Soil and nutrient losses from slope soils at Preajba, Gorj

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The paper presents researches carried out at Preajba – Gorj Experimental Field on pasture crops on a stagnic luvosoil with 6% slope in order to determine soil and nutrient losses in function of fertilizer type and crop in 2009. The soil losses determined by surface losses have been reduced with natural and sown pastures, of 0.45-0.68 t/ha and rather high, of 4.72-5.26 t/ha when cropping corn. The fertilizer doses, especially N138P81K100 have determined an increasing of plant development and the root system as well as the mitigation of losses. Along with the surface erosion there have been taken away nutrients, both macro and micronutrients. The most affectd by surface runoff was the nitrogen that is los, annually, between 0.82-4.16 t/ha, more with wide row crops like corn and less with natural and sown pastures; the phosphorus and potassium are less lost.The microelements losses have reduced values that macroelements yet the presence of phosphorus within the applied fertilizers generates the reduction of iron, manganese and zinc losses as a result of insolubilisation.