

# Horizon Hemp Seeds LLC

2022

Derrick Dohmann,

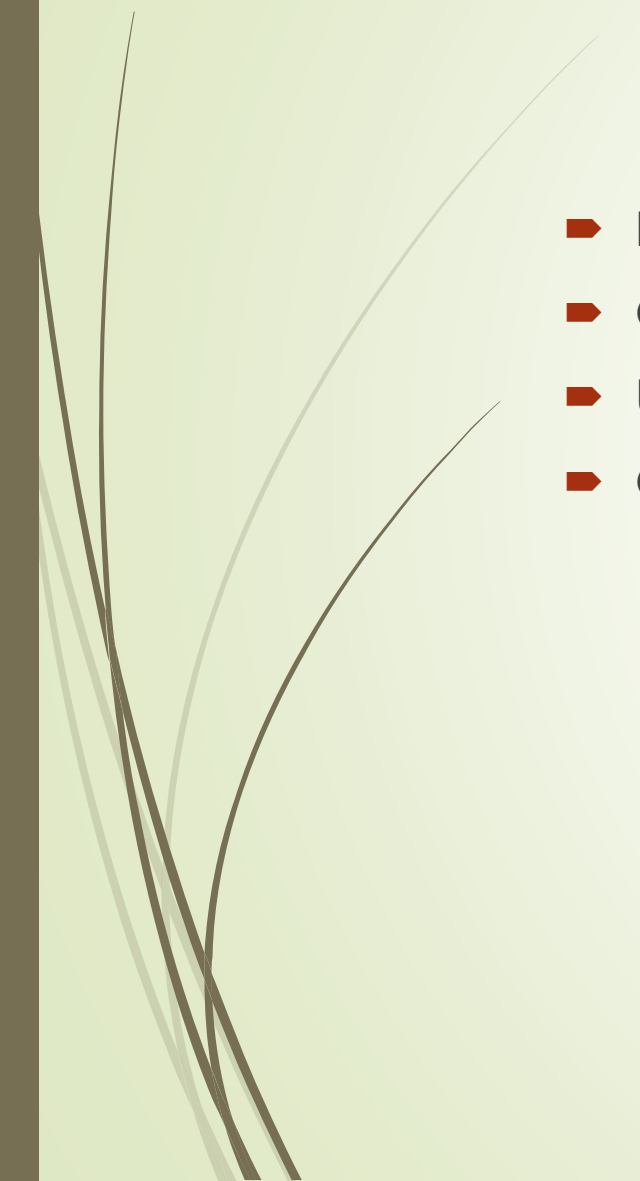
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# Horizon Hemp Seeds LLC

- HHS organization
  - Our Experience – Planting, Harvest, Markets
  - UniSeeds Partnership
  - Q&A
- 



# HHS Team

## Meet The Team



*Derrick Dohmann*

Derrick is the Horizon Hemp Seeds Sales and Marketing Manager. He has a Bachelor's Degree in Finance and Management from the University of Jamestown. Derrick is originally from Spicer, Minnesota and currently resides in Clark, South Dakota with his wife Emily. He has a wide variety of sales experience and is a proud partner of Horizon Hemp Seeds.



*Tim Bratland*

Tim is President of Legend Seeds, a leading regional corn and soybean company in DeSmet, SD. He has 28 years of experience in the seed industry and is proud to partner with Horizon Hemp Seeds as a founder and consultant.



*Dave Dohmann*

Dave worked with Hormel/Jennie-O for 28 years. He served as vice-president for 16 years. During this time he oversaw sales, marketing and research and development for a business unit with over 300 million in sales per year. He is a proud partner/founder of Horizon Hemp Seeds.



*Trav Bratland*

Trav is a corn and soybean grower from Willow Lake, South Dakota. He started farming in 1995 and has been growing and diversifying ever since. He and his wife, Connie, own and operate Bratland Farms and Bratland Ag Supply. They have two boys who enjoy being involved with the farming operation and keep them busy with football and showing sheep.



*Holly Bratland*

Holly has an Agricultural Communications degree from Texas Tech University. She spent several years working for the Texas corn and peanut commodity boards. She now owns an online fitness coaching business and is assisting Horizon Hemp Seeds with their communication strategies. Holly is the wife of Tim Bratland and together they have three kids.



# Planting – Field location



- Ideal for sandy/loamy soil, avoid high clay and poor drainage fields
- Crop Rotation
  - Ideal behind beans
  - Can go behind Corn





## Planting – Fertilizer Options

Nitrogen – typically between 80 – 120 lbs

Phosphorus – 30 – 40 lbs

Sulfur – 15 – 20 lbs

Pay attention to heavy metals levels  
(highly recommend a soil sample)



# Planting



- We planted our Vega seed variety May 30<sup>th</sup>. Seed was planted with a Hiniker drill at a depth of ½". Ground temp was approximately 55-60 degrees.
- Seeding Rate of 17 pounds per acre. (20 lbs is the targeted range)
- Worked Field before planting
- Planted in 7.5"-15" rows for weed control
- Very even stand throughout fields
- Emergence in 3 days from planting
- Full canopy in 2 - 4 weeks



# Planting – Hiniker Drill





# Harvest – JD S670

➤ 40' Flex Draper







# Wrapping

- Wrapped around the back beater reel
- Started along the shaft at the end of the reel
- Eliminated this with a 3" piece of angle iron to help deflect the trash
- Did not have issue again – make sure you do a 5 minute walk around after each time you dump to ensure nothing is building up on machine



# Combine Settings

- Concave – 30
- Chaffer – 14
- Sieve – 14
- Rotor – 400-450
- Air – 1000
- Concaves – Wide round bar
- Header was lifted all the way





# Moisture Tester

- Can use Dickey John – similar to wheat or sorghum
- Combine was not far off on moisture either, grain was only about 2 points higher than what it was reading
- Yes, the seed is green. Need to harvest wet to ensure no shelling or shatter loss (we do have wind here is SD and we experienced this first hand last year)





# Windrows of Fiber

Can be baled up and sold to fiber processing plants to produce different textiles. Also a good option for animal bedding









Seed goes from seed tender to Air Cleaner for a rough clean





# From Air Cleaner to Semi with Fan in Hopper





# Semi with Air fan and vent in Trailer

- This throws air on the seed right away (critical to have on air within 2 – 3 hours of harvest)
- This brings down the temp and cools the seed
- Seed was around 25% moisture when pulled off the field
- Seed needs to be at or slightly under 10% moisture to be considered stable







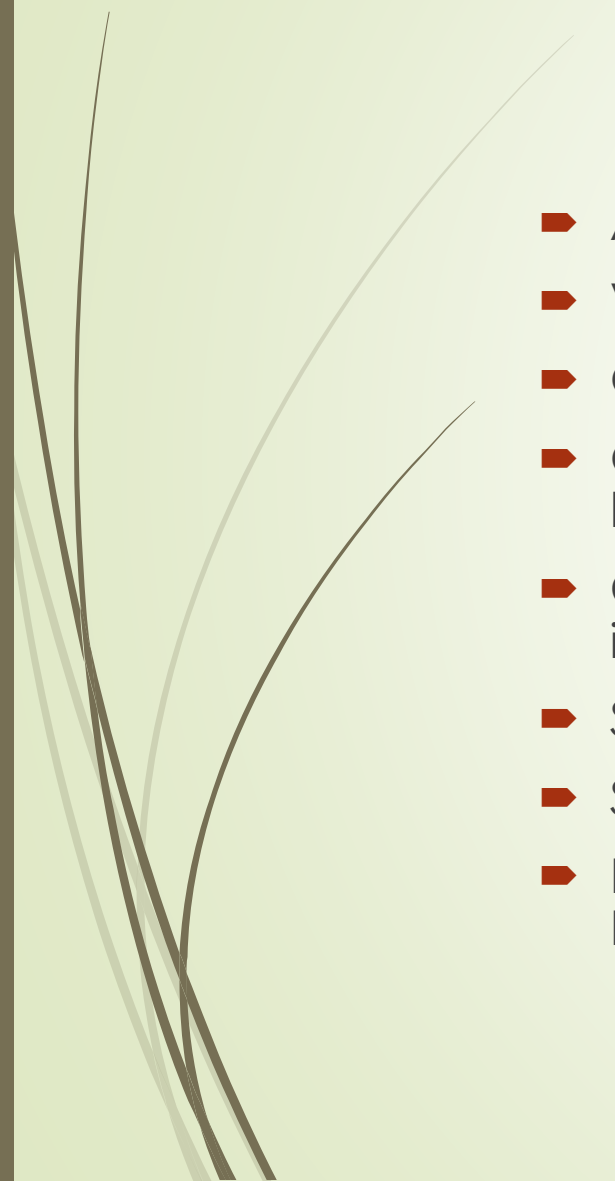
# Harvest – Certified Seed

- Our goal at the end of this year's harvest was to have certified seed through the state of SD.
- This means we needed:
  - 80% Germ or better
  - Male percentage of plants in the field to be below what the breeder states in the breeding paperwork (Ours is less than 1% Male on Vega)
  - THC less than .3% - Our results in 2021 with Vega – Non-Detect with state test. .028 with 3<sup>rd</sup> party lab out of Fargo, ND – Adams Independent Testing





# Yields and Market

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- ▶ Altair Averaged 1,000+ lbs per acre in SD
  - ▶ Vega Averaged 1,500+ lbs per acre in SD
  - ▶ Grain was about 20%-25% moisture at harvest
  - ▶ Grain dried down in hopper bottom bins or air floor bins with just air, no heat. Will need to flip bins to ensure even drying
  - ▶ Current value for grain crushing for oil is \$0.55 per lb Conventional – Organic is \$1.10 per lb
  - ▶ Seed Cost is \$4.00 per lb – Grower Meeting Special of \$3.50 with discounts
  - ▶ Seeding Rate 20lbs per acre
  - ▶ Processors will contract back grain acres (\$0.55 per lb) Dakota Oilseeds (SD), Healthy Oilseeds (ND), Hemp Acres USA (MN)



# Hemp Uses – Oil & Fiber

## ➤ Hemp Seed Oil

- Can achieve 42% protein in the cake (leftover after oil is pressed), one of the highest plant-based proteins on the planet
- High in Vitamin E, Magnesium and Omegas, Fatty Acids

## HEMP IS THE STRONGEST NATURAL FIBRE IN THE WORLD. IT'S KNOWN TO HAVE OVER 50,000 DIFFERENT USES

### TEXTILES

- Clothing
- Diapers
- Handbags
- Denim
- Shoes
- Fine Fabrics

### INDUSTRIAL TEXTILES

- Rope
- Canvas
- Tarps
- Carpeting
- Netting
- Caulking
- Moulded Parts

### PAPER

- Printing
- Newsprint
- Cardboard
- Packaging

### FOODS

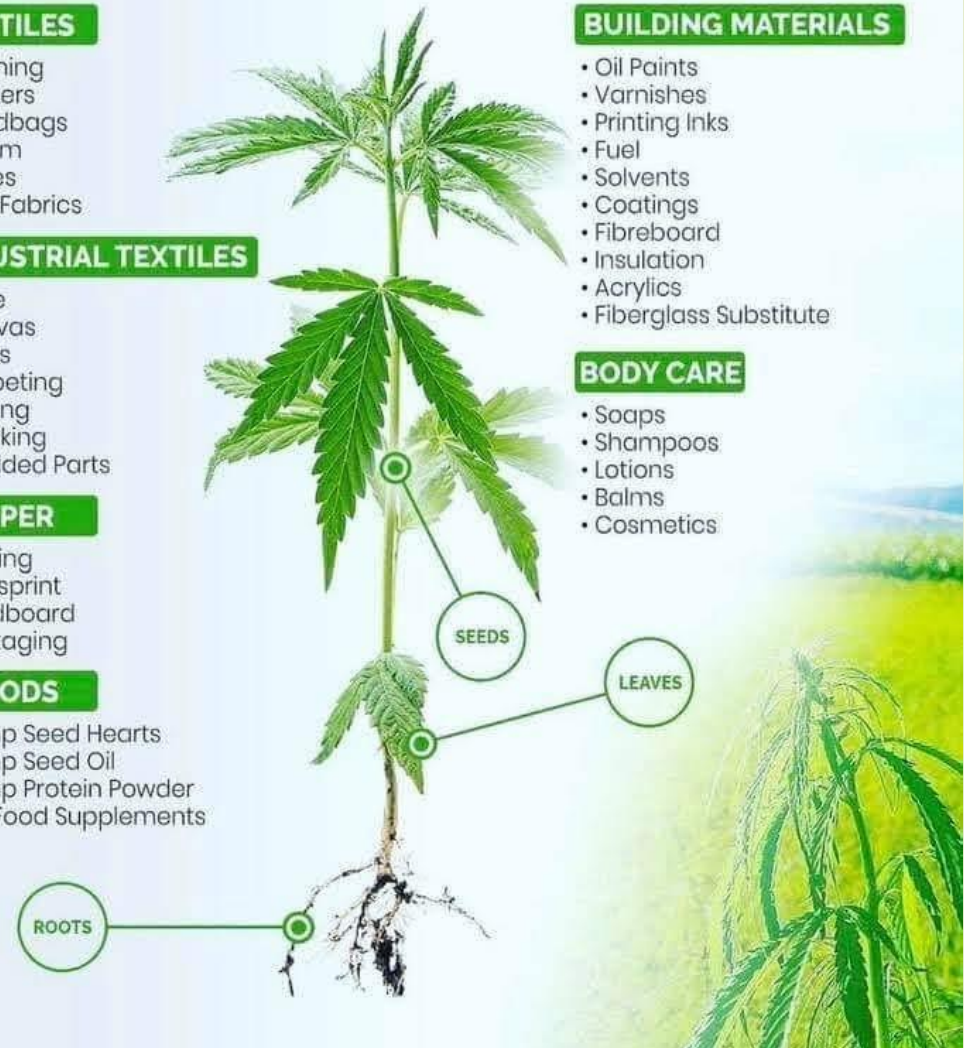
- Hemp Seed Hearts
- Hemp Seed Oil
- Hemp Protein Powder
- EFA Food Supplements

### BUILDING MATERIALS

- Oil Paints
- Varnishes
- Printing Inks
- Fuel
- Solvents
- Coatings
- Fibreboard
- Insulation
- Acrylics
- Fiberglass Substitute

### BODY CARE

- Soaps
- Shampoos
- Lotions
- Balms
- Cosmetics



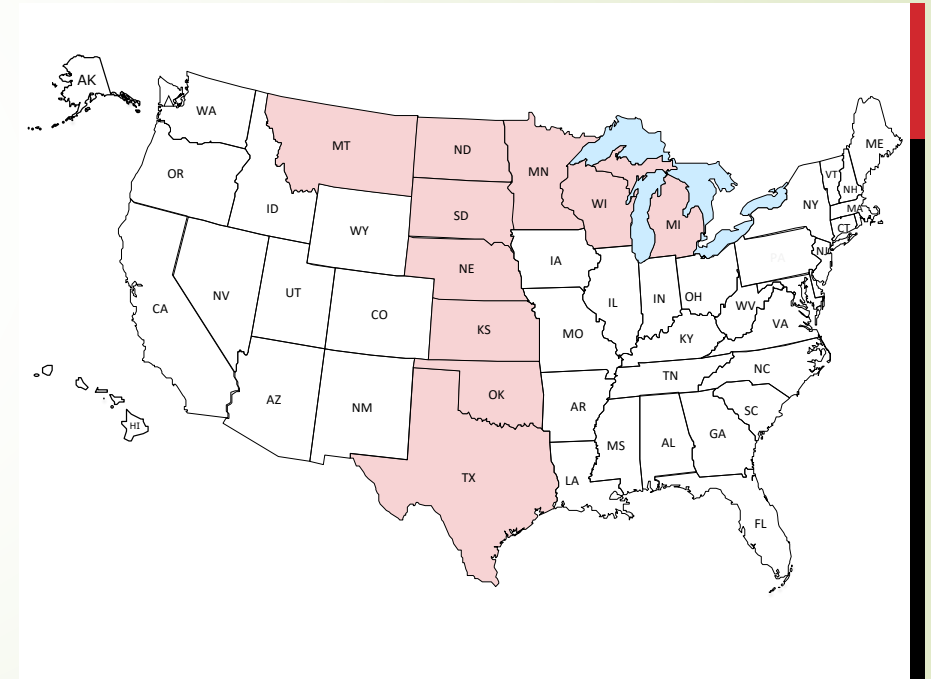






# UniSeeds Partnership

- Exclusively represent UniSeeds in all 50 states
- Marketing three dual varieties (Seed/Fiber) of industrial hemp (Anka, Rigel, Vega & Altair)
- All varieties are Monoecious:  
**Definition – Plants contain both male and female flower (Self Pollinating)**
- Develop a Dealer and Broker network for the sales, distribution and management.







# Questions?

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