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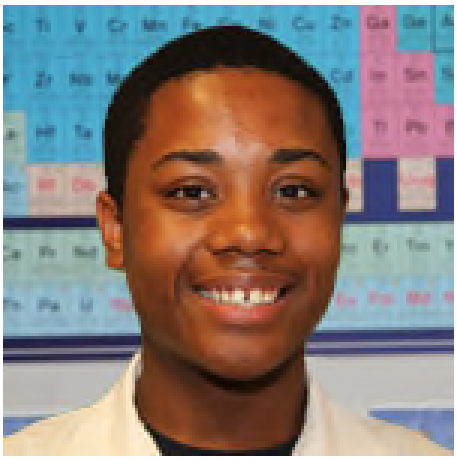
Science at Work!

Student Scientist Selected to Participate in Global Food Security Summit



Above: Omari Garrett

The world's current population is 7 billion. By 2044 it is projected to reach nearly 9 billion people. With such a significant change over a short period of time, there is likely to be a shortage of food resources. Innovation in agricultural science is at an all-time high. This is the perfect opportunity for new ideas.

Omari Garrett, a senior at Detroit Edison Early College of Excellence and a research scientist in the Ecotek Lab Program, has developed a working model for increasing crop yield while at the same time conserving water resources using super absorbent polymers (SAPs).

SAPs are classified as hydrogels, when cross-linked, absorb aqueous solutions through hydrogen bonding with water molecules. A SAP may absorb 300 times its weight (from 30 to 60 times its own volume) and can become up to 99.9% liquid.

Omari will participate in the 2016 World Food Prize Summit to be held in Des Moines, Iowa on October 13, 2016. He was selected from a group of 60 students while participating in the World Food Prize Regional Conference which was held at Michigan State University on May 12, 2016. During the regional conference Omari presented information on how India, a country that has been impacted by climate change and plagued by food shortages, can use the expandable features of SAPs to manage soil moisture and the concentration of micronutrients in soil, leading to higher crop yields during periods of drought.

The World Food Prize is the foremost international award recognizing -- without regard to race, religion, nationality, or political beliefs -- the achievements of individuals who have advanced human development by improving the quality, quantity or availability of food in the world. The event recognizes contributions in any field involved in the world food supply -- food and agriculture science and technology, manufacturing, marketing, nutrition, economics, poverty alleviation, political leadership and the social sciences.

During the 2016 World Food Prize special recognition will given to Dr. Maria Andrade of Cape Verde, Dr. Robert Mwanga of Uganda, and Dr. Jan Low of the United States. This three-person team is being honored for their achievement in developing the single most successful example of micronutrient and vitamin biofortification – the orange-fleshed sweet potato (OFSP).

Omari is passionate about helping make the world a better place for all people. His work in the lab on improving food yield through better management of water resources is an interesting concept. Participating in the World Food Prize will provide him with access to a global network of world leaders that are actively bringing food science and agricultural policy together.

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