

#### Summary:

Great Podkrusnohorská spoil heaps in the Sokolov region in Western Bohemia is the largest spoil heaps in the Czech Republic, which was pour million tonnes of overburden soil surface mining of brown coal. The thesis is setting on the basic characteristics of the water regime and water balance of spoil heap soil and thus follows a series of previous works dealing with the comparative development of the reclaimed and unreclaimed area. The areas are long-term monitoring of soil moisture using a dielectric soil moisture meter total water regime was monitored by subsurface with gravitation lyzimeter, runoff and throughfall rainfall. Older unreclaimed plots as well as reclaimed plots have higher porosity, water field capacity and moisture than young sites, however there are limited by water deficiency in similatr way as young sites due to increase in wilting point.

#### Keywords:

Spoil heaps, Recultivation, Soil humidity, Water supply, Water balance