

# GRADUATE AG RESEARCH SPOTLIGHT



## Ulianova Vidal Gómez

*"Things are changing now in Colombia, and we need more outreach and extension. Purdue has changed my life, so I'm trying to change others' lives."*

*Ulianova Vidal Gómez, PhD student, Entomology*

**THE STUDENT:** Ulianova "Uli" Vidal Gómez grew up in the mountains of Colombia amid a remarkable diversity of insect and plant life. She was studying biology at Universidad Pedagógica Nacional in Bogotá when an undergraduate course in entomology sparked her interest. She earned a master's degree at the Universidad Nacional de Colombia – Bogotá and applied for a government fellowship to train young researchers abroad who would then return to strengthen science in the country. She'd also found a notice that Associate Professor of Entomology Ian Kaplan had placed for a doctoral research assistant to study insect ecology and behavior at Purdue. The two began a correspondence, and when the fellowship came through, Vidal Gómez asked, "Where is Purdue? Because I'm going there." She spoke little English when she arrived in West Lafayette six years ago to begin her PhD under Kaplan's guidance. Fluency in English is critical to publishing in international journals, she notes, and has been her most difficult challenge.

**THE RESEARCH:** Vidal Gómez studies olfactory learning in predaceous insects. Plants, she explains, release defensive odors to "tell" other plants about the presence of an enemy and to chemically signal the pest's location to its natural enemies. "We are trying to understand how natural enemies learn to recognize these olfactory signals released by plants when they are under herbivore attack." The work ultimately could increase the efficiency of natural

enemies for better pest management. The wide range of faculty expertise in Purdue's entomology department has been especially helpful in her research, she adds.

**"LIKE TWO PHDS":** Vidal Gómez also coordinates the Undergraduate Research Experience Purdue-Colombia (UREP-C), which brings Colombian students from different disciplines to Purdue to gain research experience they can apply back home. In addition to leading seminars for the visiting students, Vidal Gómez supports them with her own experience and networks. The project is demanding — "It feels like another PhD project," she says — but has been hugely productive and rewarding. Eighteen of the 144 students she has worked with have started Purdue master's and doctoral programs, and two of her Purdue students plan to go to Colombia later this year. "I'm so proud of that," she says.

**FUTURE PLANS:** Vidal Gómez's dream is to continue insect ecology and behavior research in her own academic research group in Latin America. "I would also work with farmers, or with students to encourage them to do research, especially in agriculture — to find a way to use science to transform people's lives," she adds. She finds little time to pursue her interest in oil painting, but loves to dance and teach others Latin rhythms, including salsa, bachata and vallenato.