

## **Student Scientists from Lake Wales High School to Present Citrus Greening Research at National STEM Conference on Ecological Restoration**



John Scharff

Sophia Matthews

Sophia Matthews and John Scharff, both student scientists in the Ecotek Lab Program and 9<sup>th</sup> graders at Lake Wales High School in Lake Wales, Florida, have been invited to present information regarding their research work on citrus greening at the 2017 Stewardship Network Conference on January 14, 2017 at Michigan State University in East Lansing, Michigan.

Sophia Matthews will be discussing the impact of the asian citrus psyllid on the citrus ecosystem. She will also be presenting information regarding how student scientists in the the Ecotek Lab are proactively working together to develop innovative solution to address citrus greening. Sophia joined the Ecotek Lab Program in May 2016. She is the co-lead on the life science research.

John Scharff will be discussing and demonstrativng an innovative web application that he developed with the assistance of Ivan Torres, another student scientist in the Ecotek Lab Program. The application integrates biomathematics and virtual computing to forecast the impact of various citrus greening field remediation strategies. John joined the Ecotek Lab Program in October 2016. He has a strong background in application programming using Java Script and HTML

The Steward Network Conference is a great platform for Sophia and John to share their passion for science. Over the years several student scientists from the Ecotek Lab Program have presented papers and posters at the conference. For example, in 2015, Malik Bassett and David Whiteside, presented their field research results on ways to restore idigenous plant species found in select regions of Mount Saint Helens. In 2014, Alexis Edge, currently a junior at Michigan State University majoring in enviornmental engineering, presented a paper on ways to reverse the water cycle to monitor the concentration of greenhouse gases in the atmosphere. In 2013 Miles Frierson and Nydea Terrell presented their work on the use organic feedstocks to power biogas systems.

The Stewardship Network Conference is an annual conference attended by research scientists, professors, corporate executives and students from across the United States. During the conference scientists present and demonstrate innovative strategies ideas that can be used to conserve and restore critical ecosystems around the globe. The network functions as a boundary spanning organization for bringing transdisciplinary science of the interactions of ecology and society into practice. At the request of local community members and organizations, TSN facilitates planning processes that bring diverse stakeholders together to develop shared understanding of ecological problems, build trust, and collaboratively pursue common goals. In 2015 the organization received the 2015 Science and Practice of Ecology & Society Award from the University of Michigan.

### **About the Ecotek Science Program**

Ecotek is a science research lab program for young inventors and researchers in grades 5 thru 12. Student scientists work on projects aligned with the issues being addressed by world leaders at the United Nations. To learn more about Ecotek Lab go to <http://www.ecotek-us.com>