## **ABSTRACT**

Durante, A.A.A. et al., **Optimizing Fuel Efficiency: A Comparative Study of Waste Cooking Oil and Traditional Fuels in Household Stoves.** Research and Development. Diploma in Agricultural Technology. Quezon National Agricultural School. May 2023.

The study was conducted at Quezon National Agricultural School, Silangang Malicboy, Pagbilao, Quezon from January 2023 to May 2023. This study is about the comparison between using Waste Cooking Oil as an alternative fuel source against Liquefied Petroleum Gas to determine which is more efficient for household use using a modified simple stove.

Based on the results and findings of the study, waste Cooking Oil indeed, can be used as a substitute for traditional fuels used in households with the use of Modified Simple Stove made especially for this. It has been proved that it is as efficient and cheaper than LPG tanks.