ABSTRACT

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One of the major pest which attack the wooden product, building and furniture is termite due it seeks wood as food source. Consequently buildings and furniture damage reached annual loss IDR 8.7 trillion due to termite attacks. In addition, organophosphate chemical pesticide contaminates and accumulates in environment. Jengkol (*Archidendron pauciflorum*) is electable as alternative pesticide in against termite as it contains alkaloid, flavonoid, tannin and terpenoid. This research aims to construct anti termite formula from jengkol shell extract with 4 stages : grinding, extraction, phytochemical test and anti termite assay. For grinding and extraction from 245 gram dry jengkol shell it was obtained 15 mL ethanolic phase extract as 6.112 % yield. Moreover, phytochemical assay showed bioactives that regulates the anti termite activity : alkaloid, flavonoid, tannin, saponin and terpenoid. Anti termite assay indicated rise in termite mortality percentage from extract concentration 15, 20 and 25 % (v/v) with mortality 20, 40 and 60 %. Meanwhile LC_{50} was detected in 19.6119 % (v/v) concentration. It is clearly concluded that the termite mortality from jengkol shell is regulated by a number of bioactives in which moratlity is proportional to concentration. It is also suggested for further researches with various solvents.

Keywords : *Jengkol Shell, Maceration, Bioactive, Anti Termites, LC_{50}*