



Influence of runoff components on nutrient concentrations and losses in stream water

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This work deals with quantifying the importance of runoff components (direct runoff, interflow and baseflow) on nitrate and phosphorus concentrations and losses in selected basin. This observational study was carried out in nine different sized subcatchments of reservoir Švihov basin – small subcatchments called P6, P52 and P53 (up to 1 km²), medium sized T7U (up to 10 km²) and large subcatchments 2100, 3000, 5600, 6900 and 7400 (over 10 km²). Combinaton of runoff separation techniques and general statistical methods were used to solve this item. Proportionally the largest contribution to the total nitrate concentration in stream water has interflow and the main total phosphorus carrier is direct flow. The highest values of nitrogen and phosphorus losses are associated with direct flow, even though this runoff component may not be the largest supplier of nutrients into stream waters from a long-term point of view. This article is based on results of grant of Ministry of Agriculture QI91C200 Evaluation of komplex land consolidaton realization efficiency.