This is the inaugural issue of the IPM Innovation Lab newsletter.

View this email in your browser



### Muni's Musings



Greetings, readers,

Welcome to the very first edition of our Integrated Pest Management Innovation Lab newsletter! We plan to keep you in the know by highlighting recent activities, achievements, and future short-term plans. In this issue, we are proud to present a promising graduate student who participates in our program as well as a new Principal Investigator who specializes in biodiversity and climate change. We hope you will find this newsletter informative, useful, and entertaining.

Read Full Story >

The USAID-funded Feed the Future Innovation Lab for Integrated Pest Management at Virginia Tech raises the standard of living of people in developing countries by working with them to develop the best solutions to the agricultural challenges they face. In addition to reducing damage caused by pests and diseases, the program also deals with issues such as gender, health, nutrition. equitable use of resources, and agricultural education.





### PI Profile



Nir Krakauer gets a ceremonial neckpiece from local stakeholders.

Introducing Nir Krakauer, the new Principal Investigator for a sub award of the Virginia Techled Feed the Future Innovation Lab for Integrated Pest Management. Krakauer is heading up "Modeling for Biodiversity and Climate Change." This project will initiate an empirical study on the effect of climate change on biodiversity and changes in biodiversity to document climate change. Before this current project, Krakauer received a sub-award from Colorado State University's Feed the Future Innovation Lab for Collaborative Research on Adapting Livestock Systems to Climate Change. His previous project was entitled "Adaptation for Climate Change by Livestock Smallholders in the Gandaki River Basin." He holds a Ph.D. in Geochemistry from the California Institute of Technology and is currently an associate professor of Civil Engineering at the City College of New York.

Read Full Story >

Student Q&A



Vanessa Carrion's greatest joy in life is her family. Here she is (far left) posing happily with her husband, Michael and two daughters, Daniela and Isabella. Photo Credit: Cecilia Campoverde

Vanessa Carrion is an international student from Ecuador who plans to wrap up her Ph.D. in Economics by the end of the fall semester. Her Ph.D. program is supported by Feed the Future Innovation Lab for Integrated Pest Management at Virginia Tech. Throughout the duration of her work with the Innovation Lab, she has completed two impact evaluation papers exploring IPM's staying power, potato farming, and technology-based interventions for Ecuadorian farmers. Her supervisors are Dr. Jeff Alwang and Dr. George Norton.

### Q1) Why are you passionate about improving agricultural circumstances in Ecuador?

A1) In Ecuador, agriculture continues to be an important source of employment, livelihood, and income, and many farmers are extremely poor. I hope that my research will shed light on how to improve the life conditions of farmers, their families, and the rural communities where they live.

Read Full Story >

### **Project Updates**



### Phase V Projects

We have brief updates on each of the following projects:

- Biological control of the invasive weed Parthenium hysterophorus in East Africa Principal Investigator: Wondi Mersie
- IPM for exportable fruit crops in Vietnam
- Modeling for biodiversity and climate change Principal Investigator: Nir Krakauer
- Invasive Species Modeling for South American tomato leafminer *Tuta absoluta*, and groundnut leafminer *Aproaerema* modicella (simplexella)
- Vegetable crops and mango IPM in Asia: George Norton
- Innovative scientific research and technology transfer to develop and implement integrated pest management strategies for rice pests in Cambodia
- Vegetable crops IPM in East Africa
- Rice, maize, and chickpea IPM for East Africa

To see all of the updates, click to read the full story.

Recent Highlights



John Bowman, USAID's liaison for the Integrated Pest Management Innovation Lab (center) holds the International Plant Protection Award of Distinction, flanked by (L-R) Brhane Gebrekidan, Amer Fayad, Muni Muniappan, and Short Heinrichs.

# Integrated Pest Management Innovation Lab gains media attention

Over the past year, Dr. Muniappan's mission to control the threat of the invasive species, *Tuta absoluta* has garnered attention in both national and local media. Innovation Lab expertise has been featured in *Scientific American*, WSLS 10, *The Roanoke Times*, WVTF Radio, and Virginia Tech News.

### Colleagues collaborate to control pearl millet headminer

In late September, Dr. Muniappan traveled to Senegal, Niger, and Uganda. While in Senegal, he and colleagues released parasite wasps for biological control of the pearl millet headminer. They carried out similar work in Niger. In Uganda, they followed up with the progress of the groundnut leafminer project.

### Twitter attracts key influencers

In mid-September, the Innovation Lab conducted an analysis of influential Twitter followers in an effort to comprehend our social media reach. Among our most noteworthy followers were the Nelson Mandella Foundation, our fellow innovation labs, large government and nonprofit organizations (i.e., the U.S. Embassy Nepal, the World Agroforestry Centre), agricultural news entities (i.e., Food and Agriculture Organization

Newsroom), as well as science journalists from the New York Times and NPR. Follow us on Twitter @IPM\_IL.

# Integrated Pest Management Innovation Lab receives International Plant Protection Award of Distinction

In late August, Innovation Lab folks attended the XVIII International Plant Protection Congress, as well as several International Association of Plant Protection Sciences governing board meetings in Berlin. While there, the Integrated Pest Management Innovation Lab received the International Plant Protection Award of Distinction as part of the IPPC opening ceremony. Geoff Norton, president of the International Association for the Plant Protection Sciences, lauded the team for their efforts in creating and promoting IPM packages, hands-on training, and for having a long-term commitment to graduate student education.

# Technical advisory meeting jump-starts future plans

In early August, Dr. Muniappan, Dr. Fayad, and Zara Shortt held an Integrated Pest Management Innovation Lab Technical Advisory Committee meeting at the end of the American Phytopathological Society annual meeting. They reviewed past Innovation Lab activities and planned future endeavors with fellow committee members, Dr. Buyung Hadi and Dr. Lawrence Datnoff. Other members were unable to attend due to various personal reasons.

### Associate Director receives recognition

In early August, Dr. Fayad received a certificate honoring his service to the American Phytopathological Society in Pasadena, California. He had just completed a term as board member for the Office of International Programs (OIP) of APS. "I was very happy and honored to receive the certificate recognizing my service to APS's Office of International Programs," Fayad said. "I remain committed to serving the plant pathology discipline, OIP, and APS in promoting collaboration among plant pathologists and plant protection specialists, with the aim of increasing food security through improved plant health and agricultural productivity, especially in the developing world."

Jute hairy caterpillar snags notice in Bangladesh

In late July, Dr. Fayad conducted a survey of plant diseases with collaborator Naidu Rayapati in the fields of Jessore, Bangladesh. There, they observed virus symptoms on all kinds of gourds — sponge, ash, bitter, pointed, bottle snake, and teasel, as well as eggplant and summer tomato. They also noted damage on jute from the jute hairy caterpillar.

# Workshop participants fight back against invasive species

In mid-July, Dr. Muniappan and Zara Shortt headed to Tanzania to spread their wealth of knowledge. The trip's itinerary included one workshop on the beneficial fungus *Trichoderma* and two workshops on the tomato leafminer *Tuta absoluta*. The *Trichoderma* workshop included 24 participants from Ethiopia, Kenya, and Tanzania. Resource persons were from Tamil Nadu Agricultural University in India. The *Tuta absoluta* workshops included more than 150 participants from Tanzania.

### Director shares project news

In mid-June, Dr. Muniappan attended a Horticulture Innovation Lab meeting in Zambia to inform the crowd on Innovation Lab activities and to explore future joint projects. A joint project between both labs has already been established in Cambodia, and additional cooperative efforts are expected when all Innovation Lab projects are issued.

Read Full Story >

### The Buzz



IPMers and Feed the Future fans are abuzz over

recent trending headlines. Below are topics of interest to keep you up to date on the latest news in international affairs, entomology, and world agriculture.

#### **Invasive Species**

Tuta absoluta, a.k.a., the South American tomato leafminer is advancing fast. Scientists recommend fierce and immediate strategies to control the pest and keep it out of untouched areas.

#### Global Goals

The United Nations released a set of "Global Goals" for sustainable development, targeting themes such as ending world hunger, striving for quality education, and identifying solutions to problems pertaining to climate change, among others.

#### Optimism in sub-Saharan Africa

Life is looking up for sub-Saharan African nations. Due to recent economic growth, people of these nations are expressing optimism about the future. Health care and education remain as top priorities.

### Wasps

Welcome to the wonderful world of wasps: One species' hero is another species' villain.

### #Beepocalypse

Over the past few years, talk of a #beepocalypse has led to widespread rumors about the endangerment of bee species. USDA data shows quite the contrary. Is science setting the record straight on "beemageddon?"

### Mushroom Mercy

For beekeepers legitimately facing possible "colony collapse disorder," a mushroom may prove to be salvation for the honey bee.

Read Full Story >

### A Look Ahead



Entomological Society of America 2015 Meeting November 15-18, 2015, in Minneapolis, Minnesota, U.S.A.

International Conference of Eco-friendly Applied Biological Control of Agricultural Pests and Phytopathogens November 19-22, 2015, in Cairo, Egypt

Partners Planning and Training Workshop: Biological Control of the Invasive Weed Parthenium hysterophorus in East Africa December 13-20, 2015, in Ambo/Wollenchiti/Dire Dawa, Ethiopia

Read Full Story >









Copyright © 2015 Integrated Pest Management Innovation Lab, All rights reserved.

Want to change how you receive these emails? You can <u>update your preferences</u> or <u>unsubscribe from this list</u>

