



柴油出租车燃用麻疯树制生物柴油的试验研究

Experimental Research of Diesel Taxis Fueled by Jatropha-based

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英文关键词: [diesel taxi](#) [Jatropha-based biodiesel](#) [fuel consumption per 100 kilometers](#) [emission](#)

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中文摘要

对柴油出租车燃用生物柴油体积混合比例分别为10%(简称BD10)和5%(简称BD5)的石化柴油麻疯树制生物柴油混合燃料及柴油(结果表明:柴油出租车燃用BD10, BD5的排放性能稳定, 低于现行国II标准规定的排放限值; 与BD0比较, 柴油出租车燃用BD10的百公里油耗分别降低3.5%, 9.1%, 15.9%, 8.9%; 燃用BD5的百公里油耗基本相当, NOx+HC, NOx, CO及颗粒物排放分别降低3.5%, 4.9%, 10.5%, 3.6%。)

英文摘要

An experimental research was made into the diesel taxis on its fuel economy, pollution emission, and reliability by using Jatropha-based biodiesel blend with conventional diesel (volume ratio, recording as BD10 and BD5 respectively). The experimental results show that the diesel taxis fueled by BD10 and BD5 are fully complied with current national emission standards. The fuel consumption per 100 kilometers of BD10 fueled taxis is a little higher than that of conventional diesel fueled taxis, and the NOx+HC, NOx, CO and PM emission of BD10 fueled taxis is a little higher than that of conventional diesel fueled taxis. Moreover, the fuel consumption per 100 kilometers of BD5 fueled diesel taxis is almost the same with that of conventional diesel fueled taxis. The NOx+HC, NOx, CO and PM emission of BD5 fueled taxis reduces about 3.5%, 4.9%, 10.5% and 3.6% respectively. And, the deposit on the engine of BD5 fueled taxis increases a little, which, however, does not affect the taxi work.