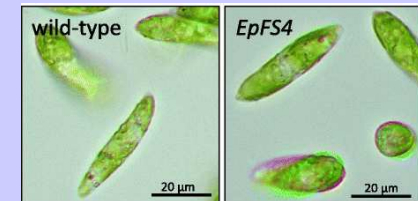
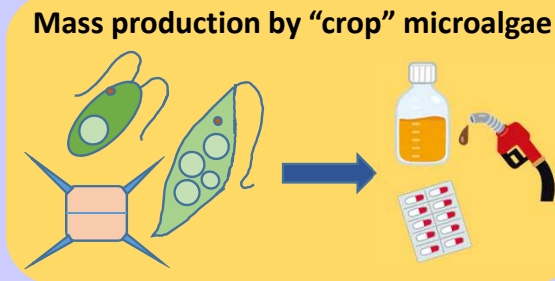


Identification and Effective Utilization of Key Factors for Producing Useful Substance in Microalgae

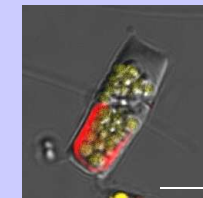
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Research Area

1. Promotion of cell survival, photosynthetic activity and nutrient uptake.
2. Modulating of metabolic flow.
3. Genome editing and cross mating methods
4. Establishment of “crop” microalgal lines



Photosynthetic activity ↑



Useful lipid-production

Recent Activities

- Production of ricinoleic acid-containing monoestolide triacylglycerides in an oleaginous diatom, *Chaetoceros gracilis*. Sci. Rep. 6:36809, 2016
- Enhancement of photosynthetic capacity in *Euglena gracilis* by expression of cyanobacterial fructose-1,6-/sedoheptulose-1,7-bisphosphatase leads to increases in biomass and wax ester production. Biotechnol. Biofuels 8:80, 2015