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### Patent Search

Invention Title	EXPERIMENTAL INVESTIGATION ON THE USE OF MAHUA OIL IN A FOUR STROKE C.I. ENGINE
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#### Abstract:

Abstract Developing countries are meeting their energy requirements through the bulk use of fossil fuels. Major amount of these countries exchequer is being spent on fossil fuels. Large-scale use of petrol & diesel is posing serious problem of depletion of petroleum fuels. Every research, which ensures development of viable alternative fuel, is good for any country's economy. So vegetable oil properties being very close to diesel fuel are the suitable alternatives for petrol & diesel. The engine is self-governing. The viscosity of Mahua oil is approximately 10-15 times higher than diesel fuel. The performance characteristics are compared by running the engine with pure diesel blend (Mahua+Diesel) with heating. Acceptable thermal efficiencies are obtained with the use of 50% Mahua oil and 50% diesel blend injection pressure at 200 atm., when run with the blend fuel.

## Complete Specification

### Claims:We Claim

1. The energy content of Bio-Diesel blends is less specific fuel consumption values are higher than that of pure diesel.
2. The mechanical efficiency of the fuel blends is seen to be nearer to that of pure diesel.
3. The indicated thermal efficiency of 100% diesel is higher than the Bio-Diesel fuel because fuel consumption using the various blends is more.
4. The brake thermal efficiency is less for fuel blends as compared to pure diesel and can be improved by modifying the fuel injector pump.
5. The blends 50% oil & 50% diesel gives closer values to that of pure diesel and is recommended for use in Single cylinder, four stroke, ANIL engine.

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