



## Oleo Chemistry and Combustion Characteristics of *Plectranthus mollis*, syn. *Plectranthus incanus*, Seed Oil

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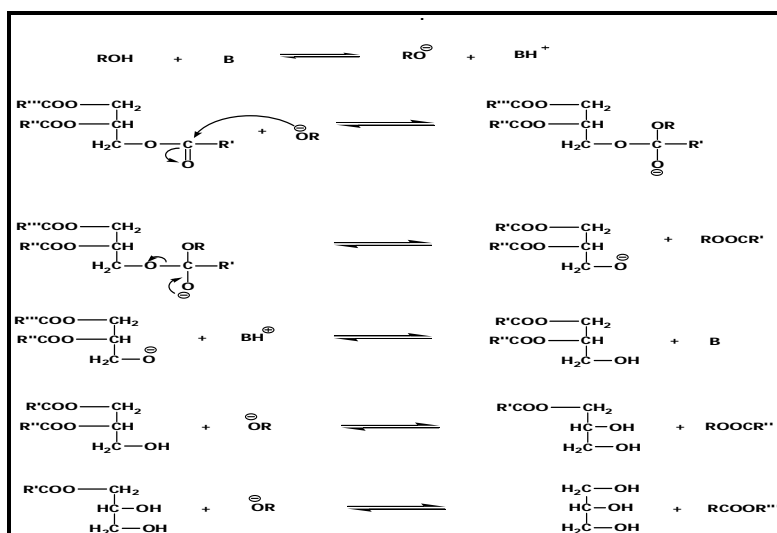
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### ABSTRACT

In this work new feedstock for biodiesel production has been screened. Non-edible seed oil species like *Plectranthus mollis* (PM) plant species yield 40% seed oil. The molecular weight (MW) of oil is calculated based on the percentage component fatty acids of the seed oil. The cetane number (CN), lower heating value (LHV) and higher heating value (HHV) of these fatty acid methyl esters (FAMES) are empirically evaluated. The combustion characteristics /bio-diesel properties of *Plectranthus mollis* seed oil methyl esters (PMSOMEs) of *Plectranthus mollis* seed oil (PMSO) is compared with existing bio-diesels. The PMSO selected in this investigation convene the major specification of biodiesel standards. This work reports the suitability of PMSO for the bio-diesel productivity.

### Graphical Abstract



Mechanism of the alkali-catalyzed transesterification of vegetable oils

**Keywords:** *Plectranthus mollis*, Industrial utilization, Biodiesel, Fatty acids, Fuel properties, *Plectranthus mollis* seed oil methyl esters.