

Impact of plant domestication on spermosphere and rhizosphere microbiome composition

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Propositions:

- 1. The abundance of Bacteroidetes in the rhizosphere and endosphere of modern crops is significantly affected by plant domestication (this thesis).
- 2. Root traits are important drivers of microbial community composition in the rhizosphere (this thesis).
- 3. Soil management practices for agricultural purposes have homogenized the soil bacterial diversity and reduced ecological interactions both at species and functional level, regardless of geographic location and soil type (this thesis).
- 4. Plant microbiome assembly starts immediately after seed imbibition (this thesis)
- 5. Plant metabolomics should focus on the unknown chemistry of plant-microbe interactions instead of typical, easy-to-measure compounds.
- 6. Without proper statistics, microbiome analyses provide merely a collection of anecdotal statements.
- 7. Sequence data analysis for a 21st century microbiologist is comparable to the devoted observation of hundreds of samples under the microscope during the early days of microbiology.
- 8. Analysis of marker genes is a powerful and constantly evolving strategy to decipher environmental and host-associated microbial diversity for research groups in developing countries
- 9. Science is the best system of human knowledge, unfortunately the current publication system and the pressure to publish among young scientists has the risk of making it less and less reliable.
- 10. One of the greatest challenge in life is to find the balance between the loudness of success and the humble self-awareness of our failures and limitations.

Propositions belonging to the PhD thesis entitled:

"Impact of plant domestication on spermosphere and rhizosphere microbiome composition"

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