

A Study on Applicability to Slopes of Water Repellent Soils

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ABSTRACT

In recent years, ground disasters such as a collapse of river levees of unsaturated soils have been frequently occurred due to the seepage and erosion of a rainwater during a heavy rain. One of the solutions is to prevent the infiltration of the rainwater by applying a water repellent soil to the slope of embankments. In this study, the effects of the rainfall intensity, layer thickness and mixing ratio for the water repellent soil were examined by the laboratory embankment model test. The results of the model test were corresponded with those of the water infiltration test. Therefore, it can be said that if the water repellent soil is applied to the slope of the embankment, the application of the water repellent soil can be a good alternative maintaining the slope stability against the infiltration of the rainwater.

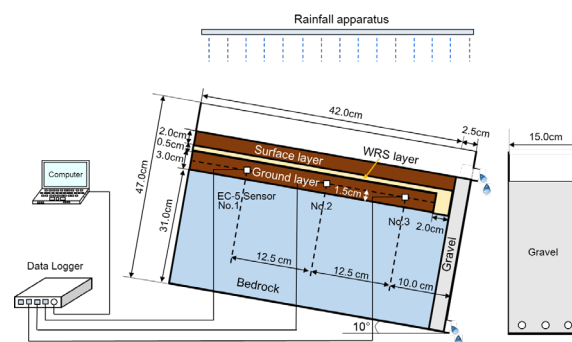


Fig. 1 Laboratory embankment model test

REFERENCES

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