



Thomas G. Chastain, Department of Crop and Soil Science
Oregon State University, 351A Crop Science Building,
Corvallis, Oregon 97331-3002
T 541-737-5730 | F 541-737-1589 | thomas.g.chastain@oregonstate.edu

George Hyslop Professorship

Activity from July 1 2012-June 30 2013

Prepared by Thomas G. Chastain

George Hyslop Professor of Crop and Soil Science

Endowment Purpose - The George R. Hyslop Professorship, established in 1997, is used to enhance and focus research and education efforts both in teaching and Extension on specific problems of the Oregon grass seed industry.

Use of Endowment Funds - Endowment funds were used to support education and outreach activities in seed production as well as an undergraduate research and demonstration project at Hyslop Farm. The goal is to integrate undergraduate instruction in seed production sciences with research, and domestic and international real-world experiences. Following are brief accounts of activities in these areas:

Education and Outreach

Three undergraduate students completed internships this past year – two graduated and returned to farms while the third is still in school. Five undergraduate internships are in progress at this time and will be completed at the end of the summer. Three of the students have internships with seed companies while the other two are interning with agricultural services companies. One additional student will be leaving this fall for an internship in New Zealand.

The undergraduate student in a long-term study exchange in eastern coastal Nicaragua completed his senior thesis and has now graduated from OSU with degrees in Crop Science and International Studies. The purpose of the study exchange in Nicaragua was to conduct research on the agricultural practices of the indigenous Miskito people. This student will be entering graduate school later in the year. All students enrolled in internships and study exchanges in my program are required to prepare written reports and present seminars to the department based on their work or research experiences.

Three graduate students are working on master's degrees in the seed production program at this time. Two are researching oil seed crops and the third is working on vegetable seed crop production.

The program's Seed Production Blog was accessed from all 50 states and 87 foreign countries during this reporting period, but about one-third of all views were from 49 cities across the state of Oregon. More than 1000 visitors to the site each month learn about Oregon seed production and the activities of my program. The purpose of the Seed Production Blog is to provide a place on the internet where current and prospective students, alumni, seed growers, seed company officials, and other practitioners as well as the general public can find current information and discussion of topics relevant to seed production.

Here's a link to the site for your consideration:

<http://blogs.oregonstate.edu/seedproduction/>

Additional information on education and outreach activities can be found at the Seed Production Blog.

Undergraduate Research and Demonstration

A multi-year undergraduate student project was completed at Hyslop Farm. The purpose was to study biological and energy efficiencies in perennial ryegrass and tall fescue seed crops grown under diverse management practices. The project has enabled students to see on a first-hand basis the impact of irrigation management, plant growth regulators, and nitrogen management in Oregon's most important seed crops. Funding from the professorship provided students with an opportunity to participate in a grass seed production research project, to learn how research is conducted, and to develop recommendations based on the research to grass seed industry practitioners. The hands-on approach brings to life the lessons learned in the classroom and the project served as a living laboratory for students enrolled in the Seed Production course.

Results from the work have been analyzed and manuscripts based on the study have been recently submitted for publication in *Agronomy Journal* and in *Field Crops Research*. Additional manuscripts are in preparation on the energy budget portion of the work and results will be presented in September at an international conference in New Zealand.

Many farmers, agricultural service industry personnel, students, and the general public observed the field project at Hyslop Farm Field Day and learned about the program's activities in several venues this past year. See the Seed Production Blog linked earlier in this report for more information and a copy of handouts.

The financial support that has been provided by the benefactors of the Hyslop Professorship was crucial in attaining the goals of the program. Several beneficial programs that were begun with the funds will continue after the term of the professorship has ended, including the Seed Production Blog.