

**EFFICACY TEST OF PROPAGATION MEDIA FORMULATION ON
VARIOUS SHELF LIFE OF ENTOMOPATHOGEN *Beauveria bassiana*
AGAINST *Hypothenemus hampei* IN THE LABORATORY**

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ABSTRACT

Beauveria bassiana is a potential insect pathogenic fungus for controlling *H. hampei* pest. This research aimed to determine the best propagation media formulation on various shelf life in controlling *H. hampei* pest. The research was conducted at the Plant Protection Laboratory, Faculty of Agriculture UPN "Veteran" Yogyakarta from August to November 2021. The experiment using the 2-factor Completely Randomized Design (CRD). The first factor were the type of formulation, namely solid and liquid. The second factor was storage time 1, 2, 3, 4, 5, 6, 7, 8 weeks. The results showed that there was no interaction between the propagation media formulation and the shelf life on spore density, spore viability, mortality, total death time, LT50, and feeding capacity. The best formulation of *B. bassiana* fungus propagation media was in solid formulation of corn media because it has higher spore density. The optimal storage length in *B. bassiana* fungus was 5 weeks storage based on spore density parameters ($4,83 \times 10^7$ spores/mL), viability (70,30%), and pathogenicity testing on *H. hampei* causes mortality (100%), total death time (9,88 days) , LT50 (4 days), and feeding capacity (0,89 grams). Both solid and liquid formulations can be stored for 5 weeks without decreasing the pathogenicity of *B. bassiana*.

Keywords : *Hypothenemus hampei*, *Beauveria bassiana*, bioinsecticide, pathogenicity