

## **Pre-treatment of oil palm fruits: a review**

### **ABSTRACT**

The sterilization process in the oil palm mill is a crucial step in extracting and yielding good quality oil. However, this process requires a vast amount of steam to be released to the atmosphere and with that, several attempts in replacing the current steaming sterilization process by means of dry(oven) heating, microwave heating and the invention of a continuous sterilizer were carried out by researchers to provide a greener technology for this purpose. This paper reviewed among the methods and past invention proposed and it can be concluded that the oil yield and the quality depend very much on two major factors, that is the pre-processing conditions and the sterilization and extraction methods used. Bunch strippability is enhanced through the use of continuous sterilizers of low temperature subjected to the fruits. Thorough comparison studies should be done on the current sterilization method and the new techniques introduced since both the current and new methods gave equally good benefits.

**Keyword:** Sterilization; Palm oil; Dry-heating; Microwave-heating; Continuous sterilizer