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Characteristics of Pellet from Oil Palm and Jatropha Residues

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Abstract

To utilize residue from oil palm and Jatropha processing, pellet making was performed and the pellets obtained were characterized in this study.

Oil palm mesocarp fiber and Jatorpha press cake (residue after squeezing seed) were employed as feedstocks. Pellet making was conducted using two pelletizers (flat-dye and ring-die types). The state of the pellet was soft compared to the conventional softwood pellet, because of their oily properties. The increase of bulk density before and after pellet making was larger for oil palm mesocarp fiber and smaller for Jatorpha press cake. The gross caloric value was 19 and 21MJ/kg-dry for oil palm mesocarp fiber and Jatorpha press cake pellets, respectively. In the workshop, the energy consumption during pellet making will be presented.

Keywords | pellet, oil palm, Jatropha, characteristics,caloric value