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STUDY OF BIODIESEL PRODUCTION FROM OILSEED PLANTS II. EVALUATION OF BIODISEL PRODUCTION FROM SOME CULTIVARS OF RAPES

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Abstract

Bio-diesel is a renewable and environmentally friendly alternative fuel that can be used in Diesel engines with little or no modification. Low cost feed stocks, such as waste oils, agricultural products, are important for low cost bio-diesel production. Rape is the most appropriate agricultural culture for this purpose, mainly due to the high fat content. In this study were evaluated the performances of 3 cultivated varieties rapes compared to new commercial types. Both, cultivated varieties and commercial sorts were cultivated using usual technologies on agricultural lands from Iasi County, Romania. The performances evaluation was conducted by analyzing the fat content from seeds for each cultivated varieties and commercial sorts, correlated with seeds production on hectare and calculating the content of fat for each culture, in order to obtain the possible production of biodiesel. The results showed that the three new cultivars are more recommended for bio-diesel production due to a higher content of fat in seeds in comparison with analyzed fat content for commercial sorts. Thus, these new cultivars could be better used for bio-diesel production at industrial level.

Key words: bio-diesel, crop, cultivars, rape

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