

عنوان مقاله:

Esterification and transesterification of inedible olive oil for biodiesel production

محل انتشار:

ششمین کنفرانس سالیانه انرژی پاک (سال: 1397)

تعداد صفحات اصل مقاله: 4

نویسندگان:

Leila Dehghan - *Department of Food Science and Technology, School of Agriculture, Shiraz University, Shiraz, Iran*

Mohammad-Taghi Golmakani - *Department of Food Science and Technology, School of Agriculture, Shiraz University, Shiraz, Iran*

Seyed Mohammad Hashem Hosseini - *Department of Food Science and Technology, School of Agriculture, Shiraz University, Shiraz, Iran*

Dariush Zare - *Department of Biosystems Engineering, School of Agriculture, Shiraz University, Shiraz, Iran*

خلاصه مقاله:

In the present study a two-step acid-catalyzed esterification and alkaline-catalyzed transesterification process using microwave heating method was compared with conventional heating method. Free fatty acid was reduced to less than 2.0% in the first step. Comparing microwave alkaline-catalyzed transesterification results with those of the conventional heating method showed that microwave can significantly increase methyl ester yield and purity, and simultaneously decrease reaction time.

کلمات کلیدی:

Esterification, Transesterification, Olive oil, Biodiesel

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/969558>

