## Introduction

The Central Oregon Agricultural Research Center (COARC) faculty and staff are pleased to present a summary of research activities conducted during 2012. The twenty-four reports in this publication focus on grass seed (6), vegetable seed (3), potatoes and peppermint (3), forages and cereals (4) and rangeland and other projects (8). We invite you to look through the report, read a few abstracts and perhaps read the entire report on topics of particular interest.

During 2012, COARC and the central Oregon agricultural community implemented a collective response to the OSU College of Agricultural Sciences Dean's challenge to local beneficiaries of the branch experimental stations around the state to provide 25 percent of the current base budget. Local growers and industry representatives, recognizing the economic value provided by COARC, developed a multi-faceted plan for voluntary contributions to support the station.

Growers across the three counties of central Oregon are being asked to voluntarily contribute \$1/irrigated acre for non-contracted crops. Suggested grower contributions of \$10/acre for carrots, parsley and onions, and \$3/acre for grass seed have been accepted by the large majority of growers in Jefferson County. In addition, seed contractors and agricultural dealers are also committed to providing meaningful annual contributions.

These local contributions during 2012 generated \$111,000 that was placed into an OSU Foundation Account for COARC Support. In addition, COARC received donations from the statewide Oregon Wheat Commission (\$20,000) and Oregon Potato Commission (\$8,000). Transfer of funding from the COARC Support Fund to the COARC budget is under the control of local grower representatives. Specific transfers of dollars must be formally requested and voted upon. The intent is to maintain a pool of funds without allowing it to grow beyond a comfortable cushion to meet expected needs.

Each year, the COARC Advisory Council meets with individual researchers to review their projects from the previous year and preview those they are planning for the coming year. We are inviting each person who donated to the COARC Support Fund to provide their input as well. If you are a COARC Supporter you are receiving a questionnaire seeking your input to be shared with the Advisory Council and COARC faculty and staff. Be assured your thoughts will be taken seriously as we work to continually earn your respect and support.

COARC's economic impact upon the local agricultural community is seen through applied research, product registrations, educational programs and services, and new crop evaluation. COARC is proactive about addressing agricultural issues in the region, and providing an incentive for growers to support our research and educational activities.

A recent example is the initiation of an alfalfa variety evaluation in August, 2011 that includes both conventional and Roundup Ready cultivars. For the first time, this four-year project will provide independent feed value testing (ADF, NDF) for each of the four cuttings, in addition to the protein and yield data provided in the past. We have been successful at making the results available in near real time to assist in your management decisions. This research is being funded by entry fees from the seed companies, at no cost to local alfalfa growers.

A second example is ongoing research being conducted on the amount of ammonia volatilization that occurs with urea-based fertilizers under central Oregon conditions. Losses in the 25 percent range, or 40 pounds nitrogen per acre, are common when urea is applied to bluegrass seed fields following the last irrigation in mid-October. What is being learned from this project is changing the way agricultural dealers and growers are doing business related to fertilizer handling and crop fertility.

I look forward to hearing your thoughts, answering any questions, discussing your concerns, or sharing ideas on how to collectively increase COARC's positive economic impact on the central Oregon agricultural community. Feel free to give me a call at 541-475-7107.

Marvin Butler, Director Central Oregon Agricultural Research Center

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