

Separation, purification and anti-oxidation ability of polysaccharides from *Coriolus versicolor* fruiting bodies

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ABSTRACT

Coriolus Versicolor is an obligate aerobe that is commonly found year-round on dead logs. The polysaccharides were found to be active components in it. The polysaccharides also contain some of polysaccharopeptides. The polysaccharopeptides produced by *Coriolus Versicolor* are effective immune-potentiators, which are used to a supplement of disease treatment and various infectious diseases. Review the many research of *Coriolus Versicolor*, the researches is commonly use ethanol precipitation and DEAE-Sepharose CL-6B in separation of polysaccharides from *Coriolus Versicolor*. But it is unknown of concentration, recovery and separation of polysaccharides from *Coriolus Versicolor*. Besides, DEAE-Sepharose CL-6B is high price, it is low recycling in separation of polysaccharides from *Coriolus Versicolor*. The goals of this research is how many concentration of polysaccharides from *Coriolus Versicolor* to reach recoveries of more than 90%. Then it replace DEAE- Sepharose CL-6B by DIAION WA30LL in separation of polysaccharides from *Coriolus Versicolor*. The concentration is 4.11mg/ml of polysaccharides from *Coriolus Versicolor* to reach upward recoveries 90%. In separation, DIAION WA30LL separate eight different pick of polysaccharides from *Coriolus Versicolor*. Then the seventh and eighth pick have high clearance rate of scavenging effect on DPPH radical scavenging activity from *Coriolus Versicolor*. In future, it supply the seventh and eighth pick to purify cell and animal studies.

Keywords : *Coriolus Versicolor*、ion exchange chromatography、ethanol precipitation、polysaccharide、anti-oxidationability

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