Feasibility Study on the Use of Rattan as Reinforcement Element in Concrete Beams

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ABSTRACT

This report is a written work describing in a search for an alternative material is warranted to replace steel in the reinforced concrete beam and slabs besides fiber reinforced plastics (FRP) due to the ever rising cost of steel. In this project, alternative material is rattan which is proposed by my supervisor.

This report looked at the use of rattan cane as alternative materials to be reinforced in concrete beam. Four concrete beam of dimension 150 mm x 150 mm x 750 mm with different percentage of rattan ratio were designed for this project purpose.

The objective was to determine the flexural behaviour of rattan cane reinforce concrete beams.