

Methane Production from Kitchen Waste using *Escherichia coli*

S. JAYALAKSHMI*+, KURIAN JOSEPH** AND V. SUKUMARAN***

Escherichia coli (*E.coli*) strain isolated from biogas plant sludge was examined for its ability to enhance biogas from kitchen waste during solid phase anaerobic digestion. The laboratory experiments were conducted for total solid concentrations of 20% and 22%. Kitchen waste was characterized for physico-chemical parameters and laboratory experiments were conducted with and without *E.coli* strain. It was found that the reactor with *E.coli* produced 17% more biogas than the reactors that are operated without *E.coli* strain.

Key words : *Anaerobic digestion, kitchen waste, solid phase, E.coli, biogas.*