

# Speaker Abstracts - Wednesday 5 December

---

## Mauchline

### Rooting around the wheat microbiome

Tim Mauchline  
Rothamsted Research, UK

The root microbiome is recruited by plants and influences plant growth, health and resource use efficiency. These microorganisms can benefit crop plants in several ways including improved plant nutritional status as well as protection against biotic and abiotic stresses. There are various factors which determine the crop microbiome community structure and understanding how agricultural practices influence the microbiome structure is imperative for the development of sustainable agricultural systems. This talk explores our work into the relative importance of several factors that shape the wheat root microbiome namely: land use conversion at the Rothamsted Highfield experiment, wheat genotype in reference to contrasting plant height, fertilisation regime at the Rothamsted Broadbalk experiment as well as the interaction of seed microbial load and land use in determining microbiome structure.