

Growth, development and viability of *Metarhizium anisopliae* on media with various nutrient sources

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ABSTRACT

The entomopathogenic fungus, *Metarhizium anisopliae* (Metschnikoff) Sorokin was mass produced in different liquid media. The nine media of various nutrient sources were evaluated to find out the most suitable medium for growth, biomass and viability of *M. anisopliae*. Sabouraud's dextrose broth with yeast extract proved to be the superior which gave significantly highest cfu (12.33×10^8 /ml) and biomass (7.20g). The next best medium was Sabouraud's maltose broth with yeast extract and potato dextrose broth with yeast extract which registering cfu count of (10.33×10^8 and 10.67×10^8 cfu/ml) and biomass (6.27 and 5.73 g), respectively. The lowest (48.33%) medium surface coverage and least biomass (1.57g) and cfu (4.33×10^8 /ml) were registered in medium with malt extract. Thus, considering growth, development and viability of *M. anisopliae*, Sabouraud's dextrose broth with yeast extract (SDY) emerged as the most potential medium for biomass production.

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