

A COMPARISON OF MEDIA TO DETERMINE OPTIMAL GROWTH IN AQUAPONICS

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Aquaponics Intro

- Combination of aquaculture and hydroponics
- Growing environments
- Grow medias

Rockwool



ZipGrow

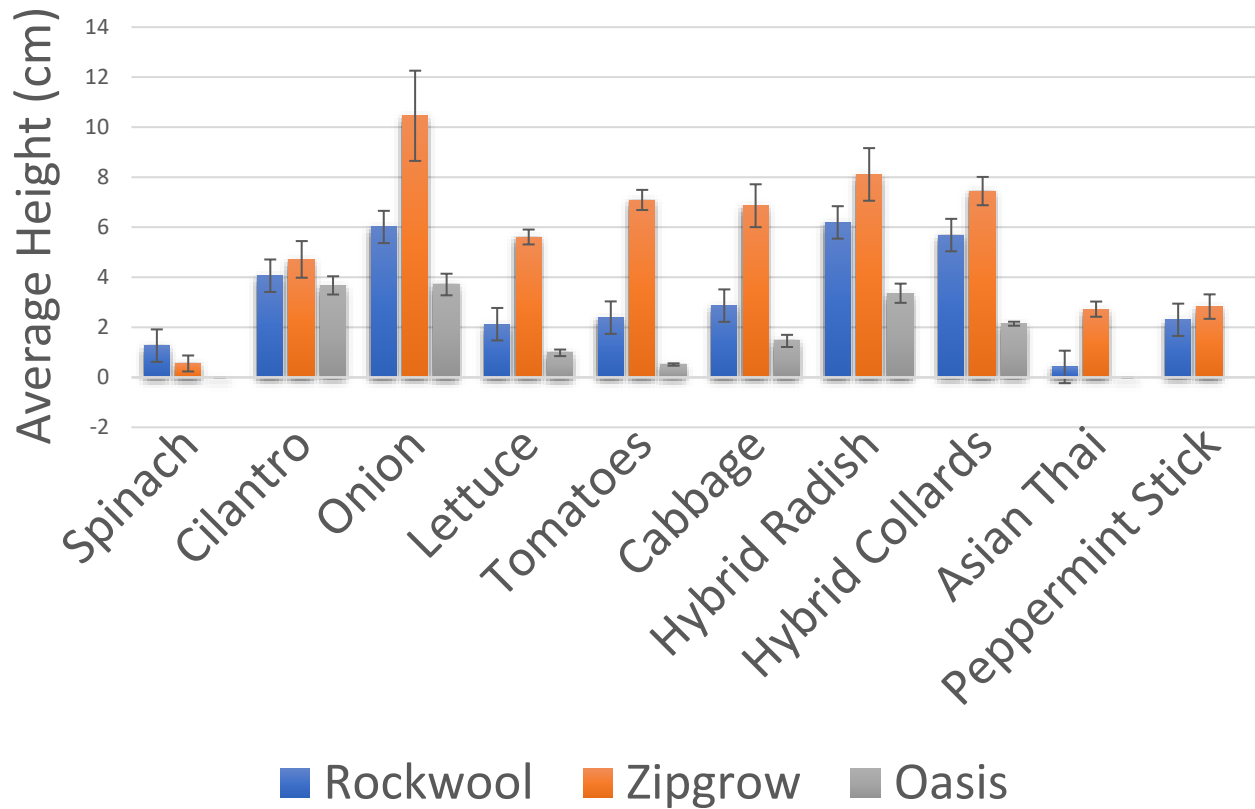


Oasis



Research Questions – Plant Growth

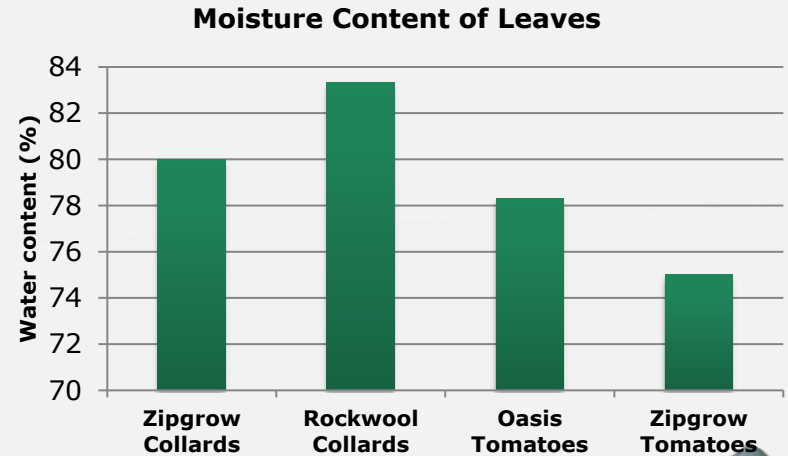
- ZipGrow & Rockwool consistently yielded higher average heights



HU Environmental student, Jordan Brown measuring plant height.

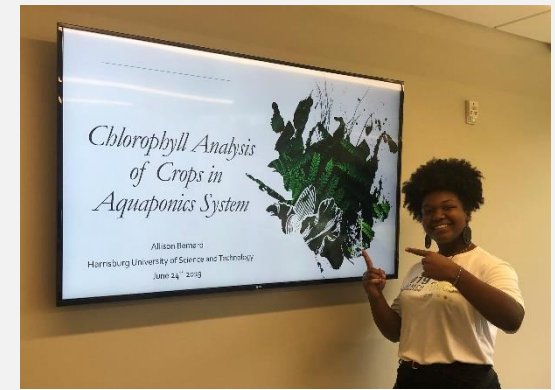
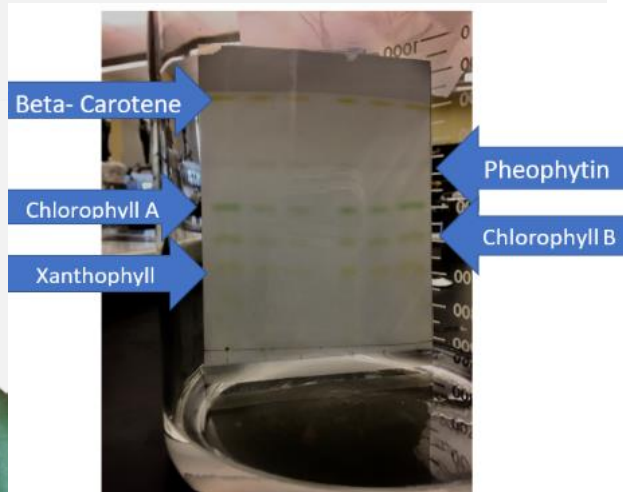
Research Questions – Nutritional Content

- Moisture Content – Preliminary Findings



Research Questions – Nutritional Content

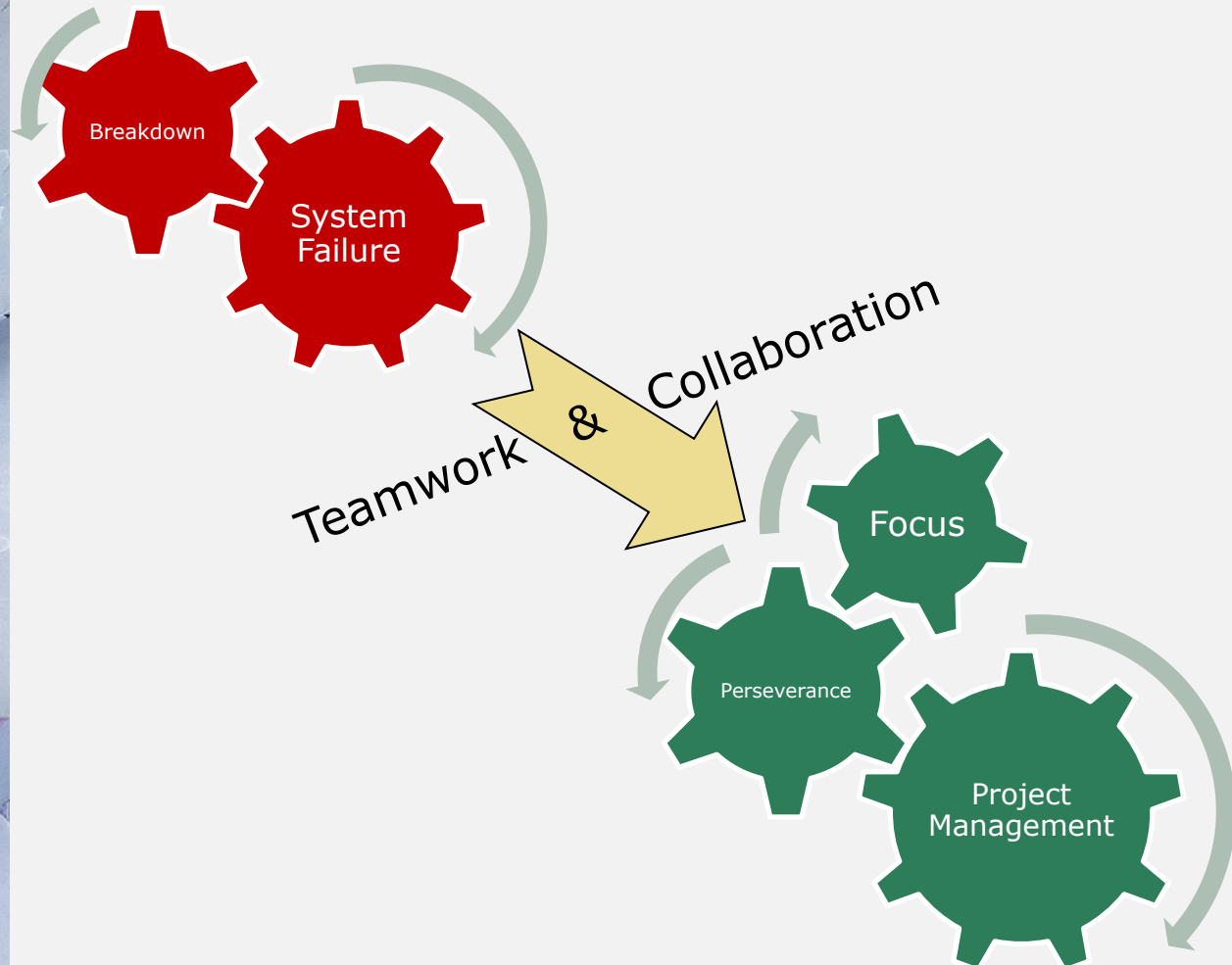
- Chlorophyll – Preliminary Findings



HU Biotechnology student, Allison Bernard, highlighting her presentation title slide for the 2019 CCA-HU Aquaponics Summer Camp.



Student Troubleshooting



Next Steps

- Additional trials within functional aquaponics system
 - Assess which grow environment is preferred
 - Nutritional content analysis and analysis of grow media itself
- Additional research questions:
 - Nutritional value of microgreens
 - Morphine levels within poppy seeds grown aquaponically
 - Ability to grow agar aquaponically (seaweed shortage)

