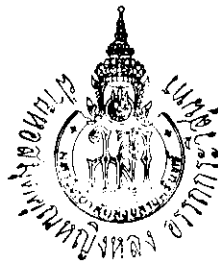




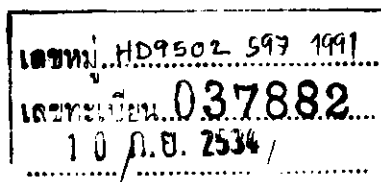
REPORT ON

FEASIBILITY STUDY ON THE USE OF NON-WOOD WASTES  
FROM RUBBER PLANTATION FOR  
ENERGY PRODUCTION



SUBMITTED TO

OFFICE OF THE SCIENCE AND TECHNOLOGY  
DEVELOPMENT BOARD



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Prepared by :-

Suteera PRASERTSAN Ph.D. Department of Mechanical Engineering

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PRINCE OF SONGKLA UNIVERSITY  
HATYAI, THAILAND

## ABSTRACT

Fallen wastes from a rubber plantation were collected during the 1991 fall season (March-April) in order to study the energy potential of the rubber plantation wastes. Rubber trees produced 227.3 kg/rai and 15.7 kg/rai of dry leaves and fallen branches, respectively. The rubber plantation wastes rank number 5 in terms of amount and energy compared with other major agricultural residues. Energy from the rubber plantation wastes is equivalent to  $5.8283 \times 10^{16}$  J/year which represents 5.95% of total energy consumption of the country (in 1988). However, it was found that the collection of the wastes significantly affected the moisture of the top soil in the field. Handling of the wastes is costly. Mechanization for the waste collection and densification is technically possible but is not economically feasible unless the carbonized leaf briquettes are produced.