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2018

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# UF/IFAS HIGH IMPACT RESEARCH PUBLICATIONS

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UF/IFAS scientists are making practical and positive impacts in the lives of Floridians and people worldwide through their research. The new knowledge and discoveries generated by our researchers are published in nationally and internationally recognized peer-reviewed journals, and they often set the example for academics and scientists across the globe.

Our research focuses on nine distinct areas:

- Plant and animal food systems
- Food safety and security
- Climate variability
- Water quality and quantity
- Emerging and invasive pests and diseases
- Natural resources, landscapes, and the environment
- Human, animal, and environmental health
- Sustainable energy
- Community sciences, economics, and science communication

These 45 publications resonated as good examples of how UF/IFAS researchers are making a difference and impact on our world. The nine publications on the inside cover were selected for special recognition at the 11th Annual Florida Agricultural Experiment Station Research Awards Ceremony.

# 9 SELECTED HIGH IMPACT PUBLICATIONS FOR RECOGNITION



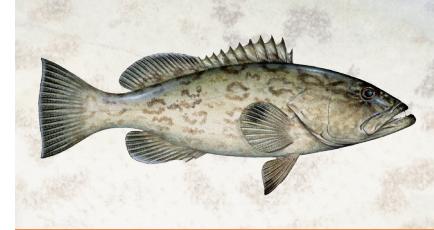
## DEVELOPMENTAL PLASTICITY

Allen, P. E., and C. W. Miller. 2017. **Novel Host Leads to the Loss of Sexual Dimorphism in a Sexually Selected Male Weapon.** *Proceedings of the Royal Society B* 284: 20171269.



## CHEMICAL GENOMICS

Bao, Z., M. A. Clancy, R. F. Carvalho, K. Elliott, and K. M. Folta. 2017. **Identification of Novel Growth Regulators in Plant Populations Expressing Random Peptides.** *Plant Physiology* 175: 619-627.



## SPATIAL ANALYSIS

Ducharme-Barth, N. D., and R. N. M. Ahrens. 2017. **Classification and Analysis of VMS Data in Vertical Line Fisheries: Incorporating Uncertainty into Spatial Distributions.** *Canadian Journal of Fisheries and Aquatic Sciences* 74(11): 1749-1764.



## INVASIVE PREDATORS

Hoyer, I. J., E. M. Blosser, C. Acevedo, A. C. Thompson, L. E. Reeves, and N. D. Burkett-Cadena. 2017. **Mammal Decline Linked to Invasive Burmese Python Shifts Host Use of Vector Mosquito Towards Reservoir Hosts of a Zoonotic Disease.** *Biology Letters* 13: 20170353.



## GENOME EDITING

Jia, H., Y. Zhang, V. Orbović, J. Xu., F. F. White, J. B. Jones, and N. Wang. 2017. **Genome Editing of the Disease Susceptibility Gene CsLOB1 in Citrus Confers Resistance to Citrus Canker.** *Plant Biotechnology Journal* 15(7): 817-823.



## TERMITE COLONIES

Kakkar, G., W. Osbrink, A. Mullins, and N.-Y. Su. 2017. **Molt Site Fidelity in Workers of Formosan Subterranean Termites (Isoptera: Rhinotermitidae).** *Journal of Economic Entomology* 110(6): 2512-2517.



## LANDSCAPE EVOLUTION

Newman, S., T. Z. Osborne, S. E. Hagerthey, C. Saunders, K. Rutchedy, T. Schall, and K. R. Reddy. 2017. **Drivers of Landscape Evolution: Multiple Regimes and their Influence on Carbon Sequestration in a Sub-Tropical Peatland.** *Ecological Monographs* 87(4): 578-599.



## REPRODUCTIVE TECHNOLOGIES

Siqueira, L. G. B., S. Dikmen, M. S. Ortega, and P. J. Hansen. 2017. **Postnatal Phenotype of Dairy Cows is Altered by in Vitro Embryo Production Using Reverse X-sorted Semen.** *Journal of Dairy Science* 100(7): 5899-5908.



## METABOLIC ENGINEERING

Zale, J., J. H. Jung, J. Y. Kim, B. Pathak, R. Karan, H. Liu, X. Chen, H. Wu, J. Candreva, Z. Zhai, J. Shanklin, and F. Altpeter. 2016. **Metabolic Engineering of Sugarcane to Accumulate Energy-Dense Triacylglycerols in Vegetative Biomass.** *Plant Biotechnology Journal* 14(2): 661-669.

- Abdollahi-Arpanahi, R., G. Morota, and F. Peñagaricano. 2017. **Predicting Bull Fertility Using Genomic Data and Biological Information.** *Journal of Dairy Science* 100(12): 9656-9666.
- Alto, B. W., and C. C. Lord. 2016. **Transstadial Effects of Bti on Traits of Aedes aegypti and Infection with Dengue Virus.** *PLoS Neglected Tropical Diseases* 10(2): e0004370.
- Bocsanczy, A. M., J. C. Huguet-Tapia, and D. J. Norman. 2017. **Comparative Genomics of *Ralstonia solanacearum* Identifies Candidate Genes Associated with Cool Virulence.** *Frontiers in Plant Science* 8: 1565.
- Chouenc, T., and N.-Y. Su. 2017. **Subterranean Termites Feeding on CSI Baits for a Short Duration Still Results in Colony Elimination.** *Journal of Economic Entomology* 110(6): 2534-2538.
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