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Formation of Water-soluble Soybean Polysaccharides from Spent Flakes by Hydrogen Peroxide Treatment

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Highlights

- Hydrogen peroxide treatment generates high molar mass, soluble soy polysaccharides.
- A design of experiment models the effects of pH, reaction time, and peroxide level.
- HPAEC-PAD, SEC-MALS, and GC-MS are used to analyze the soy polysaccharides.
- The proposed process results in soluble polysaccharide yields of greater than 70%.
- The soluble material is enriched in pectic and non-cellulosic soy polysaccharides.

Abstract

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