

ISOLATION AND SELECTION OF MUCOUS MEMBRANES PRODUCTION MICROORGANISMS UNDER PINE FOREST CANOPY IN VIETNAM

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Summary

Isolation of mucous membranes production microorganisms in soil and humus under pine forest canopy was used to increase the moisture content of burning materials. Among 32 strains of microorganisms isolated from soil and humus under pine forest canopy on AT environment, all had polysaccharide content accounting for 100%. In which thirteen strains were selected (P08, P09, P16.1, P36, P37, P40, P41, P43, P54.1, P58, P60, P65, P73) with polysaccharide content forming > 15 g/liter. Nine strains with high polysaccharide content (P08, P09, P16.1, P36, P37, P40, P43, P54.1 and P73) were selected for molecular genetic analysis based on 16S rRNA sequence. Among 9 strains of microorganisms with high polysaccharide content were identified, 6 strains were selected: P08, P16.1, P09, P36 (*Bacillus aryabhatai*); P54.1 (*Paenibacillus polymyxa*) and strain P73 (*Paenibacillus jamilae*) with a biosecurity level and have great significance in the application for probiotics production.

Keywords: *Pinus*, mucous membranes production microorganisms, polysaccharide content.