

Agricen Sciences Presents at ASA-CSSA-SSSA Joint Meeting

One of the First Comprehensive Studies of Corn Microbiome Reveals

Differences in Bacterial Biodiversity Related to Fertility Regimens and Proximity
to Rhizosphere and Rhizoplane

PILOT POINT, TX - October 22, 2012 - Agricen Sciences, an applied sciences research company leading the development of novel microbial and biochemical solutions for plant nutrition and health, announced today the presentation of new data at the ASA, CSSA and SSSA International Annual Meetings. At the joint meeting, Agricen Sciences' Dr. Michael LaMontagne presented data from a study of the microbiome associated with corn roots, conducted with a group led by Dr. Michael Allen of the University of North Texas (UNT).

Agricen Sciences and UNT researchers analyzed soil associated with corn roots collected from a field study of corn conducted at the University of Arkansas, where plots had received a range of fertilizer types and application rates. They then compared bacterial biomass and diversity in the rhizosphere (e.g., in soil loosely associated with the root ball) and the rhizoplane (e.g., in soil washed from root surfaces) – areas where plants and soil microbes interact. By applying next-generation sequencing to characterize the bacterial community, they found that bacterial biodiversity varied with the different fertility regimens and between the rhizosphere and rhizoplane.

This work provides one of the first comprehensive studies of the corn microbiome. The microbiome appears important in stimulating plant growth and protecting the crop from pathogens and environmental stressors. Understanding the controls of this important system could lead to new approaches to improve productivity and maintain soil health.

An abstract of the study, "Bacterial Diversity in Rhizosphere and Rhizoplane of Field Corn Grown with Different Fertilization Regimes" (Poster presentation; Abstract #128-5), is available **here**.

About Agricen Sciences

Agricen Sciences is an applied sciences research company leading the development of novel microbial and biochemical solutions for plant nutrition and health. The company's cutting-edge research programs on soil-plant systems are yielding new insights for crop nutrition, soil science and nutrient management. By applying this knowledge, Agricen Sciences is developing innovative solutions to address the sustainability and production challenges facing modern agriculture. For more information, please visit **www.agricensciences.com**.