

**DETERMINING THE SUITABILITY OF MEDIUM CULTURE  
AND OPTIMIZED THE MEDIUM COMPOSITION TO  
INCREASE BIOMASS OF TERMITE MUSHROOM  
(*Termitomyces clypeatus*)**

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**Summary**

The *Termytomyces clypeatus* (HQ702547.1) was used to study the effect of medium culture for the production of mycelial biomass by submerged culture. Results of the experimente was selected the most suitable environment among the four test mediums was MT3, that containing 0.1% KH<sub>2</sub>PO<sub>4</sub>, 0.2% peptone, 4% glucose, 0.1% Yeast extract, 0.015% MgSO<sub>4</sub>, vitamin B1, for appropriate culture time was 20 days for dry biomass of 4.43 g/L. When optimizing main components in the MT3 medium, the results showed that glucose concentration, peptone concentration and KH<sub>2</sub>PO<sub>4</sub> concentration in the increase of mycelial biomass in turn was 6.99%; 0.596% and 0.2% for dry biomass 5,923 ± 0,1239 g/L.

**Keywords:** *Termite mushroom, mycelial, biomass, Termitomyces clypeatus.*