

Global Biofuels & Bioproducts Summit

November 19-21, 2012 Hilton San Antonio Airport, USA

Production of biodiesel fuels from non-edible plant oils in India

M. Mathiyazhagan and A.Ganapathi Bharathidasan University, India

In recent years biodiesel becomes great attention due to its renewability and environmental concerns. In addition to this there is an ever increasing the cost of petroleum diesel are also boosting the development biodiesel fuels. Biodiesel is a sulfur-free, biodegradable and non-toxic fuel that can be used in unmodified diesel engines. The energy content and power output level of biodiesel fuels are similar to that petroleum diesel (PD). In USA and Europe, biodiesel fuels from edible oils like soy bean, rape seed and sunflower is already well established to reduce the oil dependence. But in developing countries like India biodiesel from edible oils is not possible due to lack of sufficient edible oil production. India fulfills their edible oil consumption through importing process. Therefore Government of India has launched biodiesel fuel from non-food grade oil sources like *Jatropha curcus* and *Pongamia pinnata*. India having massive scale of degraded lands i.e. 80-100 million hectors of waste lands, which is open for the cultivation of biodiesel producing plants reducing/saving the foreign money which is spent to import of petroleum diesel. Moreover these plants can able to grow even infertile lands, not browsed by animals and it tolerates the pests and produces seeds for 30-40 years. So cultivation of the above said biodiesel plants not only give fuel and it also converts the degraded lands into fertile land. Therefore in the present investigation was made on attempt to produce biodiesel from *Jatropha curcus L* and *Pongamia pinnata* (L.) Pierre oils by using two step catalyzed transesterification process.

Biography

M. Mathiyazhagan has completed his PhD (November-2011) in the field of Biodiesel Technology from the Department of Biotechnology, Bharathidasan University, Tiruchirappall-620 024, Tamilnadu, India. He was awarded Jawaharlal Nehru Memorial Scholarship for his PhD study. He has published four papers in reputed journals.

mathibdu@gmail.com