

# **Oil palm empty fruit bunches as a promising feedstock for bioethanol production in Malaysia**

## **ABSTRACT**

Depletion of the fossil fuels together with an increase in energy demand is considered as a serious threat to the world. Furthermore, fuel versus food dilemma plays an important role in search of sustainable non-edible feedstocks for production of biofuels. Liquid biofuels such as bioethanol can pave way for a cleaner earth together with less dependency on fossil fuels. Empty fruit bunches (EFBs) is one of the potential biomass wastes, which can be utilized as a raw material for bioethanol production. The high availability of EFBs as a biowaste in Malaysia can endorse the concept of waste-to-wealth that had been long dreamed since late 1990, where unwanted wastes are converted into valuable energy. The three important steps in bioethanol production from EFBs, i.e. pretreatment, hydrolysis, and fermentation are discussed in this paper. This review paper highlights some available literature and detailed information regarding the EFBs as a potential feedstock for bioethanol production in Malaysia. An environmental-friendly bioenergy and zero waste can be anticipated in Malaysia which in turn promotes an economically sustainable bioethanol production. This review is vital as it explores the EFBs potential as a promising feedstock for bioethanol which can be implemented for future commercial purpose.