

Biodiesel production from jatropha oil by catalytic and non-catalytic approaches: An overview.

ABSTRACT

Biodiesel (fatty acids alkyl esters) is a promising alternative fuel to replace petroleum-based diesel that is obtained from renewable sources such as vegetable oil, animal fat and waste cooking oil. Vegetable oils are more suitable source for biodiesel production compared to animal fats and waste cooking since they are renewable in nature. However, there is a concern that biodiesel production from vegetable oil would disturb the food market. Oil from *Jatropha curcas* is an acceptable choice for biodiesel production because it is non-edible and can be easily grown in a harsh environment. Moreover, alkyl esters of jatropha oil meet the standard of biodiesel in many countries. Thus, the present paper provides a review on the transesterification methods for biodiesel production using jatropha oil as feedstock.

Keyword: Biodiesel; Catalyst; Jatropha; Transesterification.