SUNY Morrisville Hemp for Grain Fertility Trials

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Considerations?

- What equipment is readily available?
- What production practices do I want to use?
- Who is going to buy my harvest?

- Did we mention who is going to buy the harvested components?
2018 Grain Trials

- Rain, wind, and poor harvest
Observing Varietal Differences - Anka vs Felina 32
Wind Storm mid September 2018
2018 Lessons Learned

► Mother Nature always wins
► NDVI imaging can show us a lot but it isn’t clear if the timing is right for timing of fertility applications
► Proper fertility is critical to early stage growth and weed competitiveness
► Harvest timing is critical - you cannot wait for all of the grain to dry
2019 Grain Research

- Nitrogen rate trials were expanded to include manure + inorganic nitrogen as well as previous years inorganic only nitrogen trials
- Two varieties were plated, Altair and Ferimon
- Planting dates were later than desired (June 15 - 20th)
- Crop performance through the growing season was monitored via ground measurements as well as via drone NDVI imaging
Grain trials

- A Ferimon Manure + topdress
- B Altair Manure + topdress
- C Altair Manure only
- D Ferimon Manure only
- 1-6
  - Purple 125 lbs N
  - Yellow 75 lbs N
  - Blue 150 lbs N
Emergence and Cover
Surface crusting
The fields were flown on Aug 5th but there was an error with the processing of the NDVI imaging so the fields were re-flown on August 9th. The problem still wasn't totally rectified on the 9th.
August 19th
Sept 3rd
To drone or not to drone?

- Drone imagery is absolutely worth it
- NDVI imaging may prove to be helpful to
  - Determine if sidedressing is required - maybe
  - Identify problem areas in the field during the season - though maybe too late to rectify
- Determine harvest readiness / predict yield
Grain Yield

This is hand harvested not combine harvested therefore trends are accurate but values may not be
New Problems for 2019

- Vivipary
- Case-Bearing Beetle
Grain Season Concerns

- Planting with enough time for grain to develop
- Harvesting before the fall rains start to increase
Thank you

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