

**AGRICULTURAL RESEARCH FOUNDATION
INTERIM REPORT
FUNDING CYCLE 2016 – 2018**

TITLE: Cover Crops after Forage Winter Triticale: Species Selection, Forage Production and Quality, and Irrigation Requirement in Eastern Oregon

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COOPERATORS: NA

SUMMARY: No solid data were collected yet to date. However, all the necessary field and lab work were done in 2016 field season in order to carry out the research project. The winter triticale was planted in the fall of 2016 into a field pea stubble. The selected annual cover crops will be seeded after harvesting of winter triticale as forage in late spring of 2017. The monitoring procedures for winter triticale and cover crops follow.

OBJECTIVES: The research objective is to study cover crop species forage production and quality under different irrigation scenarios seeding after harvesting a winter forage triticale in eastern Oregon. The specific objectives are:

- 1) Evaluate forage winter triticale production and quality;
- 2) Screen annual forage species for cover crops species selection;
- 3) Compare the selected annual forage species forage production and quality under different water scenarios in eastern Oregon.

PROCEDURES: All the detailed procedures are summarized here for the sake of simplicity:

- 1) field preparation including tilling, rolling, fertilization, and alley seeding.
- 2) before winter triticale seeding field management including field pea crop rotation, irrigation, weed control, and harvesting field pea.
- 3) winter triticale seeding
- 4) next year winter triticale harvesting
- 5) cover crops seeding and monitoring

SIGNIFICANT ACCOMPLISHMENTS TO DATE: A field of 14 acres were set up for small plot agronomic studies in Union, Oregon. All the necessary farm equipment was purchased and tested in the growing season of 2016. Lawn-type of tall fescue were seeded in spring in the plot alleys and established well. Solid set handline irrigation system was installed and tested in the field. After harvesting field pea crop in the designated plot area, winter triticale was seeded in 2016 fall and germinated and grown well to date.

ADDITIONAL FUNDING RECEIVED DURING PROJECT TERM: NA

FUTURE FUNDING POSSIBILITIES: NA