



## Biofuel from jamun seed (*Syzygium Cumini* (L.))

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**Abstract:** Petroleum based fuels play a vital role in rapid depletion of conventional energy sources along with increasing demand and also major contributors of air pollutants. Major portion of today's energy demand in India is being met with fossil fuels. Hence it is high time that alternate fuels for engines should be derived from indigenous sources. In the present energy scenario of fuels, bio- diesels has already been given great importance. It is understandable that the non-renewable fuel resources like crude oil are meeting their ends. However, the transformation of the automobiles and other machineries for using renewable resources is a tedious task and almost impossible. So, there is a need for prolonging the period of the availability of non-renewable fuel resources by opting for alternate fuels like Bio-Diesels. This can be done by increasing fuel efficiency and reducing the level of pollutants in the emissions. Oxide formation has been a major concern in normal fuels as well as in bio-fuels. So there is a need for the presence of anti-oxidant in the fuel we use. After clearly examining the antioxidant properties of various natural products we predicted *Syzygium cumini* which is also called as jamun fruit, to have better anti-oxidant properties, as we highly interested in utilizing natural waste we used jamun seed powder instead of jamun fruit.

**Keywords:** Jamun Seed, *Syzygium cumini*, Oxide Formation, Bio-Diesels, Pollutants.