

# Emissions Of Transesterification Jatropha-Palm Blended Biodiesel

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## Abstract

This paper deals with emissions of transesterification Jatropha-Palm blended biodiesel as fuel for 4-stroke single vertical cylinder diesel engine. The engine emissions of Carbon Monoxide (CO), Carbon Dioxide (CO<sub>2</sub>) and Nitrogen Oxides (NO<sub>x</sub>) were analyzed and discussed. All tests were carried out at varied load conditions which were 0.13, 0.15, 0.17, 0.19 and 0.21 kW. The results revealed that higher CO, CO<sub>2</sub> and NO<sub>x</sub> produced from all biodiesel blended as compared to Diesel Fuel (DF). This might be due to the higher oxygen content in the biodiesel structure and also higher exhaust temperature during combustion which promotes the formation of more hazardous gases.

**Keywords :** Jatropha-palm; blended; biodiesel; emission

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