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STUDY ON CONTAINERIZATION OF BIOGAS FUEL

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STUDY ON CONTAINERIZATION OF BIOGAS FUEL

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ABSTRACT

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The "Study on Containerization of Biogas Fuel" was conducted and evaluated at the Department of Animal Science Piggery Project, Cavite State University, Indang, Cavite in March 1999, to establish a system of biogas compression in a storage tank and determine the maximum allowable pressure on storage of biogas fuel in a pressurized tank.

It took 5.48 minutes, 8.58 minutes and 24.53 minutes to containerize 42 gas at 20 psi, 30 psi, 40 psi and 50 psi respectively. However, it took only 14.53 minutes, 30.55 minutes, 39.46 minutes and 44 minutes to utilize the compound biogas fuel at the same pressure.

The result of the study showed that both factors, the containerization time and volume of gas stored had no significant effect among treatments. In addition, utilization time was found significant at .05 level of significance but not significant at .01 level. After the conduct of the study, it was found that containerization of biogas fuel is technically feasible but not economically viable.

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STUDY ON CONTAINERIZATION OF BIOGAS FUEL^{1/}

by

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INTRODUCTION

The term "biogas" appears to be relatively recent in origin although the generation of methane from organic wastes have been known for century, before the on-set of the so - called energy crisis. Biogas was used as fuel for street lamps in England over fifty years ago, during the embargo of World War II, in Germany they use biogas to run automobiles.

Biogas production technology has been in existence before World War II, yet it is relatively new in the Philippines. The technology has evolved in time from the