











Doctor of Plant Medícíne Program Summer 2017

UNIVERSITY OF FLORIDA













External Advisory Committee

Ben Bolusky, Chief Executive Officer, Florida Nursery, Growers and Landscape Association Reggie Brown, Executive Vice President, Florida Tomato Exchange Trevor Smith, State Plant Regulatory Official/Director, FDACS-Division of Plant Industry Mary Hartney, President and Executive Director, Florida Fertilizer and Agrichemical Association, Committee Chair Gary Hein, Doctor of Plant Health Director, University of Nebraska Paul Hornby, Florida State Plant Health Director, USDA-APHIS-PPQ Madeline Mellinger, President, Glades Crop Care, Past Committee Chair Clay Pederson, Managing Director, Agromillora Florida, Chair of the DPM Alumni Support Committee Tim Durham, Assistant Professor of Agronomy, Ferrum College, Vice Chair of the DPM Alumni Support Committee Martha Rhodes Roberts, Former FDACS, Deputy Commissioner of Agriculture, Adjunct Professor, University of Florida

Faculty Advisory Committee

John Capinera, Entomology and Nematology Department Billy Crow, Entomology and Nematology Department Nick Dufault, Department of Plant Pathology John Erickson, Agronomy Department Norman Leppla, Entomology and Nematology Department Oscar Liburd, Entomology and Nematology Department Greg MacDonald, Agronomy Department Heather McAuslane, Entomology and Nematology Department Kimberly Moore, Environmental Horticulture Department, Ft. Lauderdale Research and Education Center John Peterson, Environmental Horticulture Department Aaron Palmateer, Department of Plant Pathology, Tropical Research and Education Center Keith Schneider, Food Science and Human Nutrition Department Jason Smith, School of Forest Resources and Conservation J. Stacy Strickland, County Extension Director, Osceola County Xin Zhao, Horticultural Sciences Department

DPM Student Organization (DPMSO)

Blaire Colvin, President Ploy Kurdmongkoltham, Vice President Matt Borden, Treasurer Nicole Casuso, Historian Morgan Byron, Secretary Amanda Hodges, Faculty Advisor

DPM Program Staff

Amanda Hodges, DPM Director Elena Alyanaya, Academic Advisor I

DPM NEWS Volume XI, Summer 2017





Inside this issue:

Welcoming Remarks	3
Faculty Highlight	3-4
New Student Profiles	4-5
Destination Ecuador: DPM Study Abroad	6-9
DPM External Adviso- ry Council Meeting	10
DPM Course Highlight	10
Program Exhibits, Activities, and Student Recruiting	11
Congratulations to our Graduates	12-13
DPMSO News	13
Student Accomplish- ments	14
Alumni Spotlight: Dr. Tatiana Sanchez	15-16
If the shoe fits	16

Welcoming Remarks!

http://dpm.ifas.ufl.edu/ Dear Students, Faculty, Alumni, and Friends,

Our Summer 2017 edition of DPM News includes the following highlights:

- A Faculty Highlight for Dr. Adam Dale, Assistant Professor and Extension Specialist of Turf and Ornamental Entomology
- · Destination Ecuador: DPM Summer Study Abroad
- · Student Service, Outreach, and Accomplishments Information
- Congratulatory remarks for our Spring 2017 graduates, Dr. Nicole Casuso, Dr. Greg Kramer, and Dr. Kayla Thomason
- · Our Alumni Spotlight article featuring Dr. Tina Bond
- · DPMSO News, fun, and much more!

I hope you enjoy reading DPM News, Volume XI, Summer 2017! Thank you for your interest in the UF DPM Program!

-Amanda Hodges, DPM Program Director

Faculty Highlight: Dr. Adam Dale

D r. Adam Dale (see above photo left) is an Assistant Professor and Extension Specialist of turf and ornamental entomology in the UF Entomology and Nematology Department. He has been with the department a year and a half. Dr. Dale received his B.S. in biology and his Ph.D. in Entomology with a minor in horticulture from North Carolina State University. When asked what got him interested in entomology, Dr. Dale shared the following, "I began college interested in human biology and was working towards a clinical research or medical career. Towards the end of college, I began working for an entomologist out of desperation for a job, which ended up redirecting my interests towards entomology and ecology. That position turned into a multiple year job and me going to graduate school to study entomology."

Dr. Dale's research is focused on the ecology of insects in urban landscapes. In the past his research focused mainly on investigating the effects of abiotic conditions on plant parasitic insects on urban trees. Currently his lab investigates plant-insect-environment interactions in urban landscapes on several different types of landscapes, landscape plants, and insects.

Dr. Dale also runs an extension program which disseminates his lab's research findings to turf and ornamental industry professionals and county extension agents throughout Florida. *...continued on next page*



www.dpm.ifas.ufl.edu |3

Continued from page 3...

This typically includes golf course superintendents, landscape maintenance professionals, pest control operators, urban foresters, sod farmers, nursery growers, master gardeners, and others. Dr. Dale's lab uses multiple formats to get out information including web-based resources, printed publications, and in-person workshops and presentations. Dr. Dale coordinates events and collaborates with other faculty to organize extension trainings and short courses. He is currently organizing a statewide annual workshop directed at arthropods and their associated pests of ornamental plants in Florida. Dr. Dale encourages his students to be involved in his extension program and he has had students author extension publications as well as give extension presentations.

Dr. Dale is offering a new course in the Fall 2017 semester, Turf & Ornamental Entomology (ENY3510/ENY5516). This course is designed for undergraduate and graduate students studying entomology, environmental horticulture, or any other related field. During the course, students can expect to learn about the identification, biology, ecology, and management of insects relevant to horticulture.

"I think DPM students are able to come in and hit the ground running in a position that would often require others to learn and get up to speed before moving forward."

When asked what he enjoys most about his job, Dr. Dale replied, "I most enjoy the

ability to ask interesting or important questions and design ways to answer them. I also love that I have the opportunity to develop and provide solutions or pest management strategies that can improve people's quality of life and the quality of our environment where the most people live."

Dr. Dale is supportive of the DPM program and currently serves as the chair and advisor of DPM student Matt Borden. Dr. Dale stated that when he started at UF he was excited to become involved with the DPM program and appreciates the interdisciplinary nature of the degree, given that he also has interdisciplinary training. He thinks that a multidisciplinary knowledge base and skill set is not only necessary to tackle today's challenges, but also gives individuals a great advantage. When asked how the DPM degree is beneficial for students Dr. Dale shared the following, "I think DPM students are able to come in and hit the ground running in a position that would often require others to learn and get up to speed before moving forward."

Dr. Dale was asked to share some words of advice to our student readers. Dr. Dale encourages students to:

"Get outside of your comfort zone and take advantage of new opportunities. You may think you are busy now or that you have a solid plan, but you will only get busier and plans will change. Trying things that aren't necessarily in your current plan allows you to be exposed to new types of people and new opportunities that can benefit you greatly down the road."

We would like to welcome our new Summer 2017 students!



"These mountains that you are carrying, you were only supposed to climb." -Naiwa Zebian

NEW STUDENT PROFILES

Morgan Pinkerton

Academic Credentials:

- B.S. in Biology University of Florida, Gainesville, FL
- Co-enrolled M.S. in Entomology and DPM

Why DPM?

I am from Daytona Beach, Florida. I completed my undergrad at UF in Biology with minors in Spanish and Anthropology in the Fall of 2016. I started my Master's in Entomology in the Spring of 2017 with a focus on stink bug rearing. I am working for Dr. Amanda Hodges in the Biosecurity Research and Extension (BRE) lab with the red banded stink bug, *Piezodorus guildinii* and the Bagrada bug, *Bagrada hilaris*. I started working in the BRE lab about a year and a half ago and fell in love with Entomology. I quickly realized that learning Entomology alone would not be enough to make the impact I hope to have on farmers and agriculture as a whole. I found that the holistic education that the DPM program offers would be best for a career in extension. • B.S. in Entomology - University of Florida, Gainesville, FL

I worked my way through school as a technician at the University of Florida, where I gained laboratory experience in horticulture, entomology, and nematology. After spending a few

I currently work in the Florida State Collection of Arthropods, making microscope slides of

diagnostics, both in and out of the classroom. The DPM program offers a comprehensive

understanding of agricultural problems that will equip me for work as a regulatory scientist.

Department of Agriculture Division of Plant Industry. As a technician in the Bureau of Methods Development and Biological Control, I developed an interest in government plant

years in Vermont, I returned to Gainesville in 2014 to work for the Florida

protection programs, and decided to go back to school to pursue a career in this

scale insects, whiteflies, and mealybugs. I'm excited to learn more about plant pest

• Co-enrolled M.S. in Entomology and DPM



"Where there's life there's hope, and need of vittles." -J.R.R. Tolkien, The Lord of the Rings

Sage Thompson

Academic Credentials:

• B.S. in Entomology - University of Florida, Gainesville, FL

Jessica Awad

Why DPM?

sector.

Academic Credentials:

• Co-enrolled M.S. in Entomology and DPM

Why DPM?

I received my Bachelor's in entomology at the University of Florida and was recently accepted into a combined Master's of entomology and Doctor of Plant Medicine program at UF. I'm from Port St. John, Florida, and always wanted to be a Gator. Although I'm not certain of my career goals, I know that I want to tackle problems in entomology and agriculture by using an interdisciplinary and practical approach that the Doctor of Plant Medicine program teaches. As an undergraduate, I started a project to survey and monitor for stink bugs in cole crops, and as a Master's student my project will focuses on finding an economic threshold for *Leptoglossus phyllpopus*, a leaffooted bug.



"There is pleasure in the pathless woods, there is rapture in the lonely shore, there is society where none intrudes, by the deep seas, and music in its roar; I love not Man the less, but Nature more."

-Lord Byron

PROGRAM NEWS & DEVELOPMENT

You can stayed informed of the most recent events and important announcements regarding the DPM Program by checking out our Facebook page at: https://www.facebook.com/UFPlantDoctors/



You can also tune into our IFAS blog available at: http://blogs.ifas.ufl.edu/plantmedicine/.



www.dpm.ifas.ufl.edu |5

UNIVERSITY OF FLORIDA

Destination Ecuador

by Blaire Colvin with contributions from Ploy Kurdmongkaltham

In early May, the DPM program had its first international training experience in Ecuador. The purpose of the DPM Ecuador educational experience was to expose students to tropical crops, agricultural practices and technologies in South America, experience a new culture, and strengthen relationships with ESPOL a university in Guayaquil, Ecuador. Thirteen students as well as program director Amanda Hodges attended the trip. Read on to get a glimpse of what DPM students experienced while in Ecuador!

Day 1: Quito and Surrounding Areas in the Highlands



DPM Group at CIP (International Center of Potato) in Quito, Ecuador

Our first day we visited the International Center of Potato or CIP (Center Internacional de la Papa) and INIAP (Instituto Nacional de Investigaciones Agropecuarias) which is similar to our USDA in the states. Both research stations are located just outside of Quito on the INIAP Santa Catalina Experimental Station. At CIP we learned about potato production which is one of the major crops of the highlands region. We spoke with several researchers about current challenges with potato production and toured research plots and greenhouses. At INIAP we had the opportunity to speak with a plant pathologist, entomologist, and

soil scientist who work on developing IPM programs and better management practices for the agricultural systems in the highlands. We learned about several additional crops including naranjilla, Ecuadorian highland corn varieties, and native highland bean varieties. We also toured the INIAP labs and research facilities. Fun Fact: The INIAP center we visited was one of the places Dr. Norman Borlaug worked and we got to see the photo and commemoration of his time there - pretty neat! This was a very educational stop for us and gave us a much better idea of the crops grown and practices used in the highlands of Ecuador. After visiting CIP and INIAP we headed back to the city and toured the Quito Botanical Gardens before catching our flight to Guayaquil. The Botanical Gardens introduced us to the great diversity of plants to be found in all the different regions of Ecuador. It was a great first day!

Day 2: ESPOL and Guayaquil

On the second day of our trip we were up bright and early for a hike through the natural forest located on the ESPOL (Escuela Superior Politécnica del Litoral) university campus. This was a beautiful hike where we learned about plant and insect biodiversity in a mountain forest. After getting our blood pumping on our morning hike, we returned to main campus and toured CIBE (Centro de Investigaciones Biotecnológicas del Ecuador - Center for Biotechnology Research) lab facilities and spoke with campus faculty and students in multiple subject areas studied at CIBE including molecular biology, phytopathology, tissue culture, plant breeding and genetics, and agricultural management. One of our DPM students, Lisbeth Espinoza, is an alumnus of ESPOL and worked in labs at CIBE so it was neat for her to reconnect with old friends and colleagues. After our tour of CIBE, program director Dr. Amanda Hodges and DPM



DPM Students at the top of the Mountain at ESPOL natural forest

students Daniel Mancero and Matt Borden gave presentations to the students and faculty of CIBE. They discussed the DPM program and ongoing research being conducted by DPM students. After the presentations, ESPOL hosted a wonderful Ecuadorian lunch where DPM students had the opportunity to talk with the ESPOL Dean of the College of Life Sciences and other ESPOL faculty.continued on next page

DOCTOR OF PLANT MEDICINE NEWS

... continued from page 6

After lunch we listened to presentations by ESPOL faculty on the ongoing research at ESPOL regarding cacao and banana production. Following the research presentations DPM students participated in a round table discussion with the ESPOL Dean of the College of Life Sciences and ESPOL faculty. We discussed the possibility of creating a DPM international internship at ESPOL, discussed developing an extension program in Ecuador, and the ongoing relationship between the UF DPM Program and ESPOL. After this discussion we met the president of ESPOL and learned more about the university. We had a great time at ESPOL! After our day at ESPOL we headed out to tour the city of Guayaquil which is in the coastal part of Ecuador. We toured the Iguana park which is a small park in the middle of the city full of iguanas! We also



DPM Group with President and Dean of ESPOL

walked the Malecon 2000, a large board walk by the water, Las Peñas, and Cerro Santa Ana. To get to the top of Santa Ana hill we had to climb 444 steps to the top to see the city from above. Guayaquil was beautiful at night from this view!

Day 3: Bananas, Cacao, Sugarcane, Rice, CINCAE, Rural Coastal Ecuador



DPM Group with Roberto Granja in a banana plantation

On day three we departed the city and headed out to the agricultural areas around Guayaquil. Our first stop was a large farm that produces bananas, cacao, and sugar cane. Our tour guide was, Roberto Granja , who works for Syngenta and is a UF alumnus. Go Gators! Roberto introduced us to the farm manager of the farm who took us first to the banana plantation. We walked through the plantation where we learned all about banana production, pests, diseases, management, and fertility. We also observed bananas harvested, cleaned, and packed for shipment. Ecuador is the number one producer of bananas in the world and this is a major crop in the coastal regions of Ecuador. After touring the banana plantation we went to a

cacao field on the same farm. Here the farm manager discussed cacao production, pests, diseases, management, and markets. On this farm cacao is shipped "wet" and the buyer dries the cacao to the specifications they want. Several students sampled some cacao straight out of the pod in the field. After touring cacao, the farm manager took us to the sugarcane fields. On this farm they do all of their insect management in sugarcane with biological control, no chemicals. This was very interesting. After our farm tour we visited another INIAP station nearby for a quick stop to learn about rice production and research in Ecuador. Rice is an important crop for Ecuador and is a staple part of the diet there. After our rice tour we departed for CINCAE (Centro de Investigacion de la Caña de Azucar del Ecuador - Ecuador Sugarcane Research Station). Here we learned about sugarcane breeding and varieties, disease and insect management in sugarcane, and IPM practices for sugarcane. This research station is privately funded by sugarcane growers in Ecuador so the researchers here focus on applied research directly applicable to growers. On the way back to the hotel in Guayaquil we stopped at some roadside fruit stands and saw the variety of tropical fruits grown in the area. Several students enjoyed a refreshing coco frio on the ride back to Guayaquil. It was a long, but super fun day!

Days 4-6 : Riobamba, Baños, back to Quito

We left Guayaquil and the coast and headed back into the highlands headed to Baños where compared the agricultural regions of Ecuador. We left the coastal region and witnessed how the vegetation and environment transitions as you head into the highland region. We were fascinated by the variety of crops we saw growing on our drive. Since Ecuador is on the equator, a variety of crops are grown right next to each other from bananas, to citrus, to peppers and tomatoes, wheat, corn, and berries. On our way to Baños, we visited the local handicraft markets in the town of Riobamba

... continued on next page

UNIVERSITY OF FLORIDA

river and the beginning of the

Amazon rainforest. After a great

... continued from page 7

While in the market we happened to run into DPM student Daniel Mancero's mother! She then invited the group to Daniel's grandparents house where we spent time with Daniel's family and learned about the culture and history of Riobamba. We continued on to Baños which is located just on the edge of the Amazonian region of Ecuador and sometimes called "the gateway to the Amazon". On the way there we witnessed breathtaking mountain views and more natural beauty of Ecuador. We even were fortunate enough to see several volcanoes on the way into Baños. While in Baños we visited the famous waterfall "Pailon del Diablo." We climbed many steps and got a little wet in the process to see it, but it was amazing and totally worth it! In Baños, we also visited Casa del Arbol which is where the "swing at the edge of the world" is located. Here visitors can take a ride on a swing on the edge of a mountain in Baños. Several brave DPM students took the plunge and experienced the coolest swing ride of their life! This is the same swing pictured in the National Geographic Merit Prize winning photo. While in Baños we took a short drive to the beginning of the Amazonian region where we witnessed a massive



time in Baños we headed back to Quito. On our way back into Quito we stopped at Ciudad Mitad del Mundo or the "middle of the world" which is a national monument where the location of the equator is highlighted and you are literally standing in the middle of the world. We ended the night by attending a dinner/birthday celebration for our student Daniel at his family home in Quito where we got to experience a traditional Ecuadorian birthday celebration full of great Ecuadorian food, drink, music, and dancing! A great time was had by all.

DPM Students at "Pailon del Diablo" in Baños, Ecuador



DPM Group at Mitad del Mundo standing on the equator

Day 7 - Roses in Cayambe and Historical Quito

We started the day by heading outside of Quito to Cayambe where roses are grown in Ecuador. Ecuador is the top producer of fresh cut roses in the world and well known for their high quality. We had the opportunity to tour a company that grows and exports roses all over the world. We arrived and their farm manager walked us through the many greenhouses and discussed rose production in Ecuador, management of roses, pests and diseases, rose nutrition, and rose harvest. We had never seen so many beautiful roses in one place! We toured the packing facility after visiting the production side of the company. We observed the entire production process from greenhouse growing, to cooling, to sorting by size, type, color, and variety, all the way to packing for air shipment. This was truly a unique and quite literally colorful experience! We discussed the challenges of the rose exporting business such as, meeting all of the different preferences of different customers around the



Ecuadorian Roses waiting to be packed and shipped all over the world

world and being able to fill orders. The busiest times of year in the rose business are Mother's Day and Valentine's Day. This was an educational and fascinating tour! After our rose tour, we headed back into Quito to tour the historic downtown area. We walked the streets, visited the historical churches and monuments, and then headed to the airport to return home.

The DPM international agriculture trip to Ecuador was truly a once in a lifetime experience and we really enjoyed our time in such a beautiful country. Students expanded their agricultural knowledge, learn about different and new crops, experience a new culture and people, and expand their professional network on a global level. The students who attended this trip have lifelong memories and experiences that will continue to serve them in their future careers and lives. We would like to extend a gracious thank you to all of the trip donors to this trip who helped make this opportunity possible for students.

Thank You to our Trip Donors!

The DPM Program gratefully acknowledges donations totaling \$3800 from corporations, private individuals, and alumni for the 2016-2017 Ecuador campaign. Thank you for your support! Donations and DPMSO fundraising efforts funded 93% of the overall trip costs.

Gold Donations (\$500 and above)

Florida Nursery, Grower, and Landscape Association (FNGLA) Dr. Mark Mossler & Dr. Barbel Eppler Dr. Norm Leppla Dr. Amanda Hodges & Dr. Greg Hodges

Donations

Dr. Tim C. Durham Ms. Mary Hartney & Mr. Jeff Titus Dr. Clay Pederson & Mrs. Colleen Pederson Dr. Keumchul Shin Syngenta



DPM Students at the start of the Amazon Rainforest

DPM Group at Quito Botanical Gardens



Cacao Plantation



Pialon del Diablo behind the waterfall



Banana Plantation



Rose Plantation



Enjoying refreshing coco frio!



Sugarcane Field Managed by Biocontrol

DPM External Advisory Committee Meeting

The DPM Advisory Committee met on May 25. During the advisory committee luncheon students had the opportunity to meet and interact with DPM Advisory Committee members and DPM faculty. DPM Students Matt Borden and Morgan Pinkerton gave a presentation on the DPM Study Abroad trip to Ecuador. In addition, DPMSO officers made a surprise gift presentation to Program Director Amanda Hodges to recognize her endless contributions to the DPM program and dedication to DPM students. Students presented Dr. Hodges with a framed photo signed by all students in the program, as well as a handmade pen, and "dinner on



DPMSO Officers presenting gift to Program Director Amanda Hodges at the External Advisory Committee Luncheon

us" gift card to express their gratitude and appreciation. Academic Advisor I, Elena Alyanaya, and BRE Lab Manager, Jenny Carr were also recognized for everything they do for students and the DPM program. The luncheon and meeting was a success for the DPM program.

DPM Course Highlight: Agricultural Entomology

This summer several DPM students had the opportunity to take a new course, Economically Important Pests of Florida Agriculture: Identification and Management (ENY 6905). The course was developed by Program Director Dr. Amanda Hodges and DPM student Cory Penca was the graduate teaching assistant for the summer course.

During the course students had the learned about 1) the principles of economic entomology and how these concepts are utilized in integrated pest management, 2) Sight Identification of the major agricultural insect pests in Florida, 3) monitoring, management, and biology of all of the major insect pests in crops in Florida, and 4) how to consider multiple factors including the insect pest, crop, economics, and environment to provide effective management recommendations and



Agricultural Entomology Class in Byron. GA in a Pecan Grove



Agricultural Entomology Class in Tifton. GA learning about turfgrass production

decisions for Florida crop production.

In addition to classroom time, this course incorporated field trips to enhance the learning experience. The class went to the Plant Science Research and Education unit in Citra, FL to learn about scouting and managing pests in organic tomatoes. During this trip students had the opportunity to scout tomatoes and provide management recommendations as well as identify tomato pests. The second trip the class took was an overnight trip to Georgia where students had the opportunity to visit commercial farms and research stations in middle and South Georgia. Students learned about peach, pecan, row crop, vegetable, and turf production as well as the major pests and management techniques in these crops in Georgia.

10 | *Volume 11 Summer 2017*



Program Exhibits, Activities, and Student Recruiting

- <u>May 31, 2017</u> DPM students contributed to the Florida First Detector Workshop in Sumter/Hernando counties. DPM student Cory Penca presented on identifying palm weevils and DPM Student Sage Thompson presented on Collaborating Agencies and their roles. Students had a chance to interact with DPM alumni, Dr. Leroy Whilby, Bureau Chief of Entomology, Nematology, and Plant Pathology at DPI-FDACS and Dr. Bill Lester, Residential and Commercial Horticulture Extension Agent for Hernando Co. Program Director Amanda Hodges organized this event and also presented on the identification of scale and mealybug identification on palm. This was a good event for DPM students to be involved in extension and interact with the public.
- June 15, 2017 Fall 2017 new DPM student Amanda Long and DPM Director Amanda Hodges attended the Florida Citrus Mutual Annual Conference in Bonita Springs, FL. Amanda Long is completing an internship with Syngenta prior to joining the DPM program and the lab of Dr. John Peterson of the Environmental Horticulture Sciences Department.
- July 5, 2017 DPM student Ploy Kurdmongkoltham assisted Dr. Bill Lester, DPM alumni and Residential and Commercial Horticulture Extension Agent for Hernando Co. at the Hernando County Extension Office with training videos for air potato beetles. They released both the Chinese and Napalese biotype of air potato beetles. Ploy also had an opportunity to shadow Dr. Lester for the rest of the day and learned about pine bark beetles. This was a great example of the continued support and opportunities DPM alumni provide for current students.
- July 8, 2017 DPM Students Benjamin, Alex, Sage, and Eleanor represented the program at Gator Mania, the largest summer event on campus. This was an excellent opportunity to get the word out about the DPM program and talk with potential future DPM students.
- July 16-19, 2017 DPM Students Cory Penca, Morgan Pinkerton, and Alicia Kelley along with Program Director Dr. Amanda Hodges attended the Florida Entomological Society Meeting held in San Juan, Puerto Rico on July 16-19, 2017. The DPM students delivered award winning presentations at this meeting with all three placing in graduate student oral competitions!
- August 1-2, 2017 DPM Student Lisbeth Espinoza and new student Amanda Long, along with DPM alumnus Kayla
 Thomason assisted with the Southern Weed Science Society Student Weed Contest held at the Syngenta Research Farm in
 Vero Beach, FL. Lisbeth and Amanda have been on an internship at Syngenta in Vero Beach this summer. DPM alumnus Kayla
 has also completed internships with Syngenta. We thank Syngenta for their continued support of DPM internships.



Lisbeth Espinoza, Kayla Thomason, & Amanda Long at SWSS Weed Contest



Cory Penca at the FL First Detector Workshop



Amanda Long and Dr. Amanda Hodges at the FL Citrus Mutual Conference



Dr. Bill Lester & Ploy Kurdmongkaltham taping an air potato beetle training video



Dr. Amanda Hodges, Cory Penca, Morgan Pinkerton, & Alicia Kelley at the FES Meeting in Puerto Rico



Benjamin Waldo, Alex Gannon, Sage Thompson, & Eleanor Phillips talking to students at Gator Mania on campus

Congratulatory Remarks for our Graduates

Congratulations to our Summer 2017 Graduates! We wish you the best!

We asked our Summer 2017 graduates to share a few words regarding their recent graduation and current employment. Below are their replies:

Dr. Nicole Casuso

"When I was accepted into the DPM Program, I wasn't quite sure what to expect. I knew graduate school was going to challenge me to surpass my previous limitations from a professional and personal perspective. Fast-forward four years to my graduation and what a whirlwind of experiences this degree had been! The DPM Program granted me exposure to resources from the local University and Gainesville community to private, public, and government institutions at the state, country, and even international level. Never could I have fathomed the extent to which I would be provided networking opportunities during my years in the DPM Program. Countless hours spent learning and absorbing new information then many more hours spent refining my skills through practical applications both in and out of the classroom. I could not have envisioned a more well-rounded degree program and thoroughly look forward to being an active alumna.

So what's next? I have accepted a position to teach Agriculture at Fort King Middle School in Ocala. I am excited to work with the youth and engage with the local community. The outreach efforts I launched on behalf of the DPM Program during my last year definitely provided a glimpse of running a classroom. I kick started my teaching adventure at the Florida Association of

Agricultural Educators New Teacher Triology Training in Orlando this July. These next steps won't be easy, but thanks to my degree I will face them with confidence

as well as a side of humility, knowing very well that my learning journey does not stop here. I hope to eventually pursue a future career in higher education and/or extension."

Dr. Kayla Thomason

"I enjoyed my time as a DPM student and I am very grateful to have the ability to say that I am a graduate of this wonderful program! In addition to the wide scope of classes, I was able to attend multiple conferences such as the Agronomy Society of America (ASA), American Phytopathological Society (APS), and the Florida Tomato Conference where I made valuable connections and learned current and potential issues farmers are facing as well as current research trials in place to solve these issues. The DPM program has also allowed me to explore agricultural operations in places that I may not have been able to see on my own such as lettuce and cruciferous crops in California and Arizona, and banana and cacao plantations in Ecuador.

My multi-disciplinary education and experiences while in the program have prepared me for a career in industry where it is crucial to know and be able to identify multiple issues in a cropping system and I look forward to using those skills. Ultimately my career goals are to participate in applied research that help farmers produce their crop with minimal losses due to pests and other environmental issues; directly work with growers to help them determine crop issues and solutions for those issues; and to be an advocate for agriculture in a time where people are far removed from where and how their food is produced."







Dr. Greg Kramer

"I first learned about the DPM program while enrolled in the master of science program at UF. I participated in a colloquium that discussed the program in great depth. From that first introduction I felt the program and its curriculum were a perfect fit to further my 25 plus year career in horticulture. In my professional career, I have performed as director of horticulture for both nonprofits and for profit companies. I am currently employed at Bok Tower Gardens located in Lake Wales, Florida as the director of horticulture, and use all of the different disciples that I learned through the DPM program every day."



DPMSO News

Over the summer semester DPMSO held a summer social in May to thank DPM students Lisbeth Espinoza and Daniel Mancero for their hard work in planning, translating, and touring students in their home country Ecuador for the DPM Study abroad trip. A fun time was had by all!

Additionally, DPMSO members established a new DPM social: Trivia Tuesdays! DPMSO members attended trivia night throughout the semester. This was a great opportunity for DPMSO members to test their trivia knowledge and take a break from the demands of being a DPM student.

In addition several DPMSO members organized and attended an insect collecting trip for the course



DPMSO and Dr. Hodges at the Fiesta Social for Lisbeth and Daniel

immature insects over the summer. BRE Lab manager Jenny Carr took students out to her farm in Micanopy for a fun and successful afternoon of insect collecting!



Lisbeth, Blaire, & Daniel at the Fiesta

DPMSO Trivia Night

Collecting Trip to Jenny's Farm

Student Accomplishments

Matt Borden

DPM Student Matt Borden was a featured guest speaker at two events in Jacksonville this summer, both hosted by the Eastside Environmental Council. He talked about IPM in the home landscape, pest and beneficial identification, and distributed EDIS publications to homeowners. Matt also delivered the entomology and pest management training for Master Gardener classes in Marion and Citrus counties. Congratulations Matt!





Cory Penca

DPM/PhD Student Cory placed 1st in the PhD student competition at the Florida Entomological Society Meeting in San Juan, Puerto Rico in July with his presentation titled: Pest Status of Cat-Facing Heteroptera in Subtropical Peach Production. Cory was awarded the A.S. Herlong Scholarship this semester and published a paper titled: "Pyriproxyfen treatment terminates *Halyomorpha halysreproductive* diapause, with an indirect mortality effect on its egg parasitoid *Trissolcus japonicus*" in the Journal of Pest Science. Congratulations Cory!

Ploy Kurdmongkaltham

DPM student Ploy Kurdmongkaltham co-authored three EDIS food safety publications titled: Preventing Foodborne Illness Associated with Clostridium perfringens, Preventing Foodborne Illness: Clostridium botulinum, and Preventing Foodborne Illness: Bacillus cereus. Check them out here: <u>http://edis.ifas.ufl.edu/fs101, http://edis.ifas.ufl.edu/fs104, http://edis.ifas.ufl.edu/fs269</u>. Congratulations Ploy!





Benjamin Waldo

DPM/MS Student Benjamin Waldo presented his research on the effect of nematicides on nontarget nematodes in bermudagrass to turfgrass professionals at the Annual Turfgrass Field Day held at the West Florida Research Education Center in Jay, FL on July 27. Congratulations Benjamin!

Brandon Jones

DPM/MS Student Brandon Jones presented his research titled: "Efficacy of incorporated organic amendments on turfgrass nematodes and turf health" at the Annual Meeting of the Organization of Nematologists of Tropical America,FL in Puerto Rico in July. Congratulations Brandon!





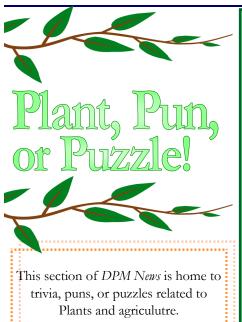
Alicia Kelley

DPM/MS Student Alicia Kelley placed 1st in the Master's student competition at the Florida Entomological Society Meeting in San Juan, Puerto Rico in July with her presentation titled: "Maternal contribution of *Candidatus* Liberibacter asiaticus to *Diaphorina citri* nymphs through inoculation of oviposition site and transovarial transmission". Congratulations Alicia!

Morgan Pinkerton

DPM/MS Student Morgan Pinkerton published a Featured Creature article on the redbanded stink bug this semester. You can check it out here: <u>entnemdept.ufl.edu/creatures</u>. Morgan placed 2nd in the Master's student competition at the Florida Entomological Society Meeting in San Juan, Puerto Rico in July with her presentation titled: "Size Disparities in Laboratory Reared Generations of *Piezodorus guildinii* (Westwood)". Congratulations Morgan!









Alumni Spotlight: Dr. Tina Bond

Q: Describe your academic background?

A: My background is in turf, ornamentals and aquatics. I obtained a BS in Agriculture from the University of Delaware where I majored in Plant Science with a Concentration in Ornamental Horticulture.

Q: What is your current occupation and how has your DPM degree aided you in the tasks and responsibilities associated with your position?

A: I currently work for Helena Products Group as a Product Specialist. I support Helena's adjuvant and Value Added product lines in all specialty markets across the U.S. Some of my responsibilities include product registration and label amendments, new product development, and technical support. The markets I

support are forestry, aquatics, IVM, golf, greenhouse/nursery, and turf/ornamentals (basically anything that isn't Ag). Since I travel the country, it is important to be able to look at an issue in the field and be able to help in a variety of situations. I've looked at forestry tracks in Weed, CA, to bermudagrass lawns hit by extreme weather in Greenville, Texas, to aquatic weed pressures in Coeur d'Alene, ID, to fertility issues in my own front yard in Florida. From weed identification to pesticide application and everything in between, I use the knowledge I obtained in the Plant Medicine Program in all aspects of my job, every single day.

Q: What prompted you to pursue your present career and where are you located?

A: I was always interested in plants and in high school always wanted to work in this field in some way. I initially wanted to work in the public garden sector and began my work at places such as Longwood Gardens and Stonecrop Gardens. From there my interests switched to plant diseases and weeds, but really anything that affected plant growth, which is what led me to the Plant Medicine Program. While at UF, I completed internships with FMC and Bayer which solidified my interest in the Agchem industry. I liked living in Florida and wanted to stay in the area, so I found a position where I could stay in the state. I travel the country and see lots of different things, so it worked out!

.. continued on next page

... continued from previous page.

Q: Why did you choose to enroll in the DPM program?

A: I chose DPM because as I learned more about plant diseases and insects it became a huge focus and something that I didn't know enough about. I didn't want to do research and desired a more diverse approach to diagnosing plant related issues. I wanted to learn everything I could about how things adversely impact plants and what could be done to remedy those situations. I was also persuaded by Dr. George Agrios to apply and accept the offer to join the program. I was one of few Plant Medicine candidates that was accepted into the Plant Medicine program by George.

Q: From a personal standpoint, how has your DPM degree influenced you?

A: The DPM degree has made me a much more critical thinker. It forced me to look at things from many sides and try to be objective about the things I observe. In general, the program led me on the path to where I am today. I came to Florida to attend UF, from there I discovered the employment path I wanted to pursue. As a result I have been a Florida resident for 16 years and couldn't be happier! I'm proud to be a Doctor of Plant Medicine and a Florida Gator!

Q: Do you have any advice or words of wisdom for current DPM students?

A: Take a business class and learn about adjuvants. Adjuvants are critical to understand if you're going to be in the industry.

If the shoe fits... why DPM might be right for you!

We often find students wondering if the DPM program is a good option for them. By answering this short quiz you can see if the shoe fits!

1. Do you want to know more about plant disease management, arthropod pest or nematode management, crop nutrition and agronomy, or

horticultural sciences?

2. Are you interested in hands-on curriculum that allows you to work in the field and/or in a lab, internships with local businesses or federal agencies, and

interdisciplinary studies?

- 3. Do you aspire to work in academia, industry, extension, or regulatory?
- 4. Do you enjoy opportunities to get involved with community outreach, networking, and attending professional development workshops, seminars, and scientific conferences?
- 5. Do you prefer application-based science?

If you answered **yes** to most of the questions listed above, then we recommend that you explore your graduate career options with the UF DPM Program!



Already enrolled in a graduate degree program? Contact our program for more information about potential dual-enrollment!

Entomology and Nematology Department, UF IFAS Steinmetz Hall 1881 Natural Area Drive P.O. Box 110620 | Gainesville, FL 32611 Phone: (352) 273-3903 | E-mail: ealyanaya@ufl.edu

Blaire Colvin, Editor DPM Student - University of Florida Amanda Hodges, PhD, Co-Editor DPM Director - University of Florida





DOCTOR OF PLANT MEDICINE NEWS



DPM Students

Interested in learning more about our current DPM students? Visit our website at: http://www.dpm.ifas.ufl.edu/current_students.html



Jessica Awad Florida, USA



Jamey Betts

Ecuador

Georgia, USA



Matt Borden Virginia, USA



Theresa Chormanski Florida, USA

Blaire Colvin Florida, USA



Wael Elwakil Egypt



Lisbeth Espinoza Craig Frey Maryland, USA



Alex Gannon Florida, USA

Morgan Byron

Florida, USA



Brandon Jones Florida, USA

Alicia Kelley Indiana, USA



Arjun Khadka Nepal



Daniel Mancero Ecuador



Cory Penca Ariane McCorquodale Florida, USA Florida, USA



Eleanor Phillips Tennessee, USA



Morgan Pinkerton Florida, USA



Georgia, USA

Rebecca Rabinowitz Florida, USA



Bruce Stripling Georgia, USA





Lanette Sobel Florida, USA



Sage Thompson Florida, USA



Benjamin Waldo Indiana, USA



Taylor Smith Florida, USA



www.dpm.ifas.ufl.edu | 17

Thank you for reading.



Photo Credits: Front and Back Cover Images Matt Borden, DPM Student