

Research Protocol

Horticulture: Quick turnaround cover crops before brassicas

Farmer-Researcher: Angie Koch, Fertile Ground CSA, Waterloo County

In cooperation with Kevin Hamilton, Ken Laing, Mike Reid and Ryan Thiessen

Overarching Research Question: Do spring planted cover crops benefit the production of late season brassica cash crops?

Angle's Specific Question: Does a cover crop cocktail containing a legume differ from buckwheat monoculture with respect to plant health and harvestable yield of late season brassicas?

There is potential for a cover crop polyculture to yield greater aboveground biomass and, with a legume, accumulate more N to meet the high N demand of brassicas.

Angie will:

- Take photos throughout the project
- · Keep in contact with EFAO with updates and questions
- Establish and conduct experiment as outlined in Protocol below
- Turn in data by October 2016
- Complete farmer-led research program training and surveys
- Present at the Farmer-led Research Meeting in Kingston, November 29-30
- Maintain current membership in EFAO

EFAO will:

- · Monitor progress of project
- Conduct training program
- Help set up Research Protocol, write and publish Protocol
- · Reimburse cost of field help, if necessary
- Help analyze data, write and publish Research Report
- Reimburse for cost of cover crop seed
- Provide \$500 payment to farmer at conclusion of project
- Reimburse one night's hotel stay for the Farmer-led Research Meeting in Kingston, November 29-30

Research Protocol & Data Collection

- In spring, establish cover crops in randomized and replicated plots following diagram below and try to maintain uniformity in management across beds and blocks.
- Record weed pressure and cover crop ground cover and aboveground biomass prior to termination.
- Plant late season cash crops; for each crop species, randomize seedlings across assigned beds.
- Record yield of brassicas crops in both buckwheat (control) and cocktail (treatment) plots.
- Record labour for treatment and control plots.
- Answer questions on data sheet provided; do not take measurements for crops with only one bed.

Experimental Design - continued on Page 2

With support from:



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Contact:

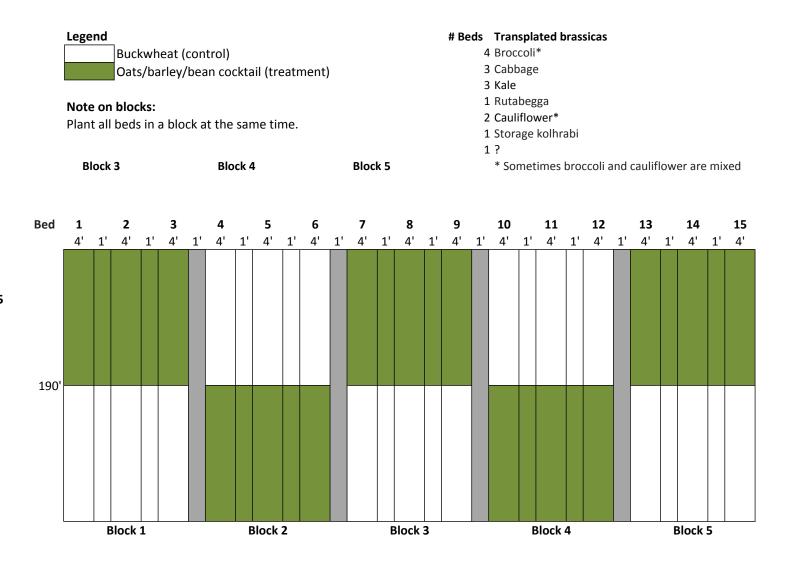
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