

The identification of microbiome markers for potato vitality

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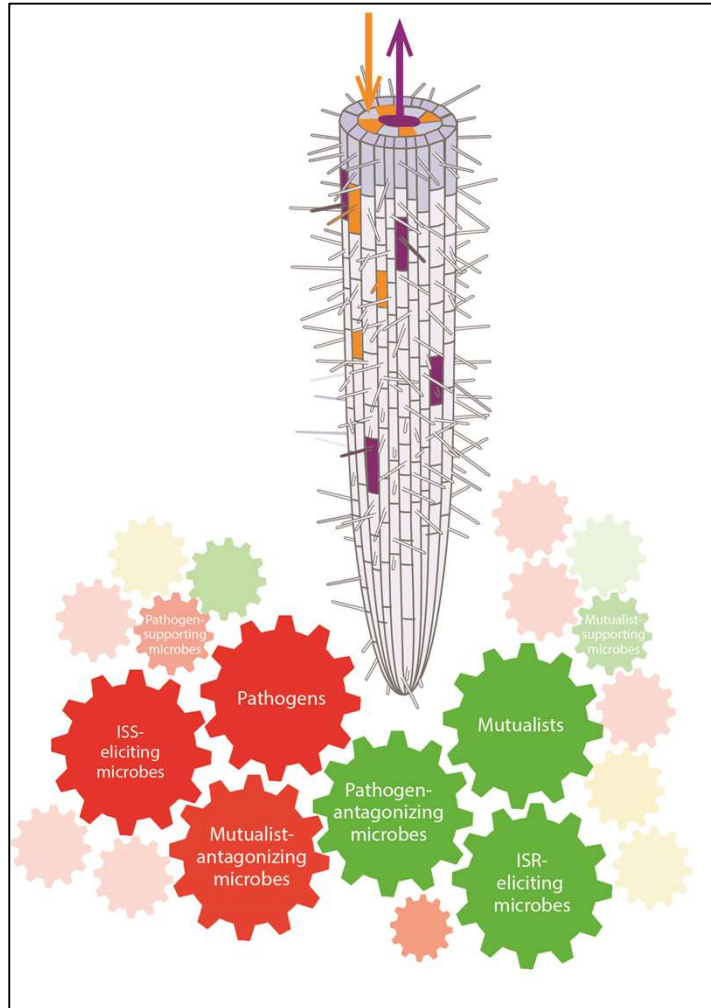
Utrecht University

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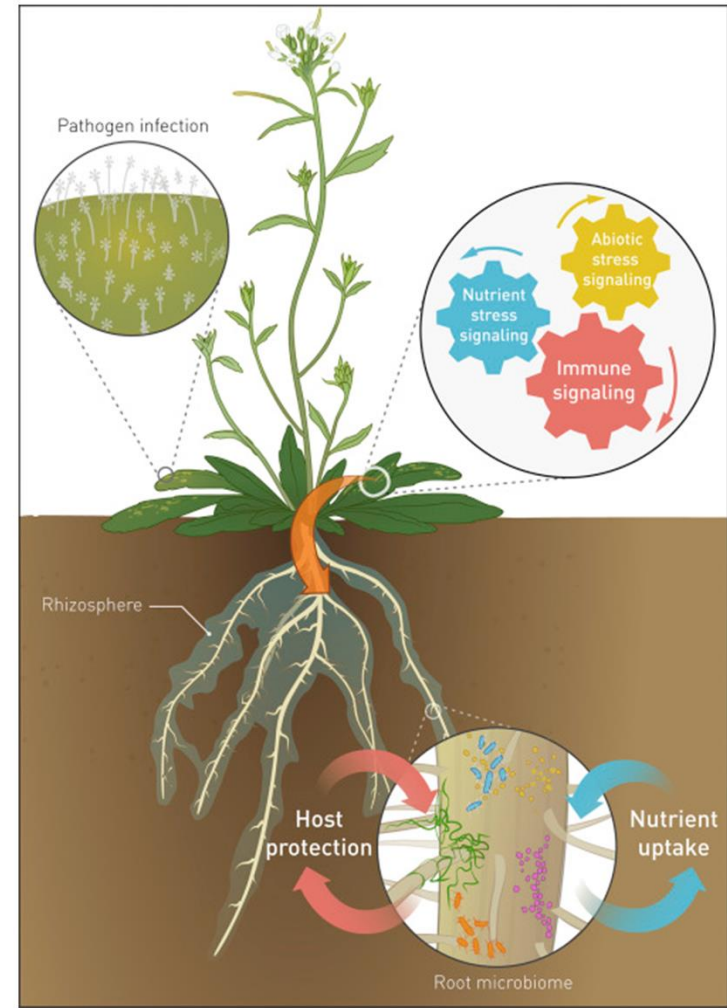




The remaining potential of microbiome is enormous.



Pieterse *et al.*, (2016) Trends in plant science

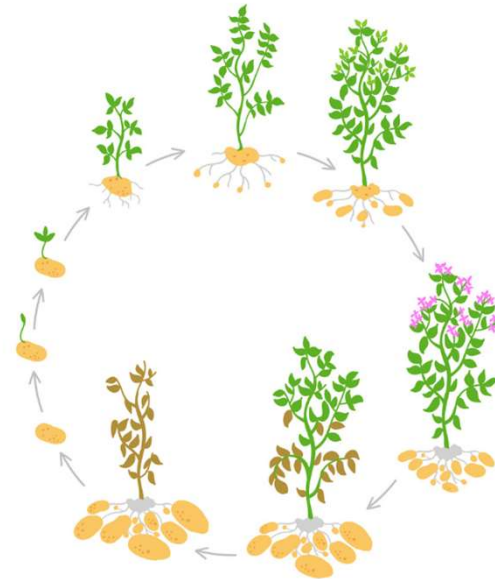
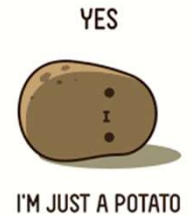


Bakker *et al.*, (2018) Cell
Berendsen *et al.*, (2018) ISME J



Why potatoes?

- **Potatoes** are the world's 4th-largest food crop after maize, wheat, and rice.
- Around 60% of **seed potatoes** on the market are produced in the Netherlands.
- **HZPC Holland BV** is the largest Dutch exporter of seed potatoes.

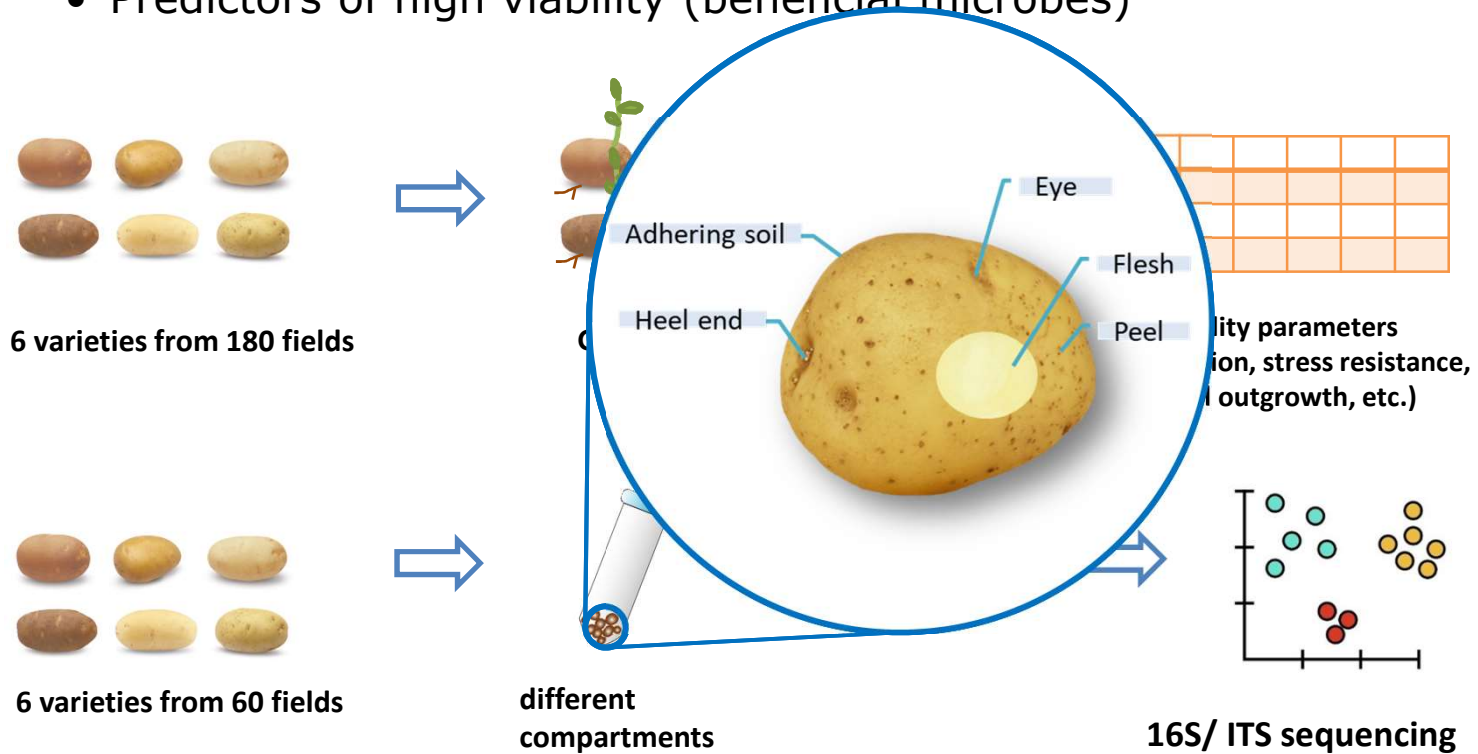




Goal of the Project

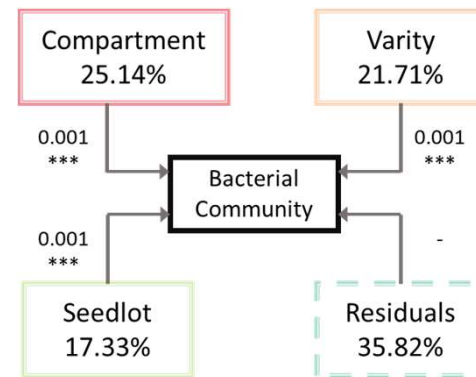
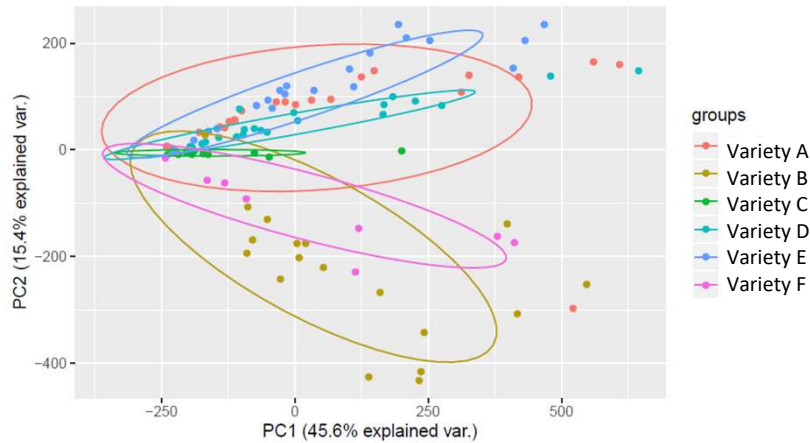
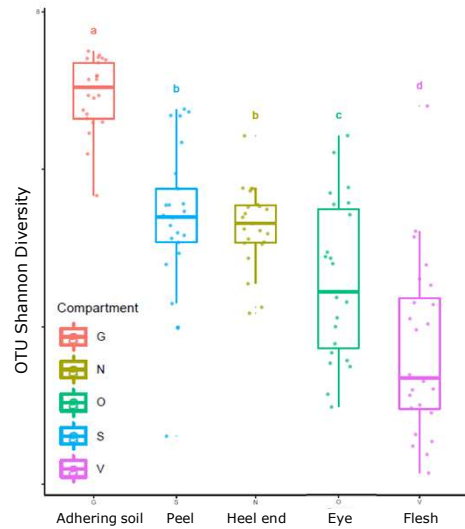
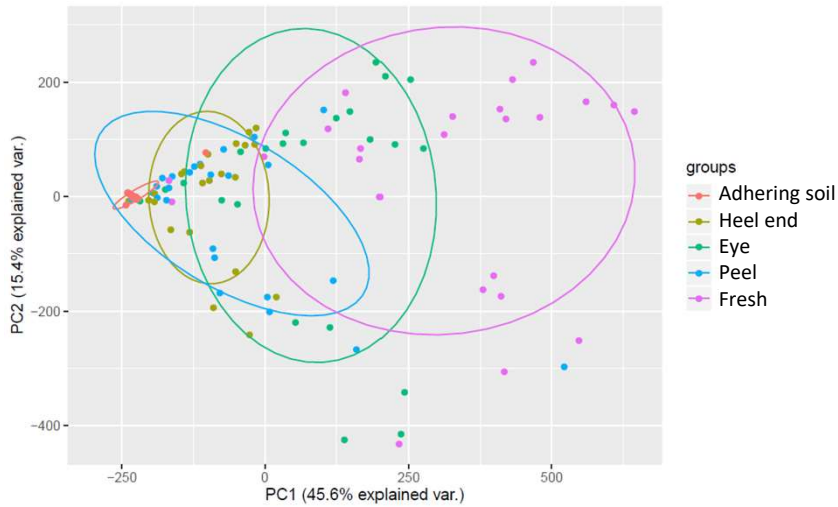
Identify microbes as predictors of potato vitality

- Predictors of low viability (pathogens)
- Predictors of high viability (beneficial microbes)





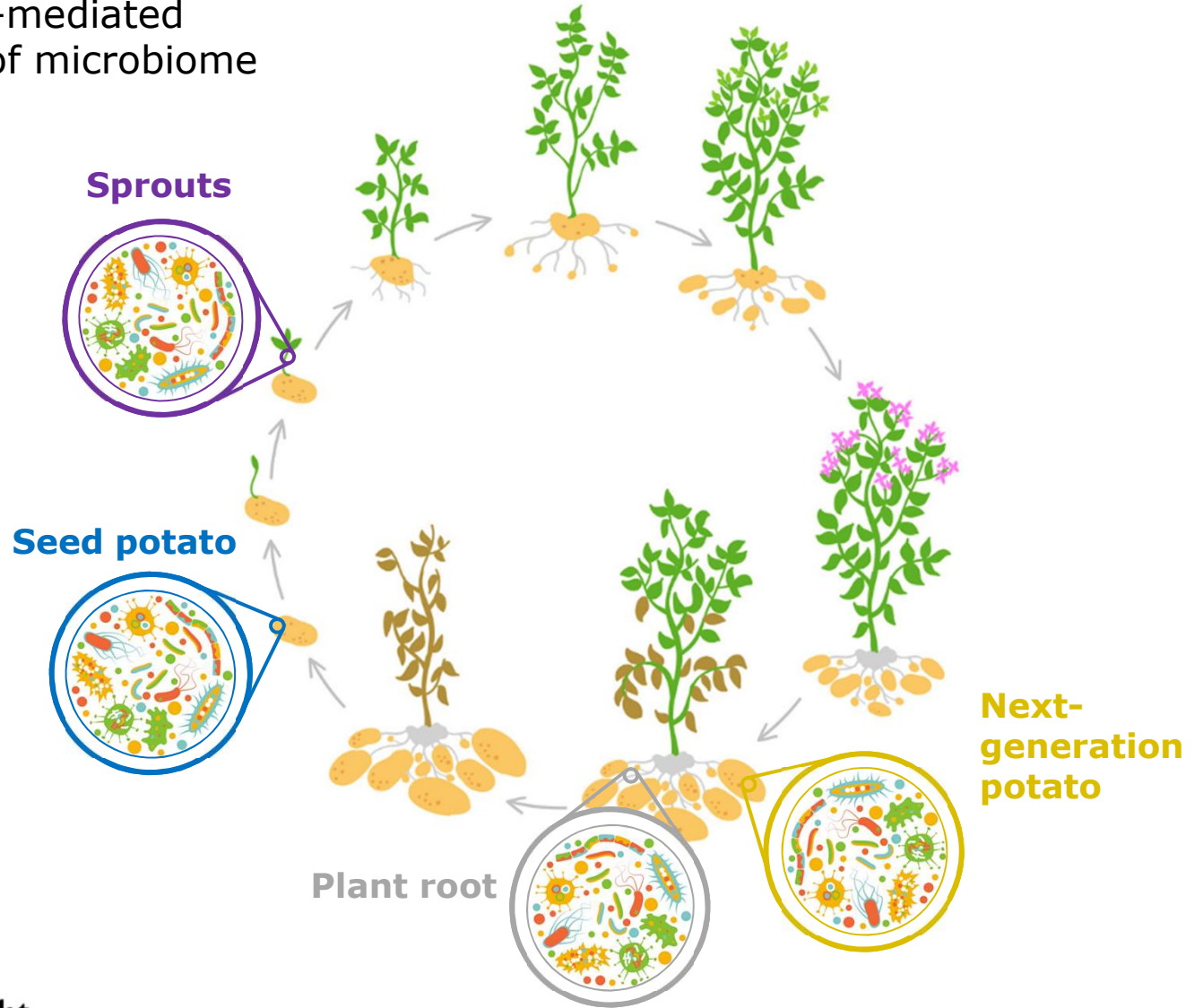
Different potato compartments/varieties harbor distinct bacterial communities





Side projects

Seed potato-mediated inheritance of microbiome



Acknowledgements



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Questions?



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