PYROLYSIS OF Aleurites moluccana (CANDLE NUT) FOR BIO-OIL

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ABSTRACT

PYROLYSIS OF Aleutites moluccana (CANDLE NUT) FOR BIO-OIL

Bio- oil from Aleurites moluccana (candle nut) was obtained by performing pyrolysis method. Dried candle nut was ground to the small sizes. The proximate and ultimate value of raw material was performed using TGA method for proximate value and elemental analyzer for ultimate value. Pyrolysis of material was done in fast pyrolysis system. There were 3 variation of temperature used; 450, 500 and 550 °C. the liquid and solid yield were collect. The highest liquid yields at 500 °C, in which liquid yield about 20.5 % weight. The liquid yield was characterizes with FTIR, SPME and bomb calorimeter. The liquid yield shows the obtaining of chemical compounds such as phenol, carboxylic acid, and other hydrocarbons.