

ABSTRACT

Infrastructure development is very much needed for the progress of Indonesia, the need for concrete material for construction. Concrete is a material for construction materials that has a mixture of fine aggregate (sand), coarse aggregate (split stone), cement and water. The addition of additives to the concrete mixture in the form of powder added to the concrete mixture. Bamboo leaf ash is one of the natural materials that can be used as an additional cement material after going through the burning process. After burning the bamboo leaves, filtering is carried out using a sieve passing a No. 200 sieve to obtain bamboo leaf ash that is ready to be used as a concrete mixture. The addition of bamboo leaf ash with variations of 0%, 5%, 10%, 15% of the cement volume. The planned concrete quality is 20 MPa with a compressive strength test of 7, 14, 28 days. The results of the study at the age of 28 days that the compressive strength of bamboo leaf ash will reach optimal compressive strength at a percentage of 5%.

Keywords : Concrete, Bamboo tree leaf ash