

ADOPT A PROJECT - 20211076

20211076 - Intercropping spring and winter cereals for silage and grazing

Account: East Central Research Foundation

Total Funds Requested: \$9,128

Funded: Yes. Leads into carbon sequestration. Cutting low - should keep erosion into consideration from fall harvest Fall grazing is needed

Amount: \$1,825

Objectives:

- 1) Demonstrate that various intercrops of spring and winter cereals can provide silage or greenfeed yields comparable to spring monocrops, with the additional benefit of fall grazing
- 2) Quantify the impact of a spring and winter cereal intercrop on the initial silage or greenfeed yield as well as the yield potential from the regrowth after harvest for fall grazing

Why is this Important?

- 1) While intercropping may result in a somewhat lower forage yield compared to a spring cereal alone, it will produce a higher quality silage, as cutting low will gather much of the winter cereal component
- 2) total forage production may actually be higher for the intercrop when including fall grazing
- 3) Attention and information is needed on best seeding and fertilizer rates.
- 4) Intercropping spring and winter cereals extends the production of quality pasture into the fall and provides the producer with some flexibility. In a year like 2021, regrowth on annual cereals harvested for silage or greenfeed extended the grazing season significantly for many producers
- 5) the presence of winter cereal with a spring cereal means the forage as a whole can benefit from early and late season rainfall.

Methodology:

- 1) 2 order factorial with 4 replicates with 3 different spring cereals, grown as a monoculture or a companion crop of winter triticale or Italian ryegrass.
- 2) Harvest with a forage harvester when spring cereal has reached soft dough stage, for silage or greenfeed yield.
- 3) Harvest 2nd time in late fall for plots with winter cereal, to represent grazing.
- 4) Measure greenfeed yield and quality, grazing yield and quality, plus data weather.

Summary:

Intercropping spring and winter cereals extends the production of quality pasture into the fall and provides the producer with some flexibility. In a year like 2021, regrowth on annual cereals harvested for silage or greenfeed extended the grazing season significantly for many producers. The presence of winter cereal with a spring cereal means the forage as a whole can benefit from early and late season rainfall.