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# Ölgewinnung aus Algen

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**With this diploma thesis one tries to win oils from algae. These oils also should be able to be processed into fuels for means of transport. For this purpose, the algae *Botryococcus braunii*, which makes few demands on their habitat and the produced oils are relatively easy to win.**

**In this diploma thesis the optimal conditions for the algae species should be determined in order to obtain highest possible yield of oil.**

**A high yield of oil is important to make this process as economical as possible. In addition to light irradiation, optimal conditions also include a suitable nutrient medium.**

**Therefore, various nutrient solutions are tested to evaluate which minerals and nutrient are best to grow the algae.**

**The produced oils should be extracted from the algae and then further refined. Fatty acid methyl ester can be produced from the oils, which can be used for biodiesel or pesticide. So that the biodiesel can also be used in conventional internal combustion engines, it must not be too different in its chemical and physical properties of conventional diesel. But the oil can also be refined into fatty alcohol. Additionally, the biomass of the algae can be used to produced further product.**

