

ABSTRACT

Use of *Fusarium brachygibbosum* in the production of mycelial protein is provided, belonging to the technical field of microbial fermentation. It is proposed for the first time that the *Fusarium brachygibbosum* shows the characteristic of a high production yield of the mycelial protein that is significantly higher than that of other types of *Fusarium* reported so far. The mycelial protein produced by the *Fusarium brachygibbosum* is filamentous, flesh-colored, elastic, and toxin-free, serving as an ideal alternative protein. Therefore, the use provides a new means for industrial production of alternative proteins and a basis for the development of safe food. Moreover, the fermentation method in the use may greatly improve the production efficiency of the mycelial protein while reducing carbon emissions to protect the environment.

FIG. 4