عنوان مقاله:

Laboratory investigation on the Effects of Coconut Fibres on Bearing Capacity Of SM Reinforced Soil

محل انتشار:

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نویسنده:

S Soleimani - *Department of Civil Engineering, University of Hormozgan, Iran*

خلاصه مقاله:

This article describes a laboratory study on reinforcement of SM soil using coconut fibres as an additive. Coconut fibres are biodegradable and environmentally friendly among the soil. Test specimens were prepared with varying percentages of coconut fibres (non-reinforced, 0.8%,1.8%, 2.4% and 3.2%) by the weight of dry soil and varied lengths of coconut fibres (35mm and 50mm).The Unconfined Compression Test (UCT) was performed to investigate the bearing capacity of soil.These primary conclusions were obtained from this investigation. The first observation indicated that according to the different fibre contents, the effects of coconut fibre reinforcement provided a significantly different improvement in the soil shear strength. The second observation showed that the effect caused by the different percentages of coconut fibres was stronger than the effect caused by the coconut fibre length.

کلمات کلیدی:

reinforcement of SM soil, coconut fibres, Unconfined Compression Test, soil shear strength