

Restraining effect of vegetation on landslides in residual granite soils and identifying areas at risk

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Two years ago, we found that landslides can occur easily above granite bedrock because of its peculiar weathering. We noticed that the frequency of disasters varies depending on local vegetation. Our purpose is to demonstrate how vegetation can reduce damage caused by landslides in residual granite soils and identify areas at risk of landslides. By conducting model experiments we showed *Quercus serrata* reduces the severity of landslides in residual granite soils. By conducting topological research and vegetation distribution research, we identified areas in northern Kakogawa, Hyogo which are at risk.

Keywords: landslide, granite, vegetation

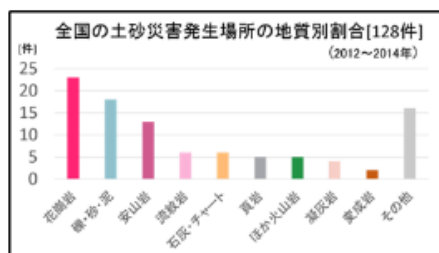


図1 全国の土砂災害発生場所の地質別割合



図2 大藤山地質図



図3 土石流跡（左）と露頭（右）



図5 作製したコナラとヒノキの模型

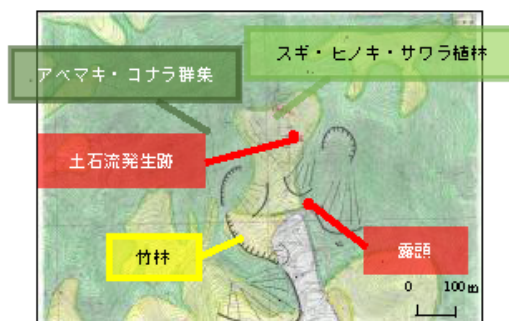


図4 UAS 測量・植生図の重ね合わせ



図6 3D化した大藤山



図7 土石流跡模型実験