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## Liquid Fuel Production Using Microalgae

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Recently, biomass has attracted much attention as a renewable energy resource. Microalgae are particularly promising biomass species because of the high growth rate and high CO<sub>2</sub> fixation ability compared to plants. Effective liquid fuel production from microalgae was studied using *Botryococcus braunii* and *Dunaliella tertiolecta*, which accumulated terpenoid hydrocarbon and glycerol, respectively. *B. braunii* could remove nitrogen and phosphorus from secondarily treated sewage (STS) in a batch system and a continuous bioreactor system with hydrocarbon production. The intracellular glycerol content could be controlled by post-translational modifications in *D. tertiolecta*. *B. braunii* is more profitable for liquid fuel production than *D. tertiolecta* based on calculating the energy balance.

**Keywords:** [Biomass](#), [Botryococcus braunii](#), [Dunaliella tertiolecta](#), [Energy balance](#), [Liquid fuel production](#), [Microalgae](#)



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