

Student Presentations + branch AGM

Monday 8 February 2022 19.00

By Zoom

Clement Aardweg

Sensing NO_x emissions in arable agriculture

The research initially examined current knowledge on NO_x emissions from soil and the impact of agricultural land management. This was followed by development and proof of concept of drone and ground-based NO_x sensor systems using low-cost electrochemical gas sensors.



Silvia Arpano

Effects of one Polyacrylamide surface application on soil and crop metrics

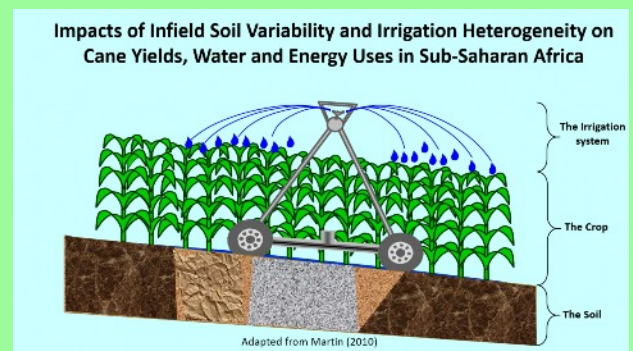
The tillage Intensity and frequency in leafy green industry does not favour the natural-occurring soil organic matter. To overcome the problems connected to poor soil structure, one Polyacrylamide application was tested in summer 2021. Here are the effects on soil and crop metrics.



Mavuto Banda

Impacts of infield soil variability and irrigation heterogeneity on cane yields, water and energy uses in sub-Saharan Africa.

In this research, modelling of the impact of irrigation and soil heterogeneity on sugarcane yield, water and energy productivity will be made to establish the extent to which improved irrigation water application uniformity and precision irrigation (PI) based on soil homogeneity could improve cane, water and energy productivities in sub-Saharan Africa.



Yolande Booye

An investigation on long term tillage impact on soil health

Ploughing leaves topsoil vulnerable to erosion, but what impact does this disruption have on soil organisms? Organisms that are relied on for healthy high-yielding soils. This research considers how soil organic matter, moisture content and biodiversity are affected, not only by varied mechanical manipulation, but also seasonal environmental

