Cover Crops for Soil Health Northeast SARE Professional Development Workshop

Industry Perspective

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We have seen 60% growth in acres being covered from 2009 to 2015

Seed sales have increased by 90% in the same period of time.

Interest in cover cropping has spread from Mid Western states to the Northeast.

Market has declined on sowing monocultures and refocused on mixtures.

Common Monocultures:

Diakon Forage Radish

Cereal Rye

Annual Ryegrass

Crimson Clover

Current Mixtures provide multiple benefits:

Erosion Control
Nutrient Scavenging
Emergency Forage
Increased Biomass

Current Mix (2-5 Species) examples

-Austrian Winter Pea & Diakon Radish

Nitrogen Fixation, Nutrient Scavenging, Aerification

-Triticale & Annual Ryegrass

Erosion Control, Emergency Forage, Biomass

-Annual Ryegrass & Crimson Clover

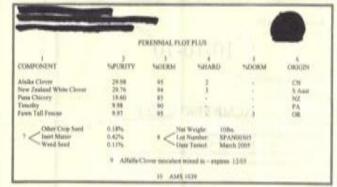
Erosion Control, Nitrogen Fixation, Biomass

-Triticale, Crimson Clover & Diakon Radish

Erosion Control, Nitrogen Fixation, Aerification, Nutrient Scavenging, Biomass

Cover Crop Issues

- -Knowing what is in the bag of seed
- -Understanding how to read a Seed Labels and Tags
- -Educating growers that "BIN **RUN**" seed is not an option
- Cover Crop Seed should come from reputable seed sources



KIND Commonly accepted name for send considered to be pure used, for example Toronto. VARIETY: Represents a subdivision of a kind genetically developed for a particular ground characterisation, for example Climax Tireofty, or Pana Chicary.

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This is the percentage of visible send that full to percentage when provided with accountable growing conditions.

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LOT following it. Indicates where product was produced, your of production, and sequence of bland. Lot number can be traced to original overpotant tests and fintery

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9 INOCULATED HEED

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111 AMS (Autoritional Marketing Basism)

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Cover Crop Issues

Bin Run Seed

Seed that is harvested on the farm and used to reseed on the farm and/or sold to neighboring farms for less cost than certified seed.

Potential issues:

Poor Germination

Spread of Noxious Weeds (Palmer Amaranth)

Genetics harvested can be less than 100%

Cover Crop Incentives

Monetary Support from State and Federal Government Increase in support has been positive and is helping to get more acreage planted.

Protocols need to be tighter for reimbursement of seed.

Some locations only require one Seed Tag

Growers are purchasing one bag and using Bin Run material for the remainder of their needs. So their cost of seed is much lower than what the actual cost should be. And the quality is being compromised.

Cover Crop Incentives

Agencies need to strictly enforce all Seed Laws pertaining to their State.

Growers must adhere to using certified seed.

Cover Crop Issues

How to get the seed in the ground at the appropriate time:

This is a major issue in the Northeast. With adaption of equipment and researching what works best for each situation, opportunity to use cover crops are increasing.

Samples of Cover Crop Equipment to follow:

InterSeeder Technologies 6 Row Planter





Benefits of InterSeeder Fria Annual Ryegrass



InterSeeder Technologies 12 row



Great Plains Turbo Till





Planting into Cereal Rye



Seeding Corn into Cereal Rye





Munro Farms





Aerial Application



Looking outside the **BOX!**

There are several species that are gaining interest in the Cover Crop market:

Sunn Hemp (Crotalaria juncea)

- -Tropical Legume that performs like a Summer Annual
- -High Nitrogen Fixation(up to 100 pounds)
- -Produces Biomass (5000 pounds)
- -Suppress Nematodes

Looking outside the **BOX!**

Sunn Hemp for grazing. Forage quality that is released states the leaves can contain NDF and ADF levels similar to crimson clover, and protein to be in the high 20's. Alkaloids are present in the seed and caution needs to be applied in managing the crop to graze the animals prior to seed emergence. In most areas, seed emergence will not take place since Sunn Hemp has a very late maturity and will die when temperatures reach 25-28 degrees Fahrenheit.

Looking outside the **BOX!**

Sunn Hemp also can be cut for dry hay. Management is critical and needs to be timely. Depending on location, harvesting will vary between 4-7 weeks. Ideally, you want to see the plant at approximately 3-4 feet tall prior to harvest. Sunn hemp can grow to 10 foot, which will not only be very difficult to harvest, but quality will be very low.

Sunn Hemp (Tropical Legume)





Sunn Hemp





Thanks



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