Este rațională utilizarea cerealelor la obținerea bioetanolului ?

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The paper presents the information regarding the bioethanol produced from corn, possibly wheat. These two raw materials specific for Romania belong to the category of energy crops. The term „energy crops" used in this thesis covers all kinds of biomass grown for energy purposes. Taking into account the harmonization with the EU directives regarding the partial replacing of fossil fuels with renewable fuels or with fuels produced from autochthonous renewable agricultural raw materials (mainly cereals, especially maize), the technological solution to produce bioethanol will be presented, using cereals specific for Romania (maize, possibly wheat). Bioethanol is a high-octane fuel that provides superior engine performance and its use is cost-effective for consumers. Environmentally acceptable scenarios exist in which bioethanol is a major energy carrier for a sustainable transportation sector. The Romanian Government Decision 1844/2005 concerning the biofuels and renewable fuels for transport transposes within the national legislation the Directive 2003/30/EC for the promotion of the utilisation of the biofuels and renewable fuels for transport. The paper also presents grounded arguments supporting the supplementary utilisation of autochtonous corn, possibly wheat, to produce bioethanol. Through the utilisation of grains to produce bioethanol the availability of energy crops for food, feed and bio-material production is not affected. On contrary, energetic availability for engines and for thermal power station using solid fuels are created, in order to perform the energetic independence of the production plant. The possibility to use the spent-grain resulted from the bioethanol technological process as feed, under ecological protection conditions. The production of energy crops depends on the environmental conditions in the given region and the agricultural management system applied, that can ensure high and constante yield, with availability for bioethanol.