



# Characterization and Productivity



RABR Project 2018

# Harvesting Algae



Samples were taken from both faces of each of the ten disks



Performed using a metal square which kept the surface area sampled ( $0.04 \text{ m}^2$ ) consistent from disk to disk.



The area within the square was then manually scraped off the disks and stored in centrifuge tubes.

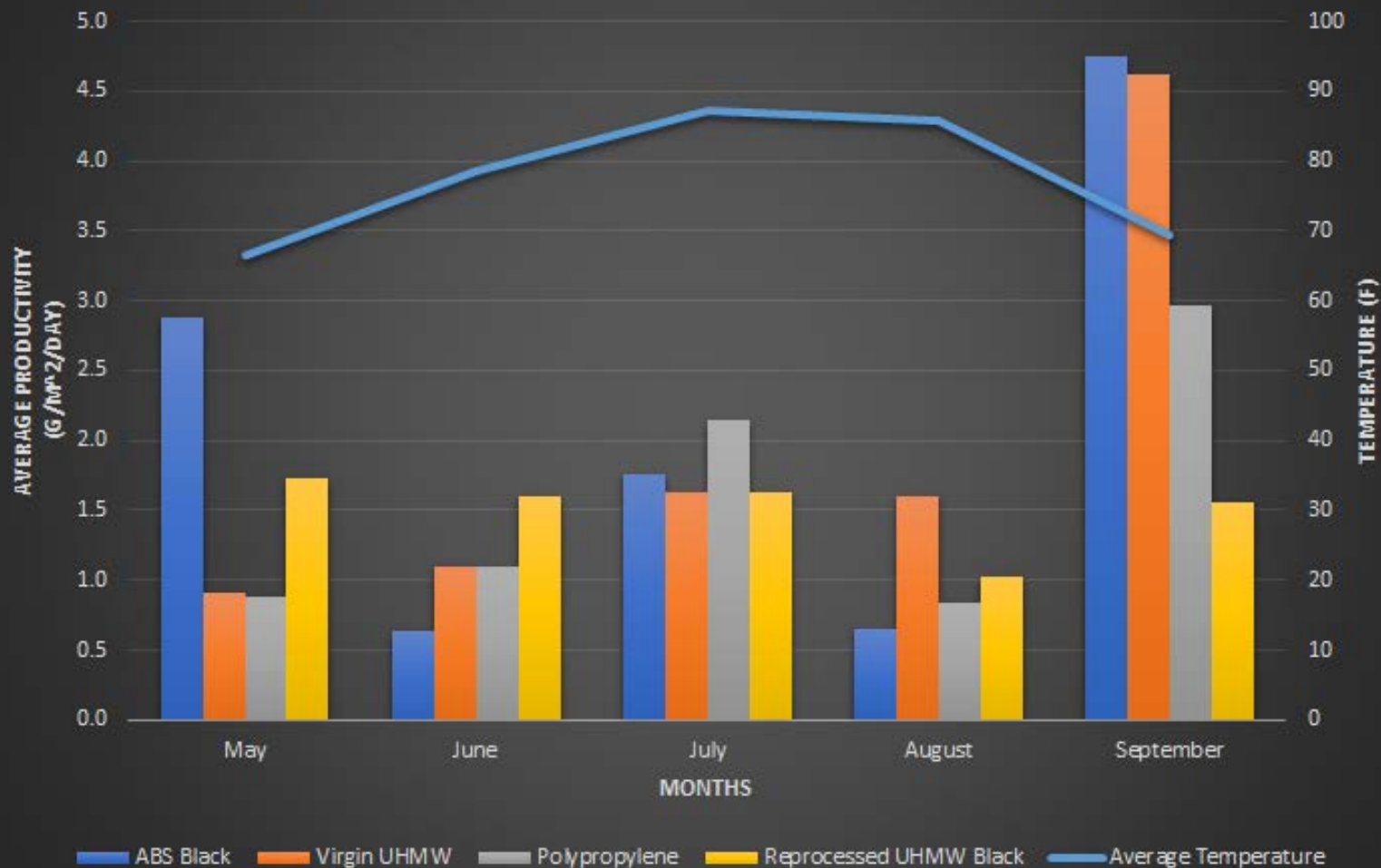
# Productivity

- Defined as the rate of generation of biomass within a system ( $\text{g/m}^2/\text{day}$ )
- Measured to determine trends between increased biomass yield and external factors (i.e. substrate material, temperature, light availability, etc.)





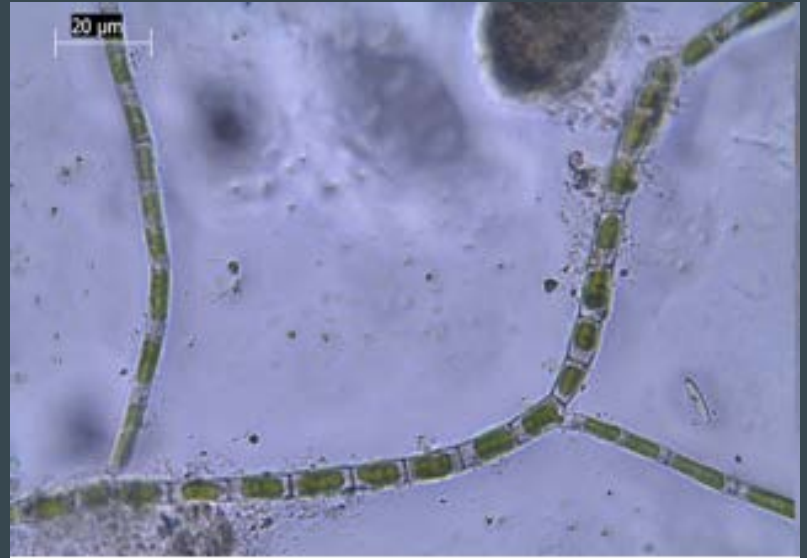
## Average Productivities of Top Producers by Month



# Algae Strains

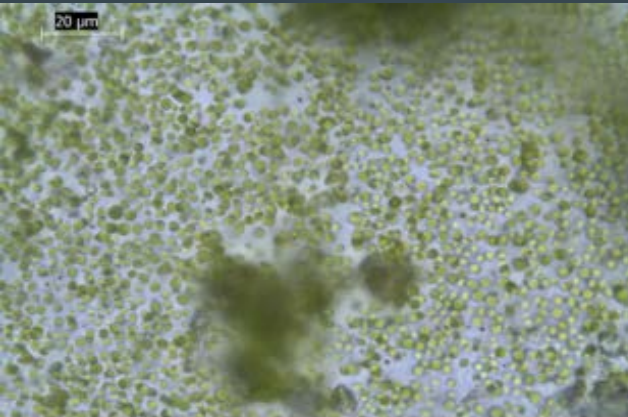


Klebsormidium (400X)



Stigeoclonium (400X)

# Algae Strains



Chlorella (400X)

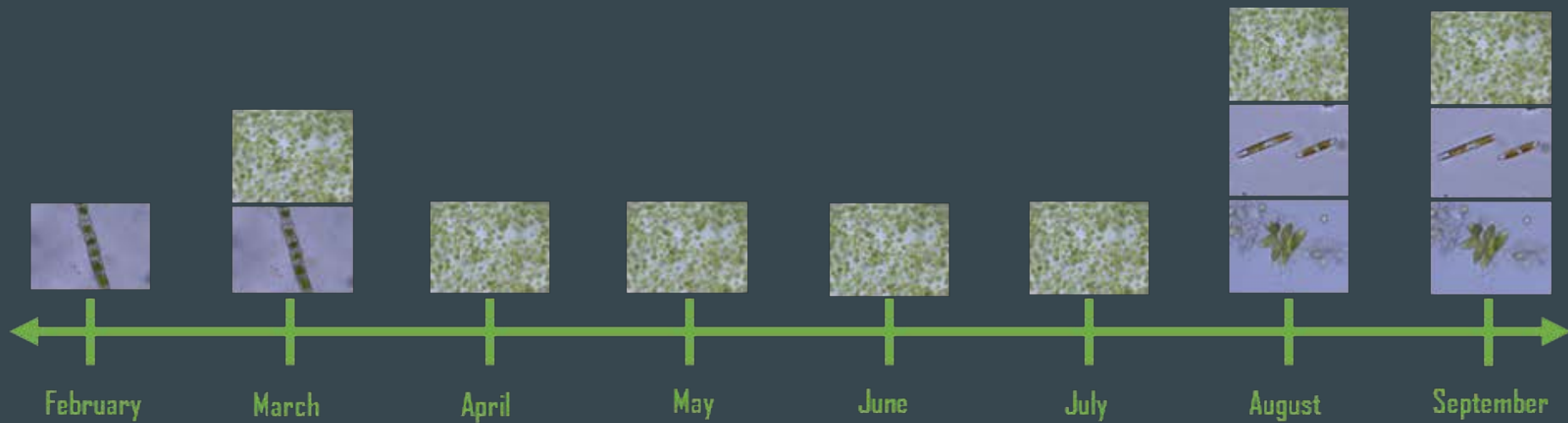


Keratococcus (400X)

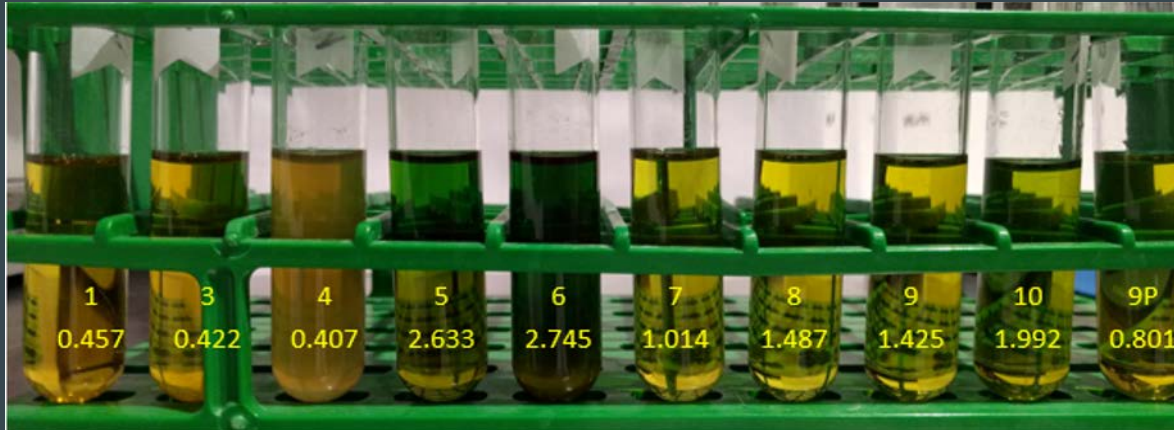


Nitzschia (400X)

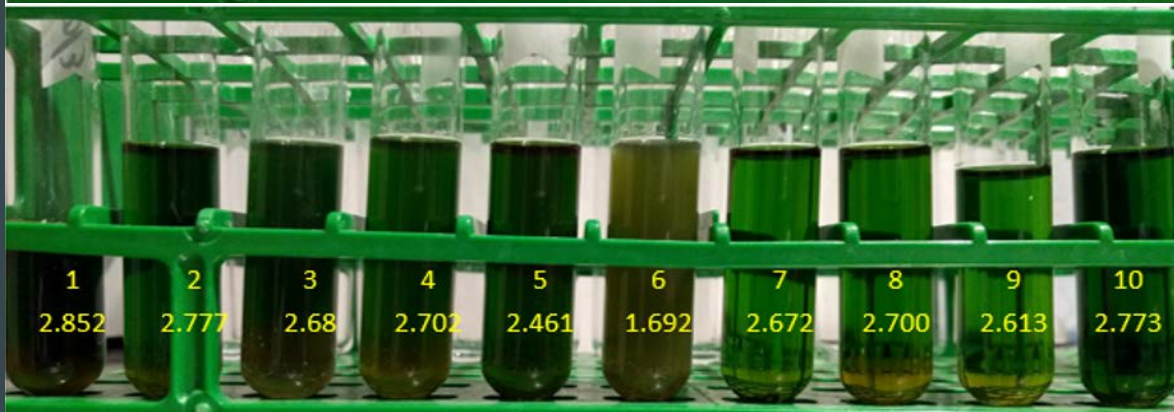
# Timeline



# Autotrophic Index



April



May