

Kenaf and kenaf-rubberwood hybrid particleboards

ABSTRACT

Kenaf (*Hibiscus cannabinus*) stem which consists of whole stem (KWS), core (KC) and bast (KB) were used to fabricate homogeneous and hybrid kenaf-rubberwood particleboards. Two types of panels namely homogeneous (100%RW, 100%KWS, 100%KC and 100%KB) and hybrid (70%RW- 30%KWS, 70%RW- 30%KC and 70%RW- 30%KB) particleboards were manufactured and examined through compaction and void evaluations. Findings show that hybrid panels consisting of 70% RW and 30% KWS and homogeneous 100%KWS give better compaction and less voids as compared to other homogenous and hybrid panels. The panel made from 100% KWS was observed to have more flattened and compressed cells compared to other homogeneous panels. A presence of RW particle apparently reduces the void content and provides better compaction in the hybrid panels.

Keyword: Composition; Food application; Functional properties; Kenaf seed; Potential