PhD project: How do soft fruit and pathogens interact with beneficial fungi?

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The James Hutton Institute

Arbuscular Mycorrhizal Fungi- AMF

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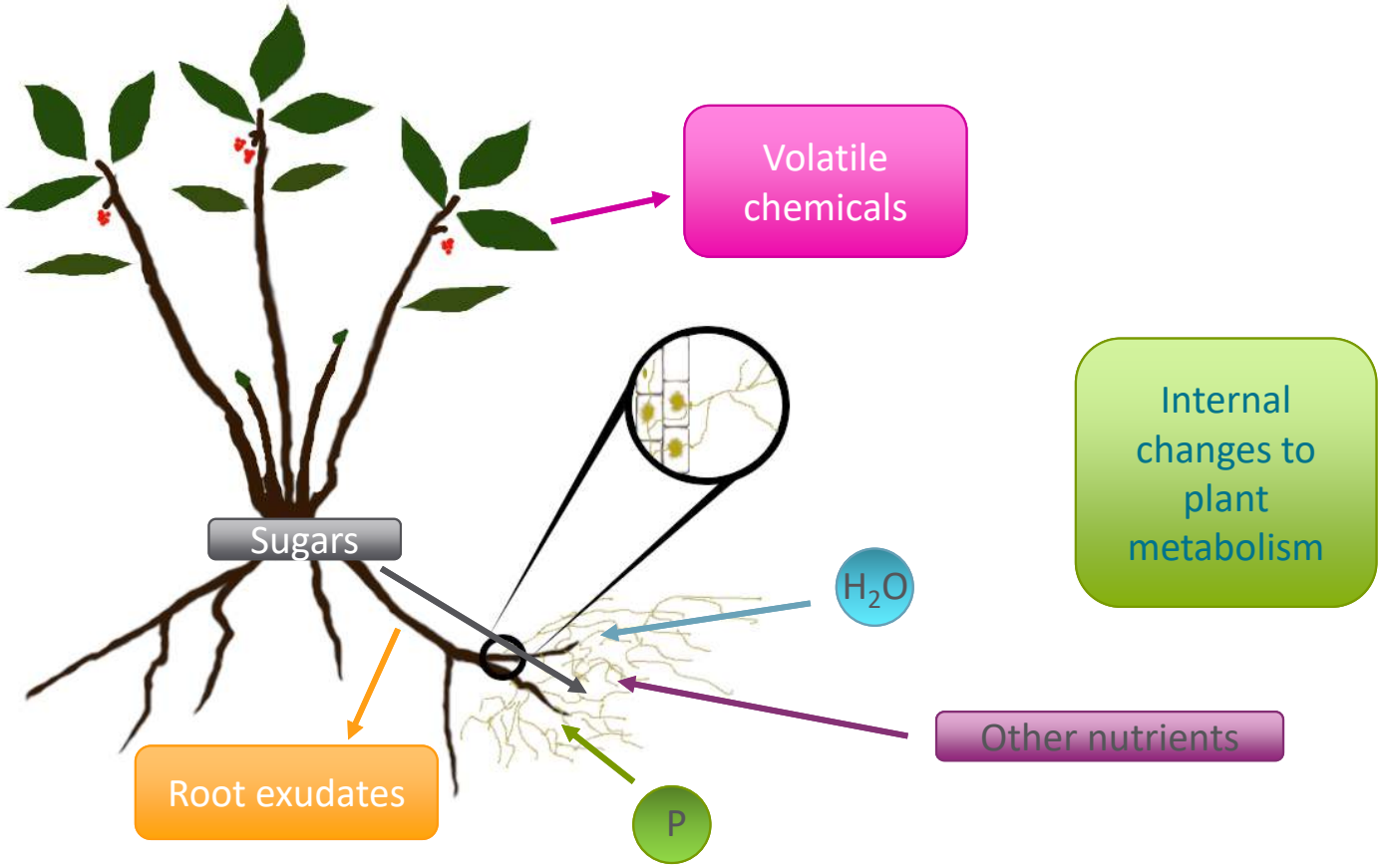
- Ubiquitous fungi living in association with roots of most plant species
  - Generally considered beneficial
  - Complicated interactions, highly context dependent
  - Several hundred species known, with varying effects on different plants

What does this mean for plants?



- AMF can affect plants in a huge range of ways
  - Increase nutrient uptake, especially phosphorus
  - Alter plant physiology, including flower number and timing, nectar production, stress tolerance
  - Alter plant-pathogen interactions. Mostly found to increase resistance to root pathogens, but not always!

What effect do they have on raspberries?

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- Situation currently almost entirely unknown
  - Based on research in other plants, there is a possibility that some AMF isolates may increase disease resistance and tolerance… or maybe increase disease damage
- Project investigating the effects of AMF on raspberries.
  - Determine what is already present
  - Test effects of these and other typically beneficial isolates on growth and disease development

Project expected to run until 2026

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