

Influence of Locally Made Effective Microorganisms on the Compressive Strength of Concrete

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Abstract : A lot of research was carried out to improve the technology of concrete, some of which include the introduction of new admixture in concrete production such as effective microorganisms. Researches carried out in Japan and Malaysia indicated that the Effective Microorganisms improve the strength and durability of concrete. Therefore, the main objective of this research is to assess the effect of the locally made effective microorganisms on the compressive strength of concrete in Nigeria. The effective microorganisms were produced locally. The locally made effective microorganism was added in 3%, 5%, 10% and 15% to replace the mixing water required. The results of the tests indicated that the concrete specimens with 3% content of locally made EM-A possessed the highest compressive strength, this proved the 3% to be the optimum dosage of locally made EM-A in the concrete.

Keywords : locally made effective microorganisms, compressive strength, admixture, fruits and vegetable wastes

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