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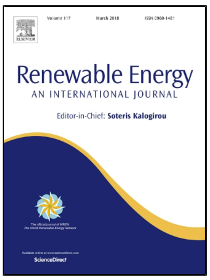

Experimental investigation on the effects of diesel and mahua biodiesel blended fuel in direct injection diesel engine modified by nozzle orifice diameters

M. Vijay Kumar, A. Veeresh Babu, P. Ravi Kumar

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Experimental investigation on the effects of diesel and mahua biodiesel blended fuel in direct injection diesel engine modified by nozzle orifice diameters

M. Vijay Kumar[a*], A. Veeresh Babu[b] and P. Ravi Kumar[c]

[a]Research Scholar, Department of mechanical engineering, NIT warangal, Warangal, telangana-506004, India. 09701339886 and vijaykumar.iitm37@gmail.com

[b]Assistant Professor, Department of mechanical engineering, NIT warangal, Warangal, telangana-506004, India

[c]Professor, Department of mechanical engineering, NIT warangal, Warangal, telangana-506004, India

Highlights:

- The diesel engine is modified with each of the three nozzles has 3 injection holes, with the aperture of Ø = 0.20 mm (modified), Ø = 0.28 mm (base), and Ø = 0.31 mm (modified) and was tested with diesel and mahua biodiesel blended fuel.
- The plantation of mahua tree is very much essential in a future generation.
- The physical properties and chemical composition of biodiesel are seen to be more effective.
- The B20 with smaller orifices NHD are agreed to be more successful in combustion performance and emissions.
- During the process with B20 and smaller orifice NHD, it's implementing the NO_x formation highly.