and 3.14 oz/ac Basagran® 5L
Desiccation: Gramoxone® 9/19/22
Seed Treatment: Apron® XL, Maxim®, Rancona®, Vibrance® **Foliar Insecticides:** None
Foliar Fungicides: 0.78 oz/ac Priaxor® Xemium® on 6/28/22
Fertilizer: 20 lb N/ac applied via fertigation; other fertilizer varied by rates being tested in the study
Irrigation: Pivot, Total: 10"/ **Rainfall (in)**: ~5.5”

Baseline Soil Samples, 0-8" (May 2022):

						---------- Melich III ----------				
	pH	OM LOI %	Melich III P ppm	Nitrate – N ppm N	Sulfate S ppm S	K	Ca	Mg	Na	CEC me/100g
NE-1	6.8	2.0	34	6.3	8.0	285	1191	221	16	8.6
NE-2	6.9	2.2	42	13.4	14.6	315	1315	202	16	9.1

Introduction: Pinto bean growers have questions about the optimal level of nitrogen (N) fertilizer. Historically, most producers have used N fertilizer in their pinto bean production, but recent data has shown less N may be needed to achieve competitive and profitable yields.

The goal of this study was to evaluate the impact of three nitrogen rates applied with strip-till on pinto bean production. Additionally, the producer was interested in the impact of the strip-till operation, so a fourth treatment was added to evaluate no-till.

The fertilizer applied with strip-till was a liquid blend of 32-0-0, 10-34-0, and 9-0-0-26. A sample of the fertilizer blend was sent to Ward Laboratories, and analysis showed a composition of 28% N, 4% P2O5, and 1% S. The fertilizer was evaluated at rates of 0 gal/ac, 12 gal/ac (grower's normal management), and 24 gal/ac. The 12 gal/ac treatment received 36 lb N/ac, 2.3 lb P/ac, and 1.3 lb S/ac, whereas the 24 gal/ac treatment received 72 lb N/ac, 4.6 lb P/ac, and 2.6 lb S/ac. Additionally, the entire field received 20 lb N/ac through the pivot.

A rye cover crop was broadcast planted at 100 lb/ac on October 10, 2021, and the strip-till application occurred in the green cover crop on May 19 on one field and May 28 on the other field. The fields were planted on June 2 and 3, 2022, and the cover crop was terminated on June 5, 2022. The cover crop was 12-24" tall at the time of termination.

Data Collection: Satellite imagery was obtained through Skysat, a high-resolution constellation of 21 satellites operated by Planet®, and the normalized difference vegetation index (NDVI) was evaluated for each treatment. Early season stand counts were taken on July 6, 2022. Samples from each plot were analyzed for bean quality parameters. Pod height measurements were taken to determine the percent of pods 2" or greater above the soil surface. Harvest loss estimates were determined by taking counts in one-square-foot frames randomly chosen in the harvested area, but equally representing the left side of header, center of header, and right side of header area behind the combine. Yield was obtained using the combine yield monitor, and was post-processed to remove erroneous data points.

Results:

	Early Season Stand Count (plants/ac)	Pods > 2" Above Ground (%)	Harvest Loss (bu/ac)	Moisture (%)	Yield (bu/ac)†	Marginal Net Return‡ ($/ac)
0 gal/ac, no-till	45,020 B*	68 A	0.9 A	10.9 A	21 B	468 BC
0 gal/ac	54,982 A	69 A	1.6 A	9.9 A	24 A	534 A
12 gal/ac	48,558 AB	66 A	1.2 A	10.2 A	25 A	498 AB
24 gal/ac	48,123 AB	66 A	1.6 A	10.4 A	24 A	434 C
P-Value	0.040	0.139	0.091	0.145	0.003	0.005

*Values with the same letter are not significantly different at a 90% confidence level.
†Yield values are from cleaned yield monitor data. Bushels per acre corrected to 14% moisture.
‡Marginal net return based on $38/cwt ($22.80/bu) pinto beans, $3.85/gal of fertilizer, $19/ac for strip-till with no fertilizer application (from 2022 UNL custom rates), and $25/ac for strip-till with fertilizer application (from 2022 UNL custom rates).

Mexican Black Bean and Spinach Pizza

Servings 4 servings

I found this on the US Dry Bean Council website.
It looked quick and easy and good!

INGREDIENTS

1 10-ounce Italian cheese-flavored thin pizza crust (such as Boboli)
1 15-ounce can, rinsed and drained, or 1 3/4 cups cooked dry-packaged black beans
2/3 cup onion, chopped
1 teaspoon ground cumin
1 teaspoon chili powder
1 garlic clove, minced
1/2 cup bottled salsa
1/2 (10-ounce) package frozen chopped spinach, thawed, drained, and squeezed dry
2 tablespoons chopped fresh cilantro
1/2 teaspoon hot sauce
1/2 cup (2-ounces) reduced-fat sharp cheddar cheese, shredded
1/2 cup (2-ounces) Monterey Jack cheese, shredded

INSTRUCTIONS

1. Preheat oven to 375 degrees.
2. Place pizza crust on a baking sheet; bake for 5 minutes or until crisp.
3. Using a fork mash beans; combine beans with onion, ground cumin, chili powder and garlic in medium bowl, stirring to combine.
4. Spread bean mixture over crust, leaving a 1 inch border.
5. Spoon salsa evenly over bean mixture; top with spinach and cilantro. Drizzle with hot sauce; sprinkle with cheeses.
6. Bake at 375 degrees for 15 minutes or until crust is lightly browned.

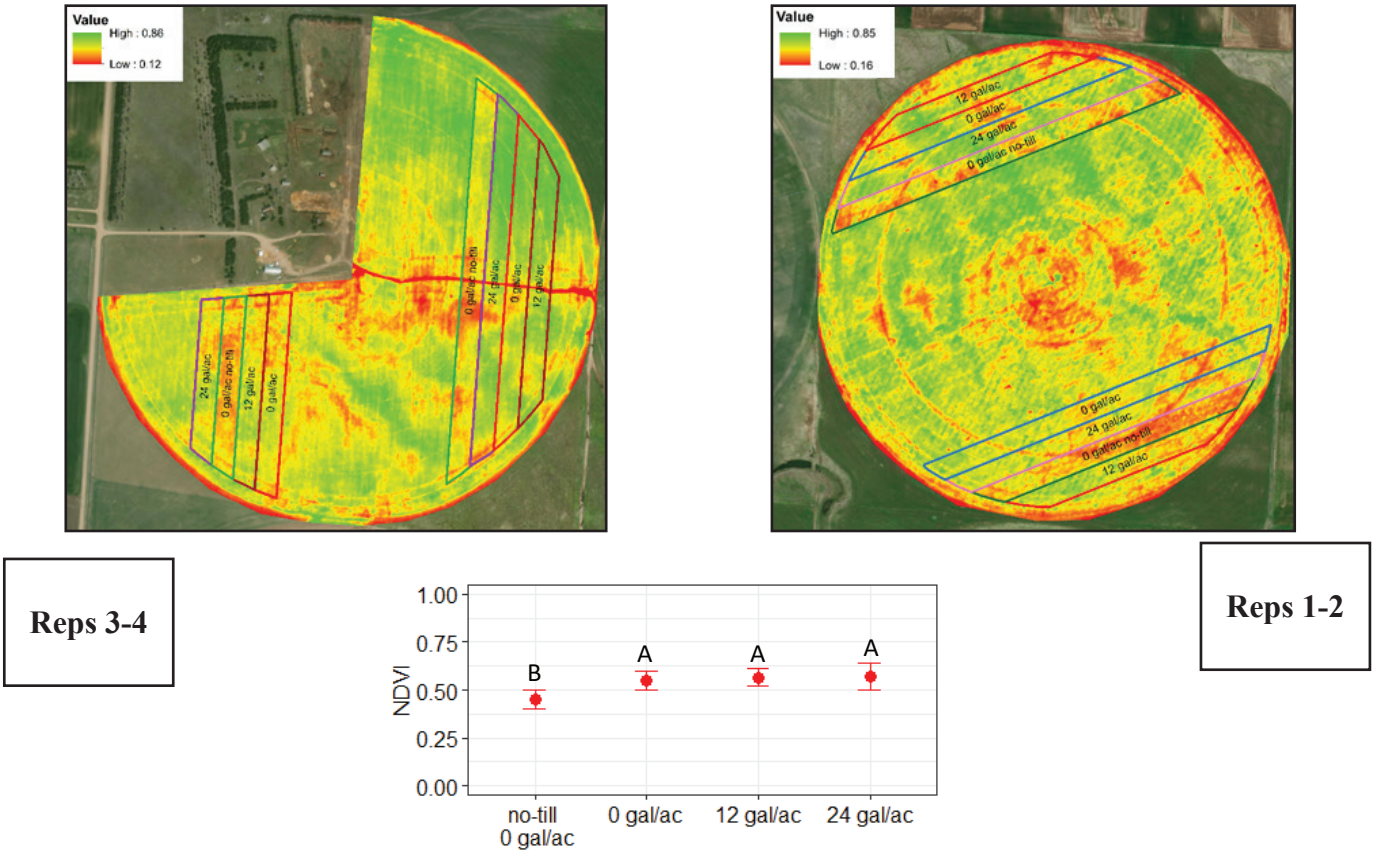


Figure 1. Normalized difference vegetation index (NDVI) from August 8, 2022. Top: treatments are outlined and labeled overlaid on NDVI image. Bottom: NDVI mean and standard deviation are shown for each treatment. Values with the same letter are not significantly different at a 90% confidence level.

Summary:

- Early season stand counts showed the 0 gal/ac no-till treatment had significantly lower stand than the 0 gal/ac strip-till treatment. Populations were lower than desired due to deep planting depth (2.5 inches) and heavy residue, especially in the no-till treatment.
- Satellite imagery obtained on August 9 showed differences in the NDVI. The no-till treatment had lower NDVI values than the strip-till treatments, and was visually apparent in the imagery. NDVI values were similar for the three strip-till treatments (**Fig. 1**).
- The no-till treatment had 3-4 bu/ac lower yield compared to the strip-till treatments. There were no yield differences among the different fertilizer rates applied with strip-till. This resulted in the greatest net return for the 0 gal/ac strip-till treatment. Heavy weed pressure in replications one and two negatively impacted yield.

Evaluating Nitrogen Rates and Strip-till for Pinto Beans

County: Banner
Soil Type: Satanta-Altvan complex 3-6% slopes; Duroc loam 1-3% slope
Planting Date: 6/2-3/22 **Harvest Date:** 9/27-28/22
Seeding Rate: 90,000 **Row Spacing (in):** 30
Hybrid: Radiant slow-darkening pinto **Reps:** 4
Previous Crop: Corn then rye cover crop 2" tall at termination **Tillage:** Strip-till, no-till
Herbicides: Pre: 15 oz/ac Prowl® H2O, ammonium sulfate, crop oil concentrate, 7 oz/ac Outlook®, 1 oz/ac Vida®, and 15 oz/ac Envy™ Six Max on 6/4/22 **Post:** 3 oz/ac Outlook®, 7 oz/ac PHT® Persist® Ultra, 3.14 oz/ac Assure® II, 9.41 oz/ac Varisto®, and 3.14 oz/ac Basagran®
Desiccation: Gramoxone® on 9/19/22
Seed Treatment: Apron® XL, Maxim®, Rancona®, Vibrance® **Foliar Insecticides:** None
Foliar Fungicides: 0.78 oz/ac Priaxor® Xemium® on 6/28/22
Fertilizer: 20 lb N/ac applied via fertigation; other fertilizer varied by rates being tested in the study
Irrigation: Pivot, Total: 10"/ **Rainfall (in):** ~5.5"

Baseline Soil Samples, 0-8" (May 2022):

						---------- Melich III ----------				
	pH	OM LOI %	Melich III P ppm	Nitrate – N ppm N	Sulfate S ppm S	K	Ca	Mg	Na	CEC me/100g
NE-1	7.1	2.9	40	7	9.8	458	2178	242	23	14.2

Introduction and Data Collection: The introduction and data collection are the same for this study as the previous study only the cover crop was grazed and was 2" tall at the time of termination.

Results:

	Early Season Stand Count (plants/ac)	Pods > 2" Above Ground (%)	Harvest Loss (bu/ac)	Moisture (%)	Yield (bu/ac)†	Marginal Net Return‡ ($/ac)
0 gal/ac, no-till	36,201 B*	68 A	1.6 B	11.8 A	21 A	475 A
0 gal/ac	51,988 A	65 A	2.3 AB	10.8 B	27 A	595 A
12 gal/ac	52,206 A	66 A	2.6 A	10.3 B	23 A	459 A
24 gal/ac	47,143 A	65 A	1.8 AB	11.0 AB	26 A	479 A
P-Value	0.001	0.120	0.087	0.017	0.112	0.129

*Values with the same letter are not significantly different at a 90% confidence level.
†Yield values are from cleaned yield monitor data. Bushels per acre corrected to 14% moisture.
‡Marginal net return based on $38/cwt ($22.80/bu) pinto beans, $3.85/gal of fertilizer, $19/ac for strip-till with no fertilizer application (from 2022 UNL custom rates), and $25/ac for strip-till with fertilizer application (from 2022 UNL custom rates).

BEAN FACT - *How can I reduce the flatulence and gas-causing properties of dry beans?*
If high-fiber foods such as dry beans are not a regular part of your diet, the natural oligosaccharides (complex carbohydrates) in beans may cause temporary digestive discomfort. Research shows that adding beans to your diet on a regular basis, at least once or twice a week, reduces flatulence. The best way to reduce oligosaccharides, is to use the quick hot-soak method to soften dry beans, then drain the soaking water and start with fresh water for cooking.

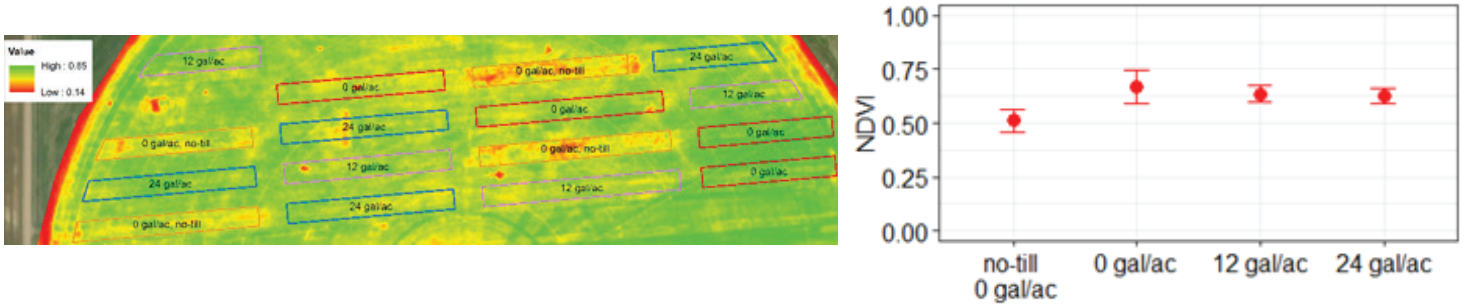


Figure 1. Normalized difference vegetation index (NDVI) from August 8, 2022. Left: treatments are outlined and labeled overlaid on NDVI image. Right: NDVI mean and standard deviation are shown for each treatment. Values with the same letter are not significantly different at a 90% confidence level.

Summary:

- Early season stand counts showed lower plant populations in the no-till treatment compared to the three strip-till treatments. Populations were lower than desired due to a deep planting depth (2.5 inches) and heavy residue, especially in the no-till treatment.
- Imagery from August 9 showed statistically lower NDVI values for the no-till treatment compared to the other three treatments indicating lower biomass. NDVI values were similar for the three strip-till treatments **(Fig. 1)**.
- The 12 gal/ac treatment had the greatest harvest loss, whereas the no-till treatment had the least harvest loss. All harvest losses were within an acceptable range. The pod height did not significantly differ between the treatments; however, numerically, the no-till treatment had a greater percentage of pods above 2", which may be partly responsible for the reduced harvest losses for this treatment.
- Grain yield and marginal net return were not significantly different among the three treatments.

Pod Ceal® on Dry Edible Beans

County: Box Butte
Soil Type: Keith loam 0-1% slope; Keith loam 1-3% slope; Keith loam 3-6% slopes
Planting Date: 6/13-14/22 **Harvest Date:** 10/11/22
Seeding Rate: 90,000 **Row Spacing (in):** 15
Hybrid: Panhandle Pride great northern **Reps:** 4
Previous Crop: Corn **Tillage:** Disked and rolled before planting
Herbicides: Pre: 30 oz/ac Prowl® H2O, 15 oz/ac Outlook®, and 32 oz/ac Roundup® on 6/7/22 **Post:** 4 oz/ac Raptor®, 30 oz/ac Basagran®, and 15 oz/ac Select® on 7/12/22; 3 oz/ac Sharpen®, 2 oz/ac Valor®, 2 pt/ac Gramoxone®, and 10 oz/ac crop oil applied for desiccation on 9/21/22
Seed Treatment: Apron XL®, Maxim®, Rancona®, Vibrance®, and Cruiser®
Foliar Insecticides: None
Foliar Fungicides: 28 oz/ac Praiz®, 1 lb/ac Nu-Cop® HB, 1 qt/100 gal InterLock®, and 1 pt/100 gal Preference® on 8/12/22
Fertilizer: 30 lb N/ac, 3 lb P/ac, and 1 lb Z/ac applied 6/9/22
Irrigation: Pivot, Total: 8-10"/ **Rainfall (in):** ~8”

Baseline Soil Samples, 0-8" (October 2021):

					---------- Melich III ----------				CEC	Zn	Fe	Mn	Cu
pH	OM LOI %	Nitrate - N ppm N	Bicarb P ppm	Sulfate S ppm S	K	Ca	Mg	Na	me/100g		(DTPA ppm)		
7.7	1.5	11.4	9	11	469	2000	313	88	14.2	0.7	3.8	1.3	0.3

Introduction: Pod Ceal® by Miller® is a product applied on dry edible beans to reduce moisture intrusion into the pod. The product is a formulation of cyclohexane polymer concentrate, which forms an elastic, semi-permeable membrane on the pods. The intent is to prevent pods from popping open during natural wetting and drying prior to harvest, and reduce harvest loss due to shelling. This producer was interested in evaluating Pod Ceal® on great northern beans to determine the impact on yield and harvest loss. Pod Ceal® was applied on 9-21-22 by ground application (90-ft boom) at a rate of 1 pt/ac, and was compared to an untreated check. Both treatments received a Gramoxone® desiccation application on 9-21-22. The field was harvested with a Case IH 7088 combine with a MacDon® 30-foot FlexDraper® head. The temperature at harvest was 75°F with 19% relative humidity.

Samples from each plot were analyzed for bean quality parameters. Harvest loss estimates were determined by taking counts in one-square-foot frames randomly chosen in the harvested area, but equally representing the left, center, and right side of the header area behind the combine.

Results:

	Harvest Loss (bu/ac)	Split (%)	Moisture (%)	Yield (bu/ac)†	Marginal Net Return‡ ($/ac)
Check	7.1 A*	0.6 A	13.4 A	35 A	836 A
Pod Ceal®	6.1 A	0.4 B	13.8 A	33 B	770 B
P-Value	0.230	0.077	0.197	0.098	0.063

*Values with the same letter are not significantly different at a 90% confidence level.

†Bushels per acre corrected to 14% moisture.

‡Marginal net return based on $40/cwt ($24/bu at 60lb/bu) and $11.82/ac for Pod Ceal®.

Summary:

- There was no difference in harvest loss between the Pod Ceal® treated beans and the untreated beans.
- Beans treated with Pod Ceal® had a reduction in percent splits.
- Yield was 2 bu/ac less where Pod Ceal® was applied.
- Marginal net return was $66/ac lower for the Pod Ceal® treatment compared to the untreated check.

###

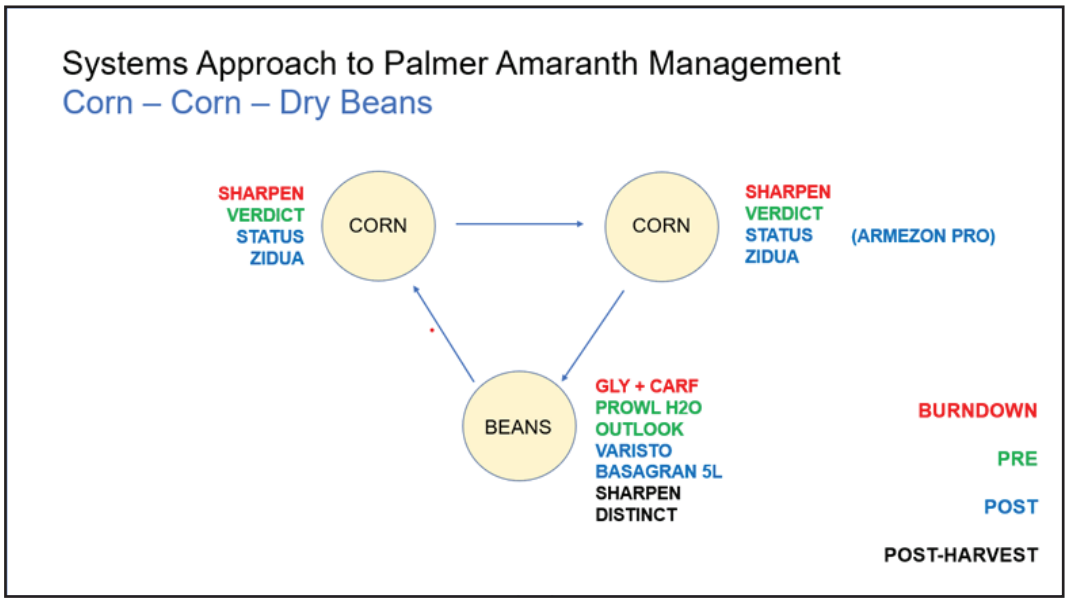
A Systems Approach to Palmer Amaranth Management

Rand Merchant, BASF Technical Service Representative

Glyphosate-resistant populations of Palmer amaranth continue to spread rapidly across the western plains. Palmer's prolific seed production and rapid adaptability make it a particularly problematic weed in our production systems. Over-reliance on single applications of postemergence-only herbicides, with no additional management strategies, can allow a small population of Palmer to quickly overtake a field.

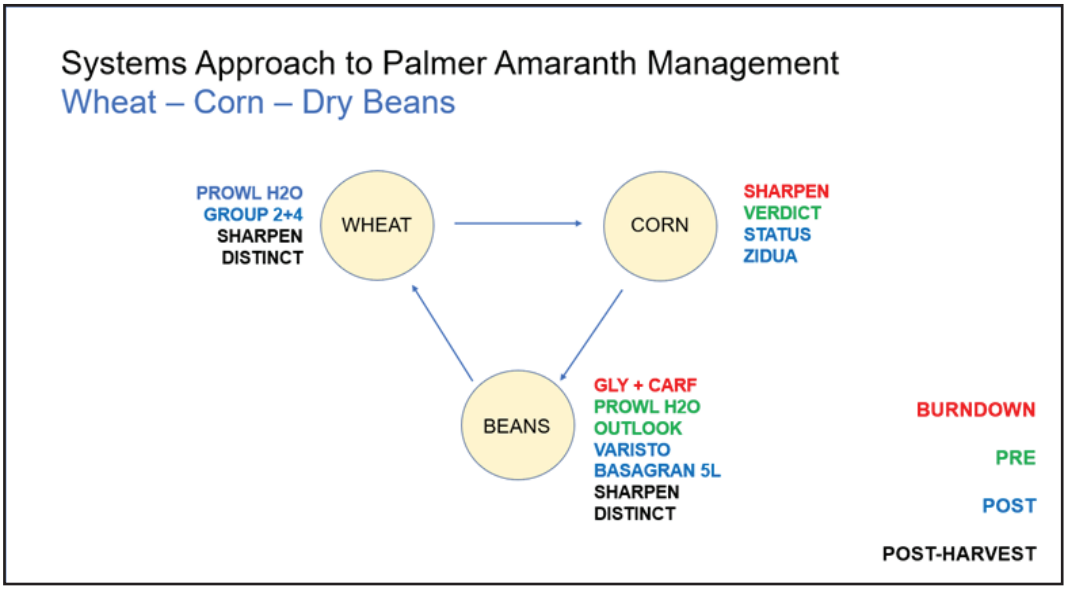
Managing Palmer in dry beans is made more difficult by the limited number of herbicide modes-of-action available to us. If our goal is to produce a weed-free field of dry beans we must look at management of Palmer amaranth and other summer broadleaf weeds as a multi-year process involving a system of cultural and chemical practices.

A handful of Palmer escapes can add many millions of seed to the weed seedbank. If we had a difficult season with weed management in dry beans in 2022, rotation to corn is a way to introduce strategies to begin managing that seedbank population down. Beginning with deep tillage in the late winter to early spring is a way to bury Palmer seed below its emergence profile in the soil and reduce the overall weed pressure that must be dealt with. In this situation, corn is not only a crop but a management tool with the goal of rotating to dry beans in subsequent years. Take advantage of this by using as many effective residual herbicides as possible within the corn cropping season. Attachment 1 is an example of chemistries available in the BASF portfolio within a three-year rotation of corn-corn-dry beans.



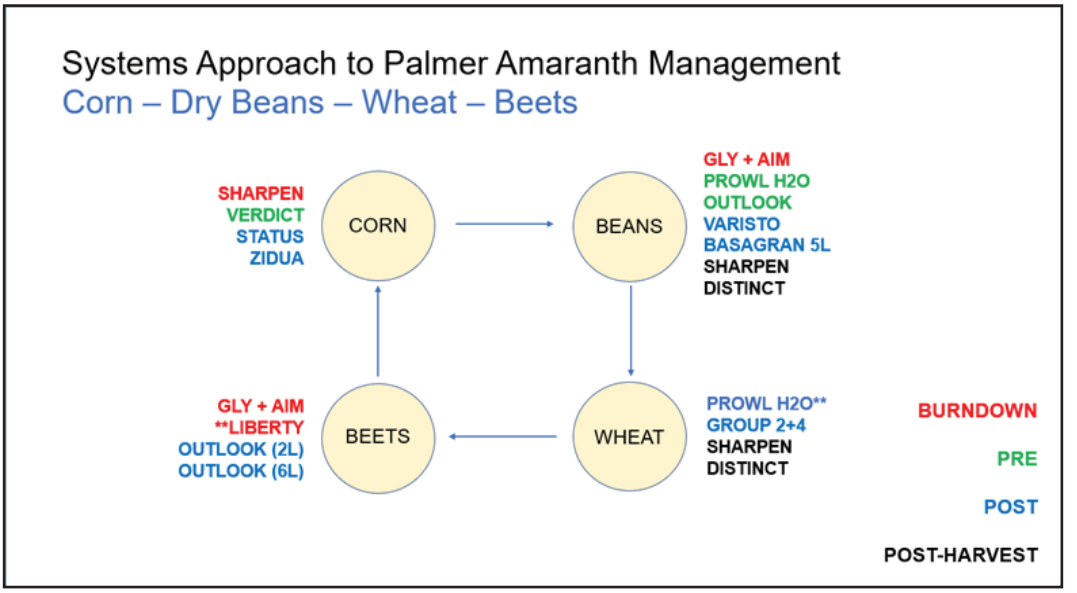
Attachment 1.

Adding wheat in the rotation gives us another effective cultural practice. Monoculture cereal grain cover crops are an effective strategy to suppress germination of summer annual broadleaf weeds. Wheat stubble after grain harvest can be an asset to weed management in subsequent years, but only if it is maintained weed-free. In our environment Palmer can emerge as late as September, and in adverse conditions can senesce in as few as fourteen days. To prevent late-emerging Palmer from contributing to the seedbank multiple burndown applications following grain harvest may be necessary but will pay dividends in the value that it brings to clean wheat stubble. For examples of chemistries available in the BASF portfolio for a wheat-corn-dry bean rotation see Attachment 2.



Attachment 2.

Adding sugar beets to the rotation creates some limitations with chemistries due to plant-back intervals. This makes our management decisions in corn and wheat even more important. I think of corn and wheat as "management" crops that give us the best opportunity to down-regulate the seedbank population while sugar beets and dry beans are "maintenance" crops with the goal of not adding to the seedbank. Attachment 3 is an example of a corn-dry beans-wheat-sugar beet rotation using the BASF portfolio. It is important to note in this example that some chemistries listed have limiting plant-back restrictions or special application considerations and producers should thoroughly understand the label before use.



Attachment 3.

The examples given are by no means an exhaustive list of potential crop rotations involving dry beans in our areas. Glyphosate-resistant Palmer amaranth requires a shift in how we think about weed management, and if our goal is to produce weed-free dry beans then we must take into consideration every possible management strategy, cultural and chemical, to be successful. Always read and follow label directions, contact your local retailer for rate recommendations and plant-back restrictions.

###

Thank you to Dr. Merchant for providing this article. We saw his presentation in a meeting and thought the information valuable to our growers as an option to control Palmer.

The Astonishing Story of Selection #27

Robert M. Harveson, Extension Plant Pathologist and
Carlos Urrea, Dry Bean Breeder
University of Nebraska, Panhandle REC

Great Northern Beans Come to Nebraska

Nebraska is a major producer of dry beans in the U.S. with growers planting anywhere from 120,000 to 200,000 acres of beans annually with an estimated economic impact of $150 million to the state of Nebraska. Nebraska ranks third in the U.S. in total production. Great northern beans have been grown here for more than 100 years and Nebraska has now become the world leader producing approximately 85% of all beans.

Many long-time residents of western Nebraska are likely familiar with the story about Chester Brown and the introduction of great northern beans into Nebraska. He brought back this bean to the North Platte Valley from Idaho in 1923, and he planted 10 acres on his farm. His success with this crop encouraged others in the area to try them as well and thus the dry edible bean industry was officially born in Nebraska. The details on how this bean became so important is likely unknown to many readers today. This sets the table for the amazing tale of a serendipitous event that accidentally occurred in a dry bean research field at the Scottsbluff Ag Lab near Mitchell, NE in 1958.

Beginning Disease Resistance Breeding

This story actually begins two years earlier with the innovative work of UNL's vegetable breeder, Shigemi Honma. In 1956, he published results of a study stating he created viable progeny after crossing the tepary bean *(Phaseolus acutifolius)* with a great northern common bean line, Montana #5 *(Phaseolus vulgaris)*. The offspring resulting from this revolutionary discovery was recognized as the first successful, interspecific hybrid produced after crossing two distinct bean species. This new hybrid was named Nebraska #1. It also provided a method to transfer common blight resistance into new hybrids, thus paving the way for the production of future blight resistant germplasm.

After the departure of Honma to Michigan State University, the potato breeder, Bob O'Keefe was temporarily tasked with running the bean program. In the summer of 1958, he planted Nebraska #1 on a field at the Scottsbluff Ag Lab. The plots had a number of problems that season, including having to re-plant the study and a severe hailstorm, all of which resulted in large levels of disease from common blight arose.

Selection 27 and Dermot Coyne Emerge

David Nuland was a UNL graduate student at this time, stationed in Scottsbluff for the summer. Many of you may remember Dave as a long-time horticulturalist at the Panhandle REC. O'Keefe gave him the responsibility to monitor and scout the affected field and select any plants that exhibited some form of resistance to common blight. Nuland selected about 30 plants that had not matured and had shown visual resistance to the disease. One particular plant from this field, labeled as "selection no. 27", was retained, and the maturing seeds were saved.

Dermot Coyne began his stellar career as UNL's bean breeder in 1961. One of his first projects was searching through hundreds of breeding lines looking for resistance to common blight. He chose selection 27 for use in his new breeding program, acquired from that one rogue Nebraska #1 plant discovered from the diseased field in 1958.

Selection 27 was then used as a parent to produce a long list of new disease resistant cultivars, including the great northern beans 'Tara', 'Jules', 'Valley', 'Harris', 'Starlight', 'Weihing' and the pinto, 'Chase'. Current UNL and PHREC dry bean breeder, Carlos Urrea has furthermore utilized the disease resistance of selection 27 to attain the blight-resistant great northern cultivars 'Coyne' and 'Panhandle Pride' due to the inclusion of 'Weihing' and 'ABC-Weihing' in their genetic backgrounds, respectively.

Source of Resistance

After creating numerous great northern breeding lines and new cultivars with excellent resistance to common blight originally created from Nebraska #1, Selection 27, it was assumed that the resistance was derived from the tepary bean, but later research by a team of breeders using molecular mapping techniques determined that the resistance transferred to this selection actually originated from Montana #5 instead of the tepary bean. Nevertheless, selection 27 is now hypothesized to be simply a chance segregate from its resistant parent, Montana #5.

Concluding Remarks

This amazing germplasm source has effectively served as a parent for decades for crossing with other breeding lines and transferring common blight resistance. It continues today contributing to the production of new cultivars that possess resistance to additional diseases, including halo blight, brown spot, wilt, rust, and white mold.

###

WBC studies and a plea for help

JD Cluever[1] and JD Bradshaw[2]
[1]PhD Candidate, University of Nebraska-Lincoln, Panhandle Research & Extension Center, Dept. of Entomology
[2]Professor & Director of Plant Health, University of Nebraska-Lincoln, Lincoln, NE, Dept. of Entomology

As a cool 1915 September day dawned in High Plains, a horse-drawn cart arrived at a local dry bean warehouse. The plant's staff proceeded to take a routine sample of what they thought would be just another load of dry beans. Alarmed, one of the staff called the plant manager, Hank Hawkins, over. Hawkins came over to look at the dry bean sample and immediately noticed a high percentage of damaged beans.

Hawkins told the driver, "I am sorry, Henry, but we cannot accept these beans. They are too damaged." Well, what is the damage from? I have never seen such a thing." Asked one of the plant staff. "It is worm damage. I have heard reports of this type of damage from other companies, but I had no idea it could be this bad," Replied Hank.

The proceeding is a fictional story detailing some of the first reports of WBC injury. In the 1940s, reports of up to 80% of Western Bean Cutworm (WBC) feeding damage occurred; in some cases, entire loads had to be rejected. Since then, WBC has been a perennial problem for dry bean growers. Typically, control of WBC is achieved with insecticide applications. However, they are not always needed; thus, it is important to know if and when an insecticide application is needed.

In corn, it is recommended to check twenty plants in five areas of each field for WBC eggs and larvae. An insecticide application should be considered if over 4-8% of plants have egg masses or larvae. And if needed, an application should be made at 95% tassel. However, scouting for egg masses in dry beans is impractical.

Thus pheromone traps are often used to predict risk. Current recommendations are to place at least two pheromone traps on opposite ends of the field starting in late June. Moths must be regularly counted up to peak flight. Risk to your beans is low if fewer than 700 WBC moths are caught up to peak flight, it is high if over 1,000 are caught, and it is intermediate if fewer than 1,000 but more than 700 are caught. If you determine that an insecticide is necessary, it is best made 10-21 days after peak flight (**Fig. 1**).

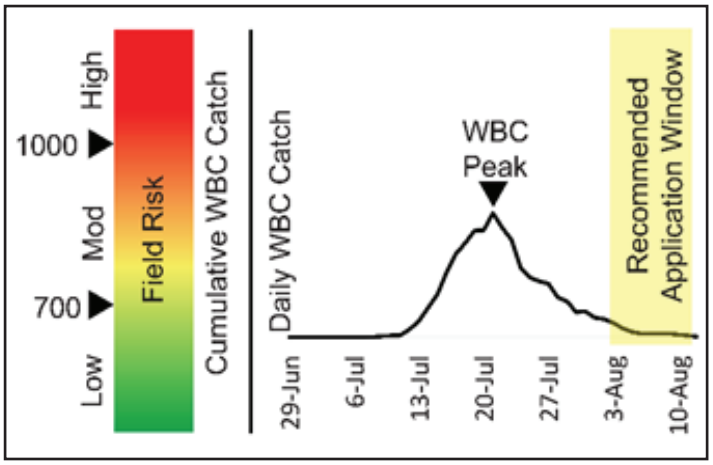


Fig. 1. *Treat Recommendations in dry bean*

However, all too often, recommendations are made primarily based on field data and do not consider the complex decision-making processes of stakeholders, such as the need for smaller landholders to share application costs with neighbors, the availability of the tools and time to conduct a monitoring program, and buyer preference.

To correct this, the UNL-PHREC Entology lab conducted a mixed-methods study of WBC control. Our

mixed-methods study combines information from an online survey, a series of focus groups, and biological field data. The survey helps to answer the "what" questions associated with stakeholder practices, and the focus groups help to answer the "why" questions.

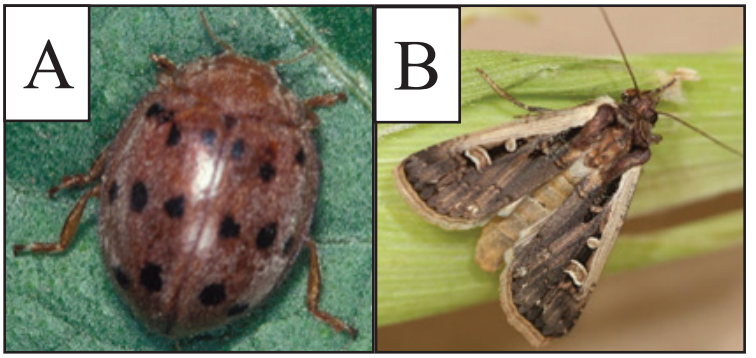


Fig. 2 a. *Mexican Bean beetle adult (Photo credit: Frank Peairs CSU);* ***b.*** *WBC adult (Photo credit: Adam Sisson ISU)*

Our initial survey was distributed by Qualtrics from February to July 2022. We received responses from 12 dry bean growers in Michigan and Nebraska. (Note: this should be interpreted cautiously as we had a low response rate). From the survey, we found that the Mexican bean beetle (MBB) (**Fig. 2**) was also a pest of concern. This has implications for pest management as the peak egg-laying period for the MBB occurs in early July. Thus, concern over the MBB may contribute to the practice of tank-mixing an insecticide with a pre-closure herbicide.

We also found that 14% of dry bean growers noticed reduced WBC control by foliar insecticides. However, this, too, must be interpreted cautiously, as we only received 12 responses.

We set up an on-farm trial at three locations in 2020 and four in 2021 to compare the efficacy of three pheromone trap types. The trap types were a standard milk jug trap, a green bucket trap, and an automated sticky pad trap. Pheromone traps were placed in two transects on different sides of each field and checked regularly throughout the season.

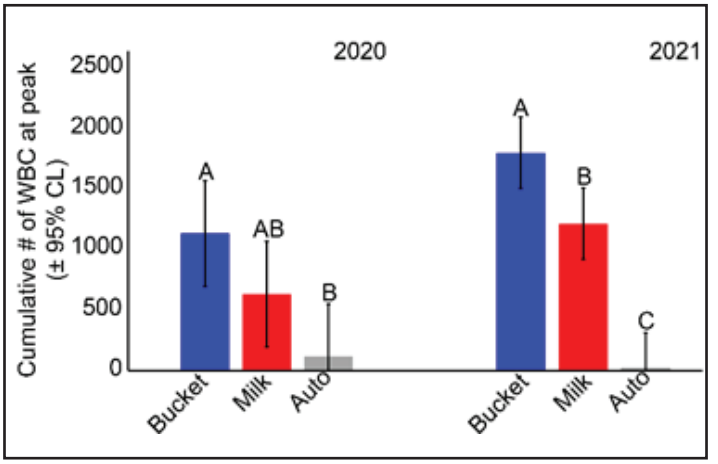


Fig. 3. *Comparison of pheromone trap types*

We found that the automated trap's sticky pad would become saturated with dust and moth scales and quickly lose effectiveness. The milk jug and bucket traps were equivalent in years with low WBC numbers (**Fig. 3**). However, the green bucket traps will outperform milk jug traps in years with higher numbers (**Fig. 3**).

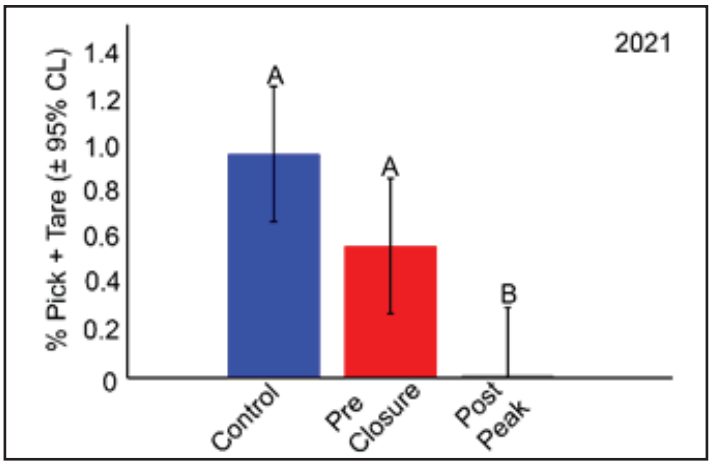


Fig. 4. *Comparison of insecticide timing*

We also performed an on-farm trial at the same three locations in 2020 and 2021 to determine the optimal spray time for WBC control. We compared 1) an untreated control with, 2) Asana (9.6 fl oz/ac) at the time of a preclosure herbicide, and 3) Asana (9.6 fl oz/ac) 10-21 days after peak WBC flight as determined by pheromone traps. We found that application after peak flight was the most effective and that the preclosure herbicide was no more effective than the control (**Fig.**

4). Thus, pheromone traps will be helpful in timing applications.

We also conducted an experiment to determine the amount of labor required to maintain each trap. We had five individuals count moths from seven milk and seven green bucket traps to determine the time necessary to count each moth. We found that it takes longer to count each moth from a milk jug trap.

$$Y = (1.43X_m + 5.78) + 32.7_{pm} + 201_a + 60_s$$

Where: Y = Total is the total time in seconds; X_m is the number of moths caught in a milk jug trap; pm is the amount of time to change the pheromone in the milk jug trap; a is the amount of time to refill the antifreeze mixture; s is the amount of time required to set up a trap.

$$Y = (1.25X_b + 5.78) + 32.7_{pb} + 201_a + 600_s$$

Where: Y = Total is the total time in seconds; X_b is the number of moths caught in a green bucket trap; pb is the amount of time to change the pheromone in the bucket jug trap; s is the amount of time required to set up a trap

The total material and labor cost for maintaining a milk jug trap is estimated to be between $20.48 and $23.37, while for a bucket, it is $42.92 and $52.27. This would amount to $0.41-0.47 / acre for a milk jug and $0.86-1.04 / acre for a green bucket (assuming two traps on a hundred-acre field). (However, cost savings may be incurred if a bucket trap is reused over multiple seasons). This is well under the $2.50/ acre

that Nebraska dry bean growers indicated that they would be willing to pay for pheromone traps *(Note: this should be interpreted cautiously as we only received ten responses, with four from Nebraska)*.

Growers from our NDBGA region II indicated that WBC is a problem depending on the year. However, those from region I stated that it is not much of a problem since they switched to direct harvesting. This makes sense since WBC larvae continue to feed upon the beans in the windrow. Thus, we learned that the harvest method should be a consideration for WBC management. (However, this needs more study before official recommendations can be made).

From our **Biological data**: we learned that 1) the green bucket trap is best for monitoring WBC in western NE and 2) insecticide applications for WBC are best made after peak flight. From our **Survey data**: we learned that 1) MBB may also be a concern for growers, and 2) that growers may be willing to pay the required amount to maintain pheromone traps. From our **Focus groups:** we learned that harvest method may affect WBC injury. So, we conclude that mixed-methods studies yield more helpful information than purely biological ones.

However, these results should be interpreted cautiously as we had a lower-than-desired response rate. We recently re-released our survey to better understand stakeholder practices and concerns. So please take 10-20 minutes of your time to complete our survey if you haven't already. The results will help guide future research and extension efforts.

- You must be a grower, crop consultant, or industry professional who is 19 years of age or older to participate
- You will be asked to fill out a survey of your perceptions/ practices regarding WBC and general insect control
- The survey will take place online & will take 10-20 minutes to complete
- There are no known risks
- Participants may be entered to win 1 of 20 $100 Amazon gift cards
- Winners will be contacted via email

The survey may be accessed here: https://go.unl.edu/wbc-ipm
For questions, please contact cluever.jeffrey@huskers.unl.edu or jbradshaw2@unl.edu

###

BEAN FACT - *Why can't I eat dry beans raw?*

Many types of beans contain a class of proteins called lectins. These proteins have the ability to interfere with the cell membrane repair process that occurs as a part of digestion. If not destroyed by cooking, lectins can cause a severe form of food poisoning, with attendant nausea, vomiting, and diarrhea. This includes bean flour.

Colorado Bean Summit

The 2nd Annual Colorado Bean Summit was held on March 2, 2023 at the Elks Lodge, Arvada, CO. hosted by the Colorado Dry Bean Advisory Committee (CDBAC).

Chelsea Didinger, CDBAC Executive Director and Bob Schork, CDBAC Administrator, coordinated an exciting program to share the behind the scenes world of dry beans from farm to fork.

This years program included a presentation by Jay Ewald, Northern Bean and Feed discussing the 2022 dry bean harvest and production in the Colorado, Nebraska and Wyoming growing region sharing some insights about the challenges farmers faced in the 2022 growing season.

Participating in a grower panel was Dan Hinman, Nebraska Dry Bean Growers Association, President, from Mitchell, NE, Troy Seaworth, CDBAC grower representative from Wellington, CO and Joe Newton, dry bean producer from Eastern Colorado. The grower panel shared their experience in producing dry beans and the sustainability benefits of dry beans. The grower panel discussion was led by Courtney Schuler, NDBC Chair.

Sally Ayotte, RDN of the Heart of the Rockies Regional Medical Center discussed the health benefits of dry beans and why she thinks they are the perfect food.

CDBAC worked with Chefs John Jaramillo and Selene Nestor, Colorado Hispanic Restaurant Association, to identify five chefs in the Denver area who were interested in showcasing their unique bean recipes.

Public attendance in the Bean Summit were the judges of this years competition. This year's Chefs participating in this years competition include:

- **Chef Rudy Elsener** of Rudy's Catering at the Arvada Elks made Pinto Bean Patties, Best-Ever Succotash, Bunder Gerstensuppe (red bean, barley, and beef soup), and Spicy Hummus Spread.
- **Chef Luis Gurrola** of Necio Mexican Kitchen made 4 tasty recipes: Chorizo Pinto Bean Dip, Frijoles Charros (Cowboy Beans), Black Bean Roasted Garlic Sauce, and Light Red Kidney Bean Hummus
- **Chef Salem Mares** of Nomad Taqueria + Beer Garden, won "most likely to order in a restaurant" with her Black Bean & Sweet Cream Mousse.
- **Chef Nora Rameriz** of Nomad Taqueria + Beer Garden won "most likely to cook at home" with her White Chicken Chili with mayocoba beans, she also prepared Red Chili and Vegetarian Red Chili.
- **Chef Zuri Resendiz** of Luchador Food Truck won "favorite pinto dish" with Pinto Bean Chilaquiles.

Dry beans utilized in this years competition were pinto and mayocoba beans donated by Barber's Farms and Northern Feed and Bean, light red kidney beans donated by Jack's Beans and great northern beans donated by Trinidad Benham.

Sponsors for this year's competition were:

Nebraska Dry Bean Commission

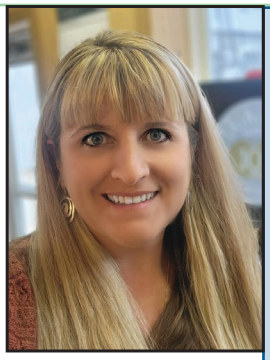
WYOMING BEAN COMMISSION

Organized in 1917

NDBC appreciates Chelsea Didinger, CDBAC Executive Director for her enthusiasm and hard work to coordinate this years event and John Jaramillo, Colorado Hispanic Restaurant Association, for selecting an outstanding group of chefs and a thank you to all the talented chefs who shared their love for dry beans. For Chef's recipes visit: https://coloradodrybeans.org/2023-bean-summit/

Chair's Comments

By Courtney Schuler



Spring—certainly a season we are all more anxiously awaiting than normal after this recent winter. The moisture was much needed, but many of the other extremes we experienced were not. And with that also comes an end to the hectic meeting and conference season for many of us. The always anticipated Planting Intentions report will be released on March 31 and after that it will be time to focus on the production year ahead and gear up for planting!

A big shout out to the Nebraska Dry Bean Growers Association for their engaging speakers and program this February for Bean Day. It's always a great opportunity to catch up with the growers and the industry. The Colorado Dry Bean Committee put on a fantastic Bean Summit in early March showcasing dry beans from the farm to the plate. The Summit featured a variety of panels, including producers, chefs, and local food distributors. Chefs from the Hispanic Restaurant Association prepared a wide variety of delicious bean dishes for lunch.

NDBC is staying engaged with our congressional representatives as the new Farm Bill becomes a topic of discussion. The complexity of the bill continues to increase as more focus shifts toward sustainability and conservation. We continue to work through the US Dry Bean Council with the Crop Protection Action Coalition for Trade (CPACT) to educate policymakers, consumers and others about crop protection products and taking a more science based approach to the policies surrounding them—visit cropprotectionact.org for more info.

NDBC appreciates those of you who participated in the dry bean production survey we put together last year to help guide our research dollars to fund projects relevant to problems you have in your operations. Our new survey is available now, so please scan the QR code below to be directed to the file on our website, print out the survey, fill it out and return it to the Commission at dryediblebeans@nebraska.gov. We will also post it on our Facebook page. Our goal is to compile results from a large percentage of our acres this year so we can take a few years off from doing the survey—extra incentive for you to participate!

In addition, we are building a list of producers willing to host on-farm research in the future. If you would be interested in hosting on-farm research, please send an email to the email listed above with the projects you'd be most interested in seeing on your farm.

If you have questions about what it takes to serve on NDBC – please contact me at 308-225-1775, or cschuler@trinidadbenham.com. The current openings are posted above.

2022-2023
Nebraska Dry Bean Commission
Members

Grower Representatives

David Howell, Treasurer, District I
Justin Relka, District II
District III– Vacant
District IV—Vacant
Jeff Jenkins, At-Large District I & II
At-Large District III & IV—Vacant

Processor Representatives

Courtney Schuler, Chair
Trinidad Benham Corporation,
Bayard, NE

Dave Weber, Vice Chair
New Alliance Bean, Alliance, NE

Chris Kelley
Kelley Bean Company, Scottsbluff, NE

Dr. John Westra,
UNL PREC Director
Ex-Officio

Lynn Reuter, Executive Director

Nebraska Dry Bean Commission
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Link to 2022 Dry Bean Production Survey—Please Complete!

US Dry Bean Council's Global Buyer's Conference BeanCon23

by Courtney Schuler

Bean industry, advocates and allies from across the globe descended on Medellin, Columbia February 15-17, 2023 for the third annual BeanCon extravaganza hosted by the US Dry Bean Council. Due to Covid restrictions for the first two years, this was the first, fully in-person BeanCon and it fulfilled its purpose - Creating an environment for innovation, collaboration, and networking to fuel increased trade and consumption of US Beans around the world. The three day event brought in over 200 attendees representing more than 20 countries.

Breaking the mold of more traditional conferences like this, BeanCon engages its audience with a variety of topics from market supply in demand, to innovation and nutrition. There is a growing focus on plant-based food and sustainability, and dry beans can play a role in that movement. The nutritional and health benefits of dry bean consumption are well-known, but were presented from a new perspective to re-energize that aspect of attractiveness.

One session focused on companies who have developed specialty bean products on the market today. They discussed their journey including what inspired them to use beans, how they attack their marketing and new projects they may be working toward. Some of the companies featured were P-Nuff, Bean Vivo, Bold Bean Co., and 13 Foods. The products ranged from some canned in beautiful jars, to tasty peanut flavored puffs, individually quick frozen products, to perfectly seasoned pureed beans in convenient microwavable pouches.

Distinguished chefs from across the world played a very meaningful role at the event. In particular, Chef Juan Manuel Barrientos, an award-wining Columbian chef, hosted the opening press event on the rooftop of his hotel in Medellin. He served many of his unique bean dishes and also developed a signature cocktail for BeanCon with pinto beans as an ingredient. It was a hit!

Another session investigated opportunities in schools and the military and how to approach those avenues and help meet their nutritional needs. "Stirring the pot," was a panel focused on debunking the myths about beans and why some consumers shy away from them. Flatulence is the most common myth, and the take home message was that most people don't experience any problems once their gut adjusts to them. The high fiber in beans takes about a week to get used to, and after that, you should be in good shape! Other myths, like beans being "high carb" and the lectins in raw beans were explained as well.

Make plans to join USDBC at BeanCon24 in Cancun, Mexico. The date and location will be announced in the coming months. Thank you to all who supported the event through sponsorship and attendance!

For a full list of speakers and their bios, visit www.beancon23.com

More from BeanCon23 in Medellin

BeanCon23 Presenters

Below are some of the bean allies from BeanCon for you to visit on the web or follow on social media for more information.

Blue Zones
A Legume A Day
NutritionFacts.org
Plantstrong
Perfect Life Nutrition - Pnuff
Root the Future
Bean Vivo
Beans Is How
El Cielo Restaurant
Chef Juan Manuel Barrientos
Bold Bean Co.
13 Foods
Eco Chef
CIA Healthy Kids Collaborative
USA Frijoles
Pure Food Consulting

"Delicious Food Gets Chosen"
- Brad Barnes, Pure Food Consulting

NutritionFacts.org

"Studies show an 8% reduction in risk of death for every 20 gram increase in legume consumption, and not eating beans may increase risk of mortality."
- Dr. Michael Greger, Nutritionfacts.org

What's the best bean to eat?
"The one you are going to eat"
- Chelsea Didinger, Ph.D. Candidate, Blogger at A Legume A Day

84% of U.S. Medical Costs due to:
- **Physical Inactivity**
- **Food choices & portions**
- **Tobacco Use**
- **Unmanaged Stress**

- Nick Buettner, Blue Zones

Beans is How

"Sustainability is the Expectation rather than the Exception" **- Chef Tom Hunt**

PLEASE HELP!

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If you raise beans, are a land owner or a bean processor and want to receive the Bean Bag, please contact us and we will get you added to the list.

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Thank you!

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