

## **Abstract**

This thesis gives a literature review of fungi of energy crops. The most important phytopathogenic and endophytic fungi of these plants are mentioned, with special reference to genus *Fusarium*.

Energy crops are plants growing for phytoenergy. Species suitable for this purpose were chosen especially for great production of biomass with a cost. Various plant species are used for this purpose.

Little information of mycobiota of the energy crops is known in comparison with traditional crops. Better are known phytopathogenic than endophytic fungi of energy crops. In my master's thesis I will study endophytic mycobiota of *Miscanthus sinensis*, *Rumex patientia* x *R. tianschanicus* and *Sorghum*, excretion of mycobiota of these plants was carried out with special attention. Anamorphic genus *Fusarium* belongs to the most important phytopathogenic and endophytic genera of herbs, therefore closer attention was paid to this taxa.

**Key words:** phytopathogenic fungi, endophytes, energy crops, phytoenergy, *Fusarium*