

RRCC Astrobio investigates chlorophyll production in different growth factors



Spring Semester start
January 2026

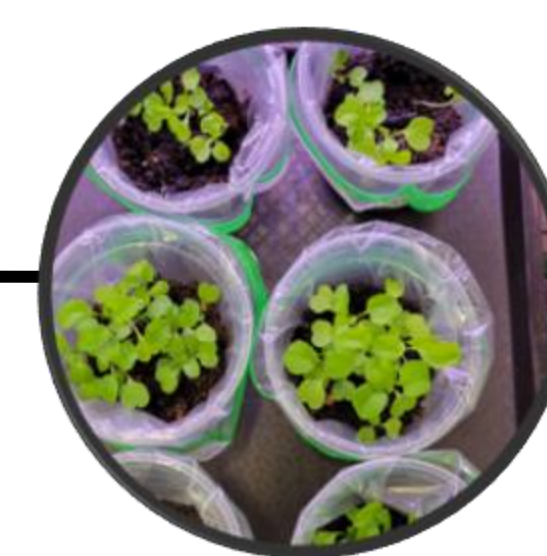
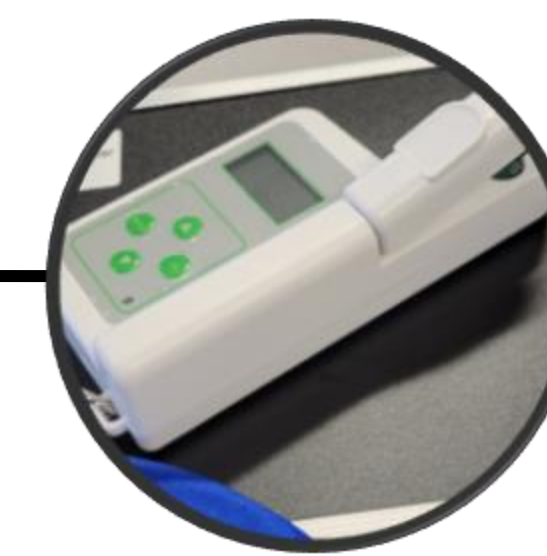
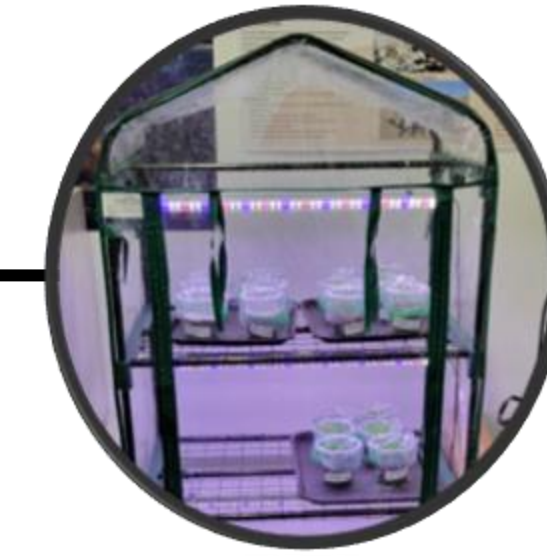
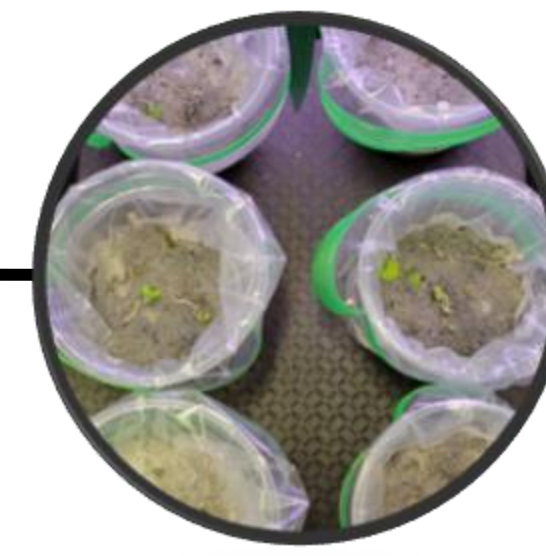
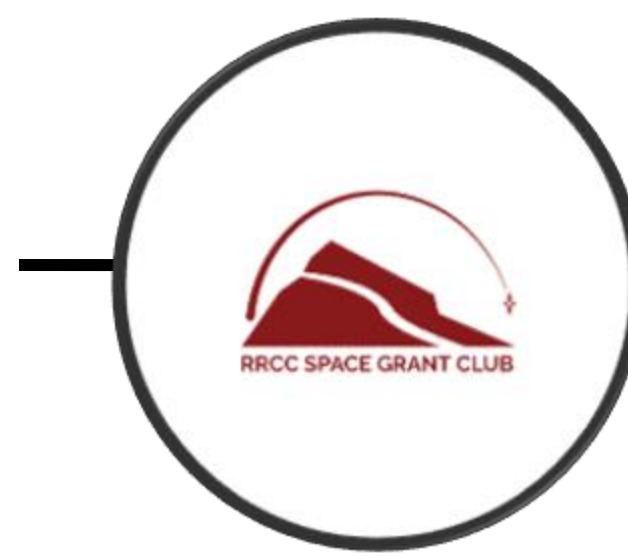
Arugula planted
February 2026

Greenhouse acquired
March 2026

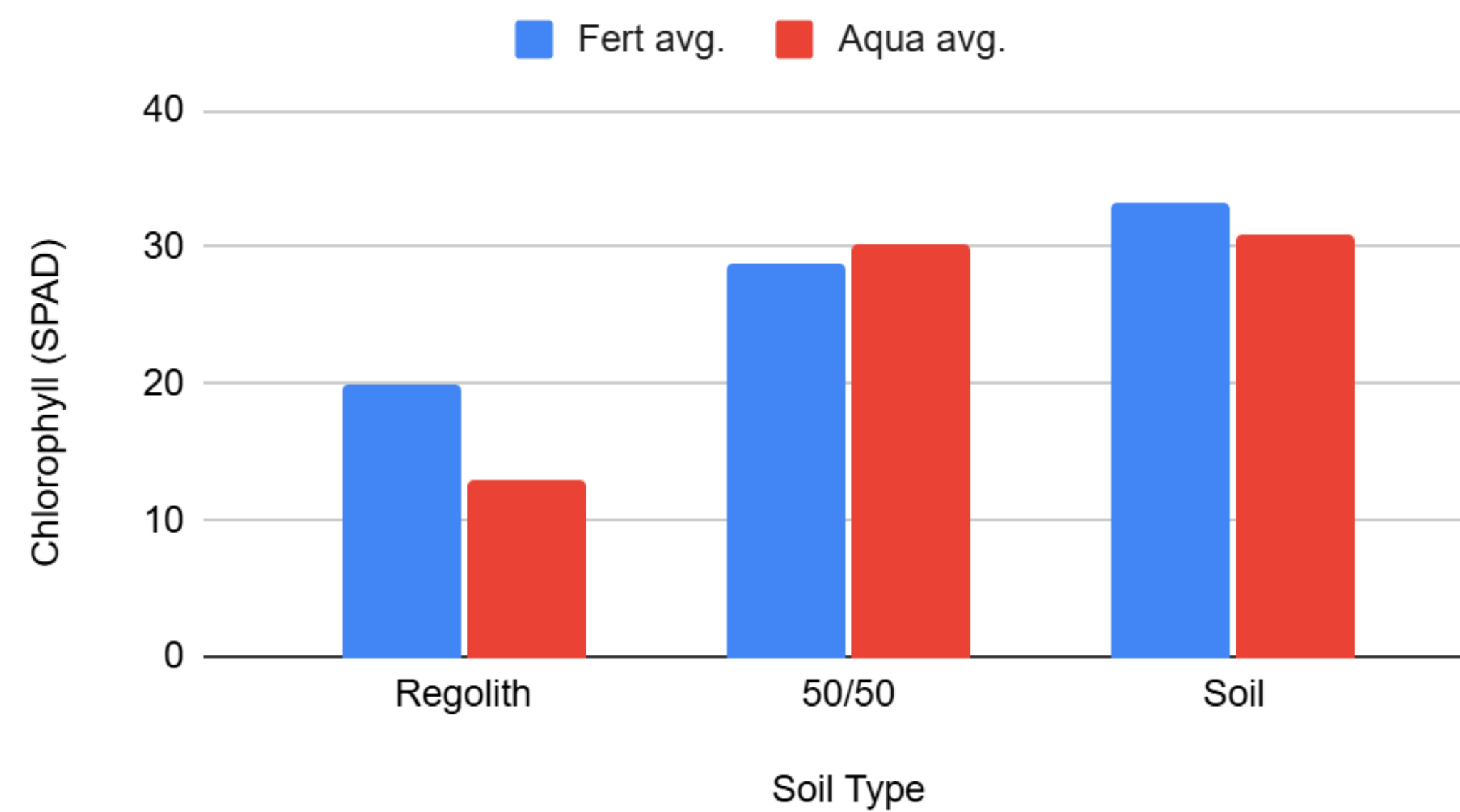
Chlorophyll Meter Acquired
March 2026

Final Data Collection
April 2026

COSGC Symposium
April 2025

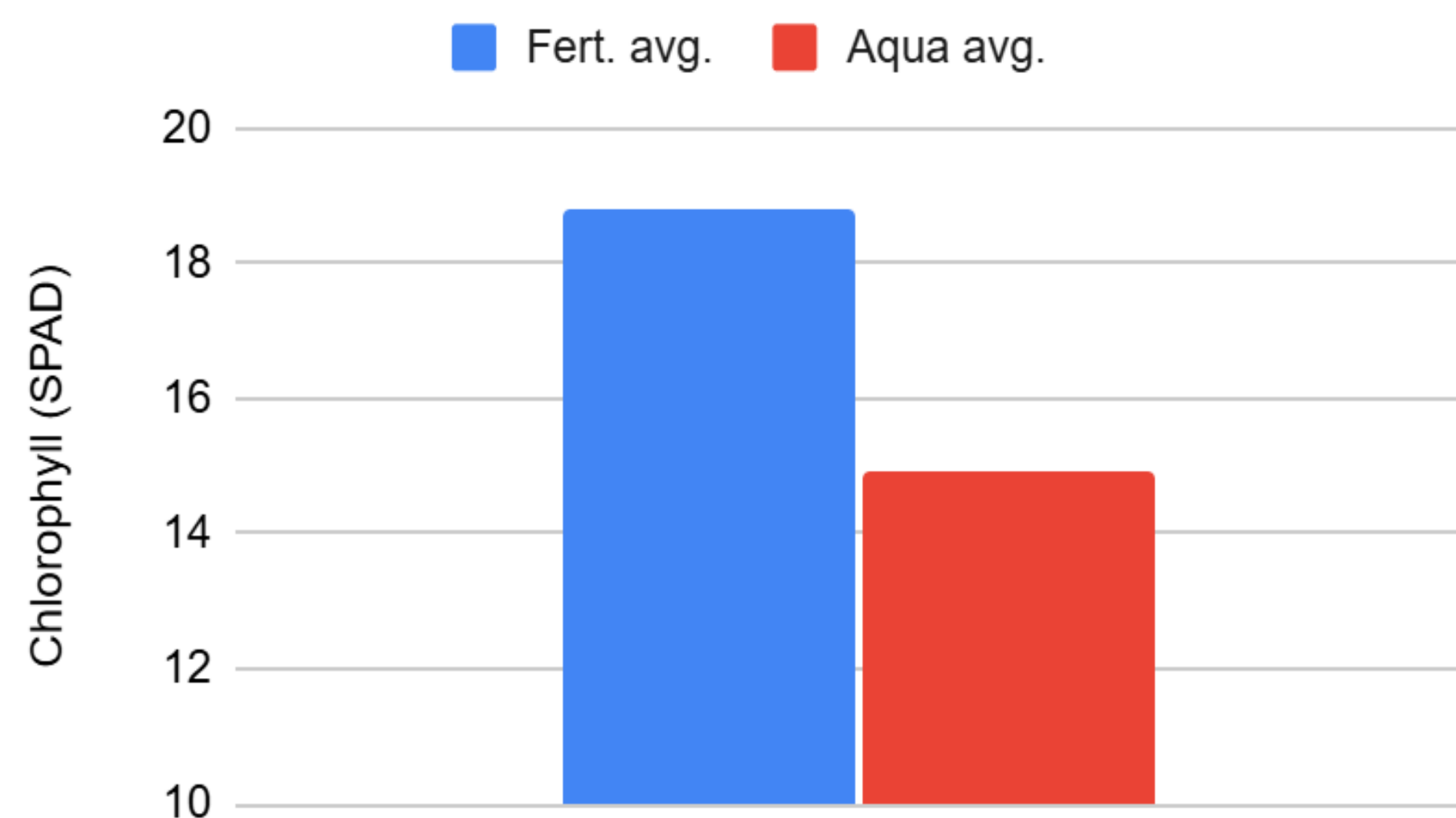


Average chlorophyll for each experimental group



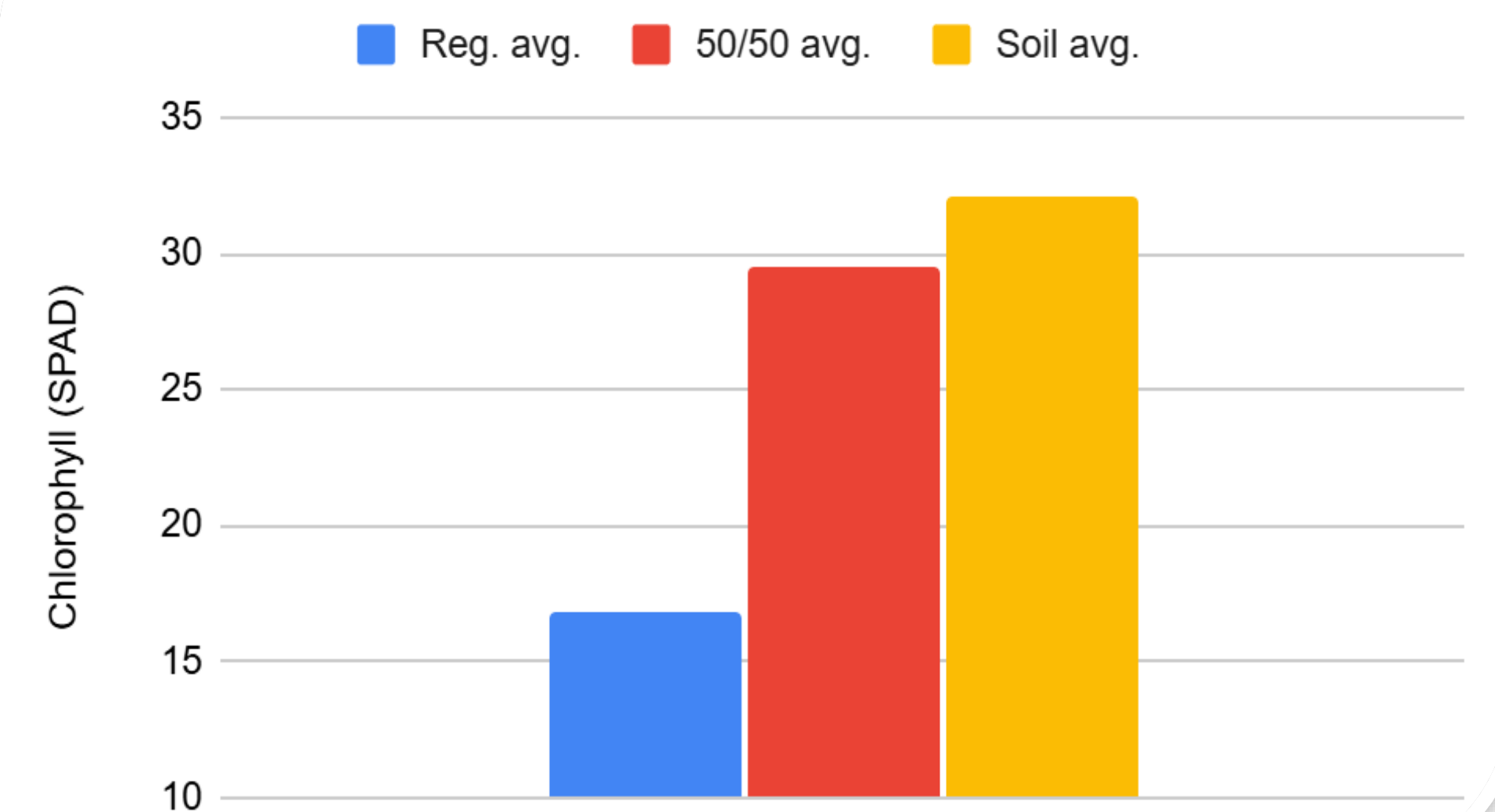
The average of each combination of water and soil factors showed higher consistent chlorophyll levels from fertilizer and water than aquaponic water.

Avg. Chlorophyll across water sources



Fertilizer water outperformed aquaponic water overall in chlorophyll production.

Average chlorophyll across substrates



Chlorophyll was best produced in the full soil condition, with a 50/50 mix of soil-regolith as a close second.