

TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE
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NATURAL RESOURCES CONSERVATION SERVICE
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AGRONOMY TECHNICAL NOTE NO. 28

PULSE CROP ALTERNATIVES FOR PACIFIC NORTHWEST CROP ROTATIONS

The 1995 Farm Bill included removal of restrictions on acres of crops planted and the phase out of crop price supports for major commodity crops in the Pacific Northwest. With these changes there has been increased interest in improved crop rotations, alternative crops, and planting with no till or direct seeding in many parts of Oregon. Research conducted by the USDA, Agricultural Research Service (ARS) and University Experiment Stations have shown that traditional winter wheat – fallow and other short term wheat based rotations in Eastern Oregon have a negative impact on overall soil quality. Some of these effects include declining soil organic matter, decreasing soil pH, and increased erosion potential.

As farmers experiment with new crops, some are reconsidering crops already grown in the region. These include winter peas, spring peas, lentils and chickpeas. These crops provide a number of benefits that compliment winter wheat production such as more diversified rotations for reducing disease and weed problems in winter wheat and enhancing wheat production with no till or direct seeding.

This technical note provides NRCS conservationists and conservation districts with a series of informational sheets on pulse crop production and management. They may be used to assist planners and growers develop cropland system alternatives that address resource problems and client objectives.

The series includes:

- Austrian Winter Peas Planting Dates and Rates, University of Idaho, College of Agriculture, Current Information Series, No. 112.
- Glacier Winter Peas, University of Idaho, College of Agriculture, Current Information Series, No. 738.
- Intercropping Austrian Winter Peas and Winter Cereals for Seed, University of Idaho, College of Agriculture, Current Information Series, No. 749.
- Dry Pea, Lentil and Chickpea Production in Northern Idaho, University of Idaho, College of Agriculture, Bulletin, No. 664.

- Wheat Stubble Management Affects Growth, Survival, and Yield of Winter Grain Legumes. Reprinted from Soil Science Society of America Journal, Volume No. 3, May – June 1991.

The information series, bulletin, and reprint may be copied as needed for planning and other technical assistance needs.