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Optimization of the *in situ* transesterification step for biodiesel production using biomass of *Yarrowia lipolytica* NCIM 3589 grown on waste cooking oil

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HIGHLIGHTS

- Biomass of yeast Y. lipolytica grown on waste cooking oil used for biodiesel production
- Optimization of direct in situ acid catalyzed transesterification step to biodiesel
- Biomass found to be the most significant amongst all factors studied by optimization
- High biomass loading (4 g) led to high FAME yield (0.88 g)
- FAME profile and physico-chemical properties show its suitability as biodiesel

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