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# Evaluation of on-site applicability for biopolymer treated soil using wet spraying method

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## ABSTRACT

Microbial derived biopolymer enhances soil strength and has an effective function for vegetation, so it can be used as a soil reinforcement material for river embankment. Previous studies were conducted for the purpose to identify the root of the phenomenon or confirm the effect at the laboratory scale. However, Field scaled test rarely demonstrated for its effect. In this study, the wet spraying method was used to evaluate the strength enhancement and vegetation effect of the surface soil of the river embankment through field scale test construction with biopolymer. As a result, the biopolymer was effective for strength improvement and vegetation even at the site scale. However, in the case of using large scaled biopolymer in the field construction, several construction conditions must be met in order to increase the workability. Accordingly, a method for producing an optimum strength effect of biopolymer was also investigated when applied through wet spraying. The experimental results of this paper are considered to be the basic data for more effective construction for biopolymers.

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