Nilda Burgos  
(1963-Present)  

Professor of Weed Science  
University of Arkansas  

“Pick up an area of interest and go with it, and you will do very well.” Nilda Burgos, 2006.

Overview

Dr. Nilda Burgos is a professor of Weed Science at the University of Arkansas. After earning her doctorate in 1997, Burgos worked as a researcher for an agro-chemical company. However, a vacant faculty position sprung up at Arkansas, and Burgos soon found herself a faculty and researcher in the same department where she had been a student. In addition to her teaching responsibilities, Burgos has now established a solid reputation as a researcher examining questions of weed physiology; weed population diversity in terms of genetics and morphology; and their implications for crop production and agricultural environments. This interview was conducted in 2010.

Early Life and Education

Nilda Burgos, Professor of Weed Science at the University of Arkansas, says that her career as a weed scientist has “everything to do” with her upbringing in a subsistence farming community in the Philippines. “It influenced my career 100%,” she says. “I acquired an understanding of how a plant is developing, and interactions between crops and their environment.” Burgos says that beyond providing inspiration and basic knowledge about agriculture, her background also instilled a kind of fortitude that helps in her line of work. “Doing research in the field presents different kinds of challenges,” she says. “One has to be physically tough and mentally resilient. I got that all from where I grew up. Heat and humidity down in the Mississippi River Delta are not so bad for me.”

Burgos earned her Bachelor of Science in agronomy with a soil fertility major at the Visayas State College of Agriculture, Philippines. After graduating, she worked on a research project examining the uses of nitrogen-fixing trees as natural soil ameliorants for corn production on hilly land, and continued to work on similar research projects in the Philippines from 1983-1991. During one of those projects, she met a consultant who was a weed science Professor (Dr. Ron Talbert) from the University of Arkansas; realizing her potential for further scientific study, he recruited her for graduate school. She excelled there, earning her master's degree and later her Ph.D. in weed science. After earning her doctorate in 1997, Burgos worked as a researcher for an agro-chemical company. However, a vacant faculty position sprung up at
Arkansas, and Burgos soon found herself a faculty and researcher in the same department where she had been a student. In addition to her teaching responsibilities, Burgos has now established a solid reputation as a researcher examining questions of weed physiology; weed population diversity in terms of genetics and morphology; and their implications for crop production and agricultural environments.

**Importance of Mentoring to Career**

Burgos credits Dr. Ron Talbert, her advisor while in graduate school and major mentor when she returned to Arkansas as faculty, and two other colleagues, Dr. Dick Oliver and Dr. Jim Barrentine, as “excellent mentors. They guided and supported me and made things a lot easier for me since the beginning,” she says. Burgos has also benefited greatly from her collaborations with other department faculty in different research specialties; for example, she has teamed with specialists to examine nitrogen uptake in rice and weedy rice, and with rice breeders and weed science extension specialists to examine gene flow in that crop. She has also collaborated with individuals outside of the Crop Science department. Currently, she works very closely with a vegetable breeder, Dr. Teddy Morelock, at the Horticulture department and an extension specialist at Oklahoma State University, in finding weed control options for cowpeas and other vegetable crops. “I have been enriched a lot by these collaborations,” Burgos says. “I also consider my collaborators my mentors.”

Burgos says that mentors have played a critical role in helping her transition to, and success in, an American university setting. As a faculty member in American universities, she has advised a number of minority and international students in similar situations and does her best to help them adjust to what may be an unfamiliar and intimidating environment. Burgos is also actively involved in efforts to promote diversity awareness and Filipino culture, including serving as the secretary of the International Student Organization as a graduate student, and as a former president and regular member of the Northwest Arkansas Filipino-American Association. “The one constant thing I've been involved in has been community service and charity work,” she says.

**Advice to Young Professionals**

Burgos says she continues to work in the environmental field because “I feel connected to it. I can make the best contributions in this field because I truly understand a lot of the problems that are plaguing this area, and my training has been in this area since the very beginning.” Burgos says the more knowledge she gains in her field, the more she enjoys doing research and learning even more. She notes that the field offers a wealth of opportunities, both in terms of research questions and employment, and she encourages minorities to pursue the environmental field if they have the desire to see it through. “Just do your best, be tenacious, and have an open mind,” she advises. “It’s mind-boggling how much needs to be done in this area. Pick up an area of interest and go with it, and you will do very well. There are lots of opportunities for employment, and innumerable resources you can use to learn.”

**For More Information**

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This interview was conducted in 2015.