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## **Biofuels from microalgae**

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Global demand for alternative fuels is expanding due to population growth, increased attention to energy security, and Genvironmental policy mandates. Biofuels are a new priority in efforts to reduce dependence on fossil fuels; nevertheless, the rapid increase in production of biofuel feedstock may threaten biodiversity. To avoid this biofuel feedstocks should be grown with environmentally safe and biodiversity-friendly agricultural practices, biofuel feedstock growing practices should be sound environmental practices throughout the fuel-production life cycle and the land area needed to grow sufficient quantities of the feedstock, should be minimized. The best alternatives appear to be fuels of the future are fuels derived from microalgae. Interest in algal biofuels has been growing recently due to increased concern over peak oil, energy security, greenhouse gas emissions, and the potential for other biofuel feedstocks to compete for limited agricultural resources. Microalgae are a diverse group of prokaryotic and eukaryotic photosynthetic microorganisms that can grow rapidly due to their simple structure. They have been investigated for the production of different biofuels including biodiesel, bio-oil, bio-syngas, and bio-hydrogen. Microalgal biofuel production is potentially sustainable. It is possible to produce adequate microalgal biofuels to satisfy the fast growing energy demand within the restraints of land and water resources. Combining microalgal farming and the production of biofuels using biorefinery strategy is expected to significantly enhance the overall cost-effectiveness of the biofuel from microalgae approach.

## Biography

Santosh Chopde has completed M.Tech (Dairy Engineering) from NDRI, Karnal (INDIA) and presently he is working as an assistant professor at College of Dairy Technology, Udgir.

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