ABSTRACT

Cliff restoration to reduce surface runoff and erosion is a fundamental challenge in the management of the river basin. Surface runoff and erosion are strongly influenced by soil cover and cliff slope, erosion is also affected by splash or rain impact factors, therefore soil cover with Hexagonal Block Precast Combined of Grass Vegetation allows for this purpose.

This study has been analyzed the effect of Hexagonal Precast Block land cover model with grass vegetation combined on surface runoff rate in the form of "C" runoff coefficient or land use factor, and have been found the general equation form produced by the model.

The form of this research is the study of hydrological models by modeling estimates of the amount of surface flow from a small area have used rational methods with Rainfallsimulator tools, The results have been found that the reduction of surface runoff on surface for sample soil without cover (NC) compared with block precast combined grass cover (BG) of 51,2 %, with a coefficient range value of C = 0.128 - 0.266 on moderate to steep slope with moderate rainfall intensity, Eq. the generalresult is, tmax, Surface Slope S, Rainfall Intensity i.

Keywords: Surface Runoff rate, soil cover, rainfall simulator