

International Energy Journal, Volume 9, Issue 1, March 2008[HOME](#) | [ABOUT](#) | [LOG IN](#) | [REGISTER](#) | [SEARCH](#) | [CURRENT](#) | [ARCHIVES](#)[Home](#) > [Volume 9, Issue 1, March 2008](#) > **Mahanta****Parametric Study on Transesterification Process for Biodiesel Production from Pongamia pinnata and Jatropha curcus Oil***P. Mahanta, J.K. Sarmah, P. Kalita, A. Shrivastava***Abstract**

Present work deals with the study of operating parameters on biodiesel yield in laboratory level transesterification set up. For comparison, experiments were conducted with oils of Pongamia pinnata as well as Jatropha curcus. Biodiesel fuels derived by the transesterification of these oils met the specifications of diesel fuel. Experiments were conducted to ascertain the effect of methanol, alkali catalyst, reaction time and reaction temperature on biodiesel oil yield. In case of Pongamia pinnata, maximum conversion of oil to biodiesel was 72% with 20% w/w of methanol at operating temperature of 60°C. Conversion was 82% for Jatropha curcus oil with 25% w/w of methanol. Fuel properties of the biodiesel obtained by transesterification were tested and found to meet the ASTM specifications.

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