

Project:	239 Improving Spring Barley for Northern Intermountain Areas
Project Leader:	<i>Lynn Gallagher</i> , Researcher, Department of Plant Sciences, UC Davis <i>Dr. Pat Hayes</i> , Barley Breeder, Dept. of Crop & Soil Science, OSU Corvallis, Oregon
Objective:	The project objective is to increase grain yield and disease resistance in spring barley adapted to the Klamath Basin.

Project:	242 Evaluation of Wheat and Barley in the Intermountain Area
Project Leader:	<i>Lee Jackson</i> , Extension Agronomist, Department of Plant Sciences, UC Davis <i>Harry Carlson</i> , Center Director, UC Intermountain Research & Extension Center, Tulelake <i>Steve Orloff</i> , County Director/Farm Advisor, Siskiyou County, Yreka <i>Don Kirby</i> , Superintendent, Intermountain Research & Extension Center, Tulelake <i>Rob Wilson</i> , UC Farm Advisor, Lassen County, Susanville
Objective:	The primary objectives of the project are to conduct a systematic evaluation of winter and spring wheat, triticale and barley germplasm in representative environments in the Intermountain region of California and to identify wheat, triticale and barley cultivars that are most suitable for production in the region. Newly released wheat, triticale, and barley cultivars and advanced breeding lines from the Pacific Northwest and other breeding programs will be evaluated in comparison with cultivars currently grown in the Intermountain region of northern California. Emphasis will be given to yield potential, disease and pest resistance and quality characteristics. Screening of early generation material from Jim Peterson's Oregon State University wheat breeding program will be included in the project. The extent of cultivar x location interactions in the region will be determined. The importance of experiments conducted at the UC Intermountain Research & Extension Center to wheat, triticale and barley production throughout the Intermountain region of California will be highlighted.

Project:	260 Development of Wheat Varieties for California
Project Leader:	<i>Dr. Jorge Dubcovsky</i> , Assistant Professor, Department of Plant Sciences, UC Davis <i>Oswaldo Chicaiza</i> , Research Assistant, Department of Plant Sciences, UC Davis <i>John Heaton</i> , Department of Plant Sciences, UC Davis <i>Lee Jackson</i> , Extension Agronomist, Department of Plant Sciences, UC Davis
Objective:	The overall goal is to produce new varieties and improved germplasm and distribute them to growers, breeders and other researchers. To achieve this goal a multi-objective project is conducted which (1) introduces new germplasm for evaluation and breeding, (2) develops breeding populations through hybridization, selection and evaluation, (3) develops information on the inheritance of characters important to quality and yield in California production environments and finds molecular markers to assist the introgression of these characters into adapted breeding lines, and finally (4) produces Breeders Seed for multiplication as new varieties and germplasm for distribution to breeders and researchers. Most of the effort is placed in breeding new varieties and developing improved germplasm. Specific goals are to introduce and maintain disease resistance, maintain or increase grain yield potential and improve end-use characteristics.