

## **A comparison study on fuel properties of pretreated Pongamia and Jatropha methyl esters for C.I. engine usage**

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### **ABSTRACT**

A comparison study was done with untreated and pretreated Pongamia and Jatropha methyl esters for recovery and fuel properties. It is observed that the pretreatment of the seeds enhanced the yield of Pongamia and Jatropha methyl esters. Pretreated methyl ester showed considerable reduction in viscosity, fire, and flash points and cloud and pour points and increased the heat value and American Petroleum Institute gravity. All these properties of fuel were found to be better than that of untreated seeds, making it suitable for use in internal combustion engines and with the possibility of having reduced maintenance problems.

### **KEYWORDS:**

biodiesel, fuel properties, heat value, methyl esters, pretreatment, viscosity