



For Immediate Release

Contact: Lee Van Wychen
Science Policy Director
National & Regional Weed
Science Societies
Lee.VanWychen@wssa.net
202-746-4686

The Battle to Build a Sustainable Agricultural Workforce

University enrollment in crop sciences declines despite a growing demand for talent

LAWRENCE, Kansas – June 28, 2010 – While the U.S. job market remains in the doldrums in the wake of one of the deepest recessions in history, there is at least one profession bucking the trend. Job opportunities in the crop sciences are booming.

One driver: an aging workforce. Many predict that up to half of all crop scientists in industry and government jobs will retire over the next decade. A recent report by Purdue University and the U.S. Department of Agriculture's National Institute of Food and Agriculture predicts more than 54,000 agriculture-related job openings annually between 2010 and 2015.

"There isn't a better business to be in right now," says Randy Smith, a member of the Weed Science Society of America and a field research and development leader for Dow AgroSciences. "Agricultural scientists have an opportunity to feed a hungry world and to write the next chapter in the 'Green Revolution.' It's a cutting-edge profession and a noble calling."

But despite the promising employment outlook, there is a talent shortage in the applied agricultural sciences. Data from the National Academies shows 4,010 baccalaureate degrees awarded in agriculture business and management in 2007 – but only 177 in crop production. A 2008 USDA review shows Bachelor's degrees awarded in agronomy and the crop sciences decreased by almost a third between 1984 and 2003. Several universities have dropped or consolidated programs in the agricultural sciences because of low enrollment and dwindling funds.

"The issue of talent development in the agricultural sciences is a topic of paramount concern within higher education and industry circles," says Emilio Oyarzabal, technology development manager, Monsanto. "There are many students pursuing degrees in the marketing, sales and

business side of agriculture, but the number in the applied agricultural sciences is declining steadily.”

Oyarzabal and other experts say a number of intersecting trends are contributing to the dwindling talent pool. Publicly funded graduate assistantships have evaporated. Budget cuts, retirements and competition from higher-paying industry jobs have resulted in the steady drain of agricultural sciences faculty – the very individuals responsible for recruiting and training. Grant monies are pouring into molecular biology and other basic sciences – not into applied sciences like agriculture. One possible reason:

“There is a misperception that the agricultural sciences have matured and aren’t as exciting as some of the newer, emerging sciences, such as biotechnology and molecular biology,” says Roger Gast, product development leader, Dow AgroSciences. “But nothing could be further from the truth.”

Don Wyse, Ph.D., a professor of agronomy and plant genetics and director of the Center for Natural Resources and Agricultural Management at the University of Minnesota, says changing demographics also play a role.

“The number of students raised on a farm has plummeted, and we haven’t yet figured out how to engage and recruit students from urban communities,” he says. “The link between their lives and how their food is produced is really remote at best.”

Initiatives to build a sustainable agricultural workforce

What’s the solution? The Weed Science Society of America and nearly 30 other scientific societies and agricultural industry partners have begun to collaborate on [ideas for building a sustainable agricultural workforce](#). Some of the proposed initiatives include:

- Promoting an awareness of career opportunities in the crop sciences.
- Building a pipeline of students in middle and high schools who are interested in pursuing degrees in applied and basic agricultural sciences.
- Generating awareness of the importance of sustainable agro-ecosystems and the crucial role of the agricultural sciences in feeding a growing world population.
- Funding scholarships to attract the best students into agricultural science studies and to support applied learning programs.
- Developing innovative recruitment and training programs to attract high-quality graduate students with leadership potential.

Most agree it will take a sustained investment of resources to reverse the talent shortage. And the need has never been more critical.

“To feed a growing population, experts predict we will need to produce more food over the next 40 years than we’ve produced over the past 10,000 years combined – and with diminishing land

and water resources,” says Lee Van Wychen, Ph.D., science policy director of the Weed Science Society of America. “The stakes couldn’t be higher.”

About the Weed Science Society of America

The Weed Science Society of America, a nonprofit scientific society, was founded in 1956 to encourage and promote the development of knowledge concerning weeds and their impact on the environment. The Weed Science Society of America promotes research, education and extension outreach activities related to weeds, provides science-based information to the public and policy makers, fosters awareness of weeds and their impact on managed and natural ecosystems, and promotes cooperation among weed science organizations across the nation and around the world. For more information, visit www.wssa.net.

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