The usability of grasses for energy purposes in relation to other crops

Jan MOUDRÝ Jr., Petr KONVALINA , Jan MOUDRÝ, Markéta PROKEŠOVÁ - University of South Bohemia České Budějovice, Czech Republic

Together with rising importance of renewable resources for the world energy industry the usability of energy crops has been more and more actual topic. Taking into consideration that the area for these crops has increased, it is necessary to concern many more factors and aspects related to their production. Beside the yield of dry matter, which is still considered the main criterion of production efficiency, it is necessary to take into account the environmental and some economic aspects. In this regard it seems suitable to use for energy purposes also other crops with yields under the profit break-even point of 12 t/ha that could not compete with established species. Energy grasses as reedgrass (Phalaris arundinacea), cocksfoot (Dactylis glomerata) or tall oat grass (Arrhenatherum elatius) with average yields of dry matter between 8 – 9,5 t/ha cannot be compared (as far as the yield is concerned) to maize (Zea mays) or miscanth (Miscanthus sinensis Anderss) for example, however these crops can be chosen to the crop rotation thanks to their environmental functions – soil protection and low site conditions requirements for example.