



Caracterizarea unor materii prime energetice specifice pentru România, destinate producerii de bioetanol

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Bioethanol, meaning dehydrated etilic alcohol obtained through fermentation, it's an alternative to usual fuels. Production of energy crops, which in Romania are represented mainly by corn, can have a series of advantages, such as: - it's a Romanian specific harvest, usable on a large scale and that can be regenerated; - can insure employment in rural media and additional funds for the local institutions. The term „energy crops” covers all types of biomass which is cultivated with energetical purposes. This article presents the results of the tests performed for the main energy crops from Romania, meaning mainly corn. Corn, a cereal with a large content of starch, is the most profitable raw material which can be used in the fabrication of bioethanol. The raw materials used were analyzed from a chemical and a physical point of view, but also at the level of mycotoxin content. Based on our experimental studies the conclusion is that the corn, a cereal with a high starch content, is the most profitable raw material to be process for bioethanol in Romania. Another advantage of corn in comparison with wheat and mainly with barley is the hardness of starch, and the low content in beta-glucans. The results allow to create a data basis for the characteristics of energy crops in Romania and the study of the influence of the raw materials quality indicators on the technological process