USE OF RICE HUSK ASH FOR SOIL STABILIZATION

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Rice husk is one of the largest farm refuse in Malaysia. This is put into use as a fuel, building bricks, etc. A large quantity is being disposed by dumping or by burning which is becoming a menace. An attempt has been made in this investigation to make use of the rice husk ash to stabilize clayey soil along with lime. The effect of the quantity of admixture of lime and rice husk ash on the soil properties like index properties, compaction characteristics and strength characteristics has been studied. Also the influence of the ratio of the quantities of lime and rice husk ash for a given quantity of admixture on the soil behaviour has been investigated. The soil has been collected from Klang town which is classified as CH soil under unified classification system. The rice husk ash used in this investigation is from Kedah burner unit supplied by SIRIM. It has been found that there is a decrease of maximum dry density and an increase of optimum water content when the soil is treated with the admixture of lime and rice husk ash. The plasticity index of the soil is decreased by treating the soil with the admixture of lime and rice husk ash. The effect is more significant after a curing period of 28 days. Also, it has been found that there is an optimum quantity admixture at which the soil attains peak strength. The peak strength increases as the curing time increases.
