RESEARCH ON THE EXTRACTION OF POLYSACCHARIDES FROM GANODERMA LUCIDUM

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Summary Purpose.

Determination of the optimal method for obtaining the polysaccharide Ganoderma lucidum.

Research content:

1. Determination of suitable conditions for the production of polysaccharides in Ganoderma lucidum.
2. Optimization of the extraction process of polysaccharides from Ganoderma lucidum.

Polysaccharide extraction method:

Polysaccharides were extracted from medicinal herbs according to the method of Jin Gao (2015), Zhu (2009), Chen (2011) and some research conditions were changed to obtain polysaccharides from Ganoderma lucidum.

Step 1 Wash Ganoderma lucidum very quickly with 95% ethanol, then evaporate the ethanol, dry it and grind it into a fine powder.

Step 2: Extract Ganoderma lucidum powder with water (3 times) with solid:liquid solvent ratio, different temperature and time.

Step 3: Filter through a Whatman paper filter, collect the filtrate.

Step 4: The filtrate was concentrated and centrifuged at 3000 rpm for 15 minutes.

Step 5: Add a solution of [V (n-butanol): V (chloroform) = 1: 4] to remove the protein, centrifuge at 6000 rpm for 15 minutes and collect the supernatant.

Step 6: Precipitate with 95% ethanol with 3x volume of ethanol, leave to precipitate overnight at 4 °C. The polysaccharide precipitate was isolated by centrifugation at 10,000 rpm for 5 min.

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