

Agroecology, Horticulture, and Environmental Quality

CROP AND WEED SCIENCE OPTION

Put plant science to work breeding and growing crops for food and biofuel.

THIS MAJOR IS A GOOD FIT IF YOU CAN SEE YOURSELF:

USING INNOVATIVE PRACTICES to increase crop yields and protect plants from pests

BREEDING CROPS using genetic transformation, molecular markers, and other new and classical techniques

INTEGRATING INFORMATION from business, microbiology, entomology, engineering, and other fields to grow crops sustainably and at a profit

Learn the science behind the production of field crops such as wheat, corn, barley, rapeseed, and beans and get practical experience in crop management. Graduate with an applied biotechnology background and well prepared for crop-related careers in weed science, plant breeding and genetics, seed production and certification, crop production, cropping systems management, and agricultural consulting.

University of Idaho faculty do wide-ranging research in crop and weed science. They develop new varieties of wheat, mustard, canola, and potatoes; evaluate the biological risks of transgenic crops; develop new approaches to protect crops from pests; improve crops for use as biofuels; and much more.

INSIDE THE CLASSROOM

Study how plants grow and develop. Explore soils, weeds, microbes, insects, and other factors that affect plant growth. Learn to manage crops with precision techniques incorporating GPS. In hands-on laboratories you'll learn by doing: insert a jellyfish gene into tobacco to make it glow in the dark, produce biodiesel from canola seeds, and create a dual potato-tomato plant through grafting. Field trips will take you to farms and processing facilities. More hands-on opportunities are available at our plant science farms and computer-controlled greenhouses.

OUTSIDE THE CLASSROOM

INTERN. Get practical experiences like these: WESTERN FARM SERVICE Assist company agronomist in research trials on the effects of fertilization on the performance of grapes, hops, mint, and other crops . . . COORS BREWING COMPANY Manage malting barley field trials . . . SYNGENTA Help field biologist develop new pest management products.

STUDY ABROAD. Deepen your understanding of your major—and the world—in countries like these: TAIWAN Study rice production . . . MEXICO Visit mango and coffee plantations . . . INDIA Learn about 1,000-year-old farming practices on terraced hillsides.

DO RESEARCH. Make hands-on discoveries. Assist in a faculty research project or do your own independent study. Test the potential of mustard seed meal to deter weeds, insects, and nematodes in soil. Help select rust-resistant wheats from among thousands of plants growing in field plots. Use DNA testing to detect plant viruses in aphids. Study the inheritance of herbicide resistance in weeds. Paid positions are available.

GET INVOLVED. Network and have fun. PLANT AND SOIL SCIENCE CLUB Grow plants for sale; take field trips . . . SOIL STEWARDS Work at the on-campus organic farm . . . AGRIBUSINESS CLUB Meet business leaders and potential employers, learn about internships, and get help developing your resume and improving your interviewing skills.

FASTFACT

Professor Jack Brown breeds mustards for garnishing franks and fueling diesel engines.

CAREER OPPORTUNITIES

Our graduates get jobs with starting salaries of up to \$45,000 in business, government agencies, and nonprofit organizations.

Here are a few possibilities:

GROWER. Oversee day-to-day farm operations, including planning, pest management, irrigation, equipment maintenance, and managing employees.

FIELD REPRESENTATIVE. Work for a company that sells seed or supplies such as machinery, fertilizers, and pesticides. Recommend and explain products.

WEED MANAGEMENT SPECIALIST. Plan and implement sustainable weed management strategies for a corporate or family farm.

AGRICULTURAL CONSULTANT. Give farmers recommendations for pest control and pesticide use, plant variety selection, and more.

RESEARCH TECHNICIAN. Assist a university, government, or company agronomist in laboratory, greenhouse, and field research.

FIELD INSPECTOR. Inspect seed crops for export certification.

COMBINE YOUR EDUCATION. A second language can broaden your career options. Depending on your career goals, take courses in business, animal science, forestry, or agricultural economics.

CONTINUE YOUR EDUCATION. Earn an advanced degree in plant science, environmental science, agricultural economics, agronomy, plant breeding and genetics, or plant pathology.

FIND OUT MORE ABOUT THE AGROECOLOGY, HORTICULTURE, AND ENVIRONMENTAL QUALITY MAJOR

WWW.CALS.UIDAHO.EDU/PSES

