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Author(s)	Kinoshita, Shunsuke, Nakamura, Makoto, Kusumi, Harushige
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# Study on greening of shotcrete slope considering landscape and earth environment.

S. Kinoshita, M. Nakamura, and H. Kusumi  
Graduate school of Kansai University  
3-3-35 Yamate-cho, Suita-shi, Osaka  
JAPAN  
E-mail: [k503527@kansai-u.ac.jp](mailto:k503527@kansai-u.ac.jp)

## Abstract

*In our study, we chose the vegetation base which was suitable for greening of shotcrete slope considering landscape and environment from the test results. We confirmed the water retention rate and the cover degrees in a test.*

## 1. INTRODUCTION

Enormous shotcrete slope built in 1960's becomes aging now. Therefore, it need the maintenance and repair. However, in the case to remove aged shotcrete in the maintenance and repair, there are various problems. And, in recent years, we regard a greening method considering landscape and environment as important. So, we suggest the method to consider the landscape and environment as well as the maintenance and repair in our study.

## 2. TEST OVERVIEW

We examined the vegetation and the vegetation base from a water retention test and a field test. We examined the water retention effect of the suggested vegetation base from a field test and a water retention test. Figure1 is one of the vegetation base which we suggest. The vegetation base is made from soil materials and storing materials. We used *Hedera helix*, *Trachelospermum asiaticum*, *Euonymus fortune coloratus*, and *Hedera canariensis* for the vegetation.



**Figure1. The vegetation base**

## 3. RESULTS AND DISCUSSION

It confirmed the superiority of the combination ratio of 40% of akadama soil and 60% of humus soil in soil materials from the water retention test. Also it confirmed the superiority of *Hedera canariensis* in vegetation from the field test.

## 4. VIEW IN THE FUTURE

Furthermore, we aimed at the superiority vegetation base in water retention, and the strong vegetation suitable for greening of shotcrete slope.

## REFERENCES

Kameyama, S.(2002): Vegetation investigation for creation plans in a green environmental design, pp.105.