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# Theme：Structural and functional study of the plant root-associated microbiota for sustainable agriculture

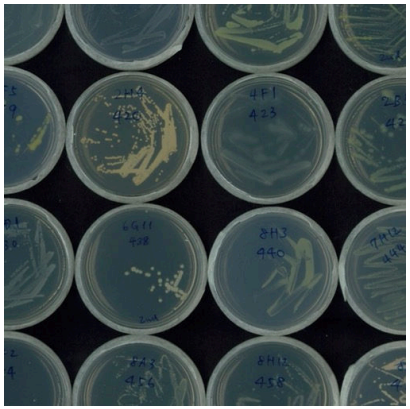
## Purpose：

Our goal is to understand the plant-microbe interactions from the molecular to the field scale aiming to develop new technologies for sustainable agriculture. The main focuses are: (1) which factors contribute to shape the microbial community structure, (2) what are the functions of the root microbiota, and (3) how the root microbiota exhibits their functions.

## Achievement:

(1) Capture the features of the root-associated microbial community and reveal the key environmental factors that are involved in the community formation in distinctive crops and agricultural practices.
(2) Establish the microbial culture collection of the root-associated microbial community.
(3) Elucidate the microbiota-assisted mechanisms of environmental adaptation in plants.

a tea plantation in Shizuoka



microbial culture collection

plant growth rescue
by microbial inoculation