



Quantitative experimental investigation of runoff processes in a small catchment

P. Zlabek (1), T. Kvitek (2)

(1) University of South Bohemia, Ceske Budejovice, Czech Republic, (2) Research Institute of Ameliorations and Soil Conservation, Prague, Czech Republic (zlabek@zf.jcu.cz / Fax: +420 385310122 / Phone: +420 387772778)

The influence of land use in particular subcatchments on runoff processes and runoff components was evaluated in the catchment of Kopaninsky stream. The catchment of Kopaninsky stream is situated in palaeozoic mostly acid crystalline rocks which are specific in its geomorphology and hydrogeology. Seven subcatchments were chosen for the purpose of this study. These subcatchments vary in different land use in recharge zones, in the presence of tile drainage systems in discharge zones. Two and three runoff components separation methods (Kliner & Knezek 1974, Dolezal 1997, Kulhavy 2001) were used to determine baseflow, interflow and directflow and were confronted. The land use overview was elaborated for particular subcatchments. The linkage between land use and runoff characteristics in each subcatchment was assessed.