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Effect of L-Ascorbic acid on performance and emission behavior of neem biodiesel operated diesel engine

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Abstract

Nowadays, researchers are view in multidimensional of the consumption of fossil fuels, energy conversion and emission controls. Many researches proved that biodiesel is the best alternate sources for conventional diesel fuel. In worldwide biodiesel is extracted from vegetable oil obtained from transesterification process. In the present investigation, the nerium oil methyl ester (NOME) with L-ascorbic acid as additive is used as fuel in order to find out working characteristics of diesel engine. The NOME) proportions with 1% L-ascorbic acid (LA) as additive. The break thermal efficiency (BTE) of B20 with 1% of LA is 3.12% higher than diesel. The brake specific fuel consumption (BSFC) decreased 3.84% by adding of LA additive with B20 blend (B20 + LA