

Abstract

Biofuels have been in the center of focus for many years. They are believed to be the solution to rising fossil fuel demand. This work links together cellulose based biofuels and genetical engineering. Biofuels consumption and production are encouraged all over the world. On the other hand genetical engineering faces harsh legislative obstacles. Our work examines the influence of GM corn on corn for silage yields, which can be used to produce cellulose based ethanol. Results of our model state that if 85% of corn sown area in the CZ was dedicated to GM corn, the yields of corn for silage would increase to 150%. Main drawback of our analysis is that estimates suffer from large uncertainty. Based on discovered significant positive effect, the work recommends liberalization of rigorous EU legislation concerning GM crops. The results of this work can indicate further focus of biofuel industry as well as development in genetical engineering.

JEL Classification Q16, Q42, C23

Keywords biofuels, cellulose based ethanol, GM crops, GM corn

Author's e-mail PBlahova@email.cz

Supervisor's e-mail Karel-Janda@seznam.cz