

Oat Cover Crop in Garlic, Year 2

Objectives:

1. Determine if planting oats as a winterkill mulch impacts overwintered garlic yield.
2. Determine if an earlier planting date (so that oats and garlic can be sown together with significant growth on the oats before winterkill) impacts overwintered garlic yield.

Farmer-cooperator will:

- Follow Research Protocols for study
- **Take photos throughout the project** and send to PFI for use in Research Report and blog.
- Keep in contact with PFI with updates and questions
- Turn in data by October 2017.

Practical Farmers of Iowa will:

- *Help set up research protocol.*
- *Monitor progress of project and provide support when needed.*
- *Publish results in a PFI research report, on PFI website, and potentially other outlets.*
- *Reimburse costs of seed.*
- *Provide \$550 cooperator payment at conclusion of project year.*

RESEARCH PROTOCOL

Crops:

Varieties:

garlic –Music

Oats—Organic Cover Crop oats from Welter Seed and Honey

Treatment:

Treatment: Single row of garlic planted Sept. 19, 2016 with oats sown the same day.

Control: Two rows of garlic planted Oct. 14, 2016, mulched with straw on Dec. 8, 2016.

Field Layout:

Because of difficulty with this project in 2015-2016, replications were simplified to a side-by-side trial.

Example Plot Layout

Oat cover – Sept-planted

Straw cover – Oct-planted

| |
|---|
| Single-Row Garlic with Oats – planted and sown Sept. 19 (650 cloves) |
| Double-row of garlic planted Oct. 14, 2016; mulched with straw Dec. 8, 2016 |

Harvest Data Collection:

During harvest, record the following data on the provided excel datasheet.

Contact: Liz Kolbe, Horticulture Coordinator

(515) 232-5661

liz@practicalfarmers.org

2017 Garlic Data

| | |
|----------------------------------|--|
| oat cover crop seeding rate: | |
| cover crop height at frost kill: | |

| Planting Date | Mulch Type | number Cloves Planted | Harvest | | | |
|---------------|----------------|-----------------------|-------------------|-------------------------|------------|-------------|
| | | | Seed Garlic Count | Marketable Garlic Count | Cull Count | Total Count |
| Sept. 19 | Oat cover crop | 650 | | | | |
| Oct. 14 | straw | | | | | |