



1

What does success in production ag look like?

-  Is it an easy rotation that allows you free time during summer?
-  Is it maximizing your perceived profitability, but at your soil's expense?
-  Is it conforming to the acceptable standards of the coffee shop experts?

2

What does success in production ag look like?



Is it maximizing every drop of moisture your soil receives?



Is it protecting the health and viability of your soil for the next generation?



Is it a profitable, diverse crop rotation that includes livestock and acres NOT in crop production?

3



Spring 2022 in South Dakota
We must do better!

4



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Acre by Acre Management

- ▶ Use Yield Maps to Manage Profitability!
 - ▶ Enroll saline, poor producing acres in a grass program
 - ▶ Increase APH, and profitability/acre
 - ▶ Great hunting habitat, and fixes the salinity issues
 - ▶ Why spend \$\$\$ on expensive inputs in zones that have a negative return??
- ▶ Manage your farm Acre by Acre!



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Living Roots

- ▶ Cereal Rye aerial applied 100 lbs end of August
- ▶ Great weed control
- ▶ Fantastic water infiltration



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OCTOBER 2021 RYE



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MAY 2022 SOYBEAN SEEDING

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JUNE 16 SOYBEANS
IN TERMINATED RYE

3 WEEKS AFTER
PLANTING

12

May 2024

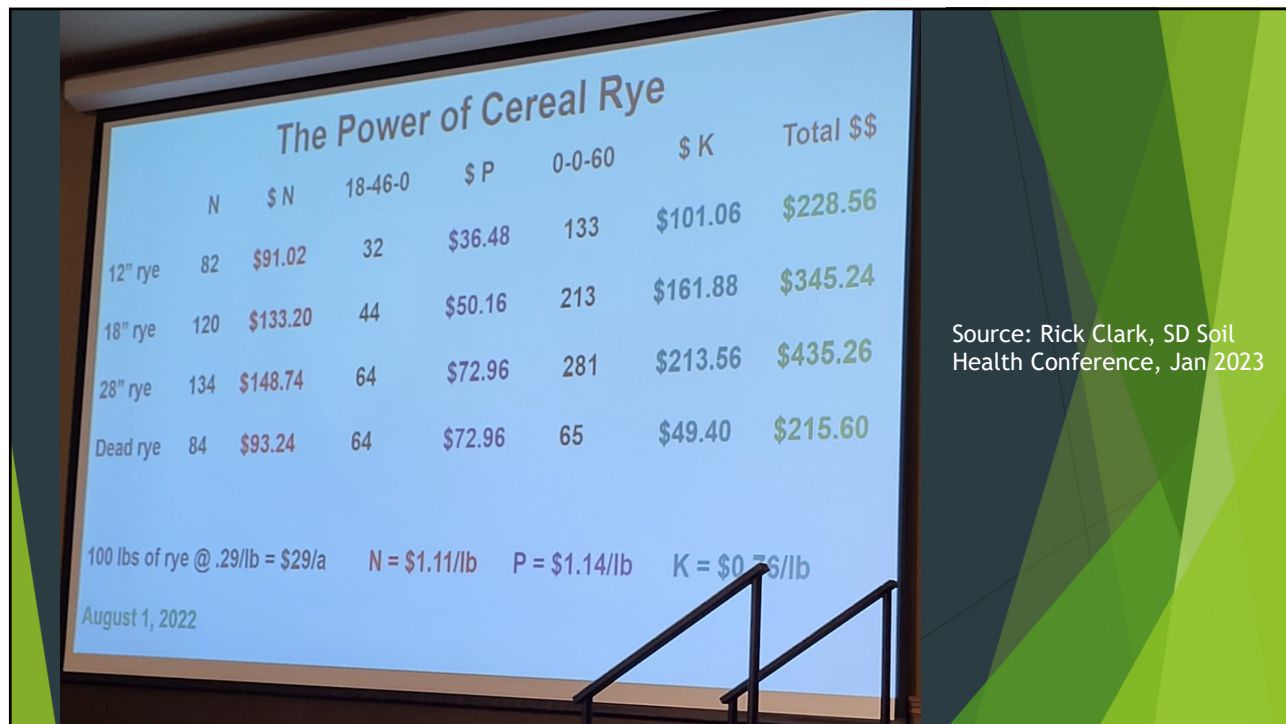


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[Michael Staton](#), [Michigan State University Extension](#), and [Martin Chilvers](#), MSU Department of Plant, Soil and Microbial Sciences - March 24, 2021

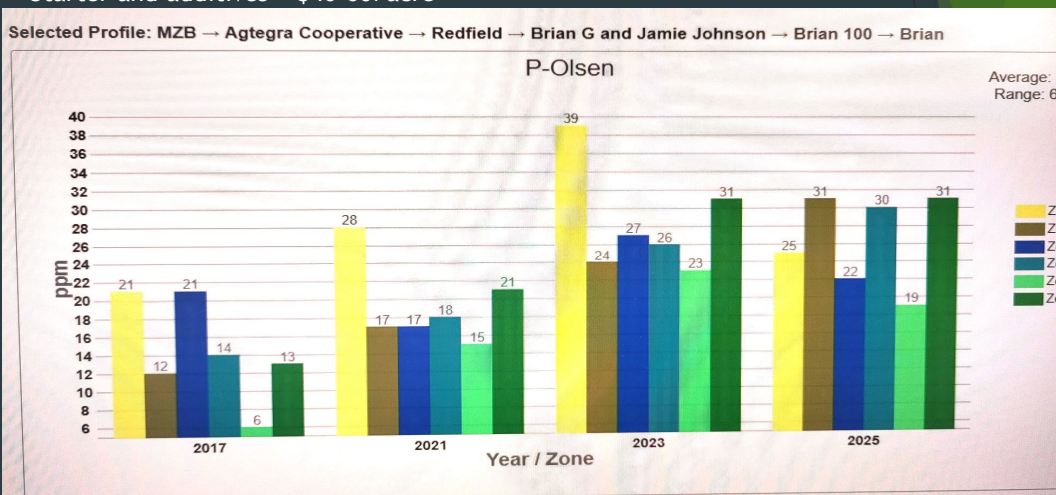
- ▶ The most effective white mold strategies **incorporate a variety of tactics** and many of the most effective tactics are implemented prior to or at planting.
- ▶ Reducing planting rates can be an effective tactic for reducing white mold.
- ▶ Using **cereal rye** has been shown to **reduce white mold incidence**.

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- ▶ Johnson Farms Fertility Costs
 - ▶ N = about \$95/acre
 - ▶ P + K = \$0
 - ▶ Starter and additives = \$40-60/acre



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► Rye Cover Crop = Expense Reductions and Improvements

- | | |
|---|---------------|
| ► NO White Mold = NO YIELD REDUCTIONS | \$50-200/acre |
| ► No Fungicide apps to control white mold | \$30/app/acre |
| ► P & K fertilizer | \$50-100/acre |
| ► Weed control | ???? |
| ► Improved Water Infiltration | Priceless |
| ► Improved Soil Structure | Priceless |
| ► Planting conditions | AMAZING!! |

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Cover Crops: Investment Strategies

Income

- Grazing Income
- **Replacement of Tillage**
- Fertilizer Savings
- Incentive Payments
- Yield Improvements

Capital Appreciation

- Resiliency of the cropping system.
- Improve Soil Health
- Build Soil Organic Matter
- Control Weeds
- Prevent Soil Erosion

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JULY 2022
WINTER WHEAT



19

Integrating
Livestock



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Integrating Livestock



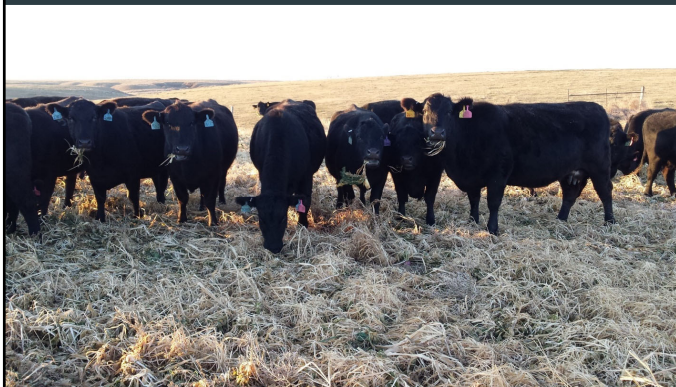
Ella baling
Forage Barley 7-15-19



Cover Crop
In September

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Integrating Livestock



Produce forage on **LOW PROFIT** acres, follow with Cover Crop, and Graze
Great way to produce feed, add diversity, and increase soil health

22



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How do you know if you are succeeding?

-  Do you practice any or all of the soil health principles?
-  Is the business profitable?
-  Is the next generation motivated to keep improving?
-  Does your management reduce your stress and improve your mental health?

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