



Diatom's Lipids – Scope for Biodiesel

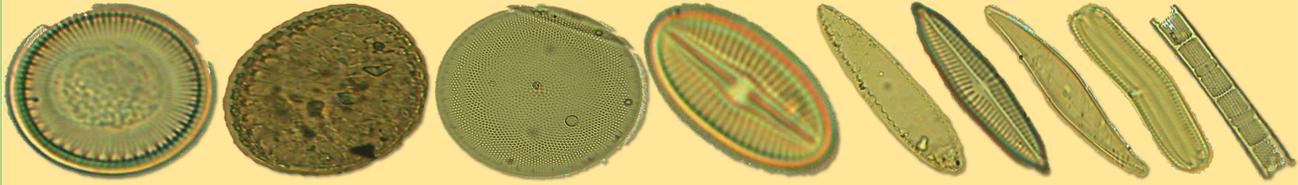
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DIATOMS

- Diatoms are a major group of microalgae that belongs to the class “Bacillariophyceae”
- They are distinguished by their ornate cell structure made of hydrated silica and are known as “Algae in Glass houses”
- Diatoms majorly store their energy in the form of lipids or as chrysolaminarin – a complex polysaccharide
- The diatoms are considered to be a potential source of lipids for biodiesel production



Diatom	Lipid content (% dry wt)
<i>Nitzschia sp.</i>	45–47
<i>Nitzschia dissipata</i>	28–46
<i>Navicula pellucosa</i>	27–45
<i>Isochrysis sp.</i>	25–33
<i>Thalassiosira weissflogii</i>	22–24
<i>Phaeodactylum tricornutum</i>	20–30
<i>Cylindrotheca sp.</i>	16–37
<i>Skeletonema costatum</i>	16–35
<i>Thalassiosira pseudonana</i>	16–26

Biodiesel Production Schematics

