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PERFORMANCE & EMISSION ANALYSIS OF BIODIESEL USING VARIOUS BLENDS (CASTOR OIL+ NEEM OIL BIODIESEL)

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ABSTRACT

Major need of energy generation is fulfilled by fossil fuels which are used for worldwide transportation. In recent year India need sources of an alternative fuel as a biodiesel and its major potential can be generated in India almost 10-30% of diesel can be replaced with blending of biodiesel. This biodiesel can reduce major Burdon on the import as well as reduction in pollution level. For India maximum wasteland can be utilized for plantation of sources as a seed base like caster seed, Neem trees and biodiesel can be produced and make it available as alternative fuel.

The focus of this paper is to conduct study of biodiesel properties (castor oil + Neem oil) and its performance with various blends. For diesel engine the performance and emission is almost increasing by 2-5 % and emission level are quiet lower than present fuel. This will be the major sources in the generation of energy for the replacement of diesel.

So that we are interested in biodiesel for a variety of reasons, but most importantly, it's potential to reduce total lifetime carbon dioxide emissions, as well as reduction in other pollutants.

KEYWORDS: Diesel Engine Performances, Biodiesel Blends, Biodiesel Castor Oil/Neem Oils, Performance Analysis