

ABSTRACT

Attempts to use alternative to fossil fuels in internal combustion engines have been many and varied. The substitution of diesel in a diesel engine by a vegetable oil has been attempted in Sri Lanka too. The oil chosen for the present experiment is extracted from the seed of *Jatropha Curcas* plant. This plant is of the Euphorbacea family and is planted as a fence post. It is considered to be draught resistant and easily cultivable. Being a non-edible oil it does not compete in the food market.

The attempts to extract the oil mechanically and by chemical methods are reported here. The two successful methods are described. The subsequent usage of oil in a single cylinder diesel engine is reported. Most of the problems associated with the use of *Jatropha curcas* oil have been overcome and the engine was able to generate power to drive an electric generator. However the economic benefit of the oil is not very attractive for its widespread usage as these seeds are not found in abundance.