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Properties of Extracts from Wheat Bran by Subcritical Water Treatment

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Wheat bran was extracted with water and subcritical water from 50°C to 260°C for 5 min. The highest extracted yield of *ca.* 53% on a weight basis was achieved at 200°C, at which the maximum saccharide content was also obtained. The protein, total phenolic, hydroxymethylfurfural and furfural contents were the highest at 240°C. The radical scavenging activity was also the highest at 240°C. It was demonstrated that the extract prepared at 250°C had the ability to suppress the autoxidation of linoleic acid by lengthening the induction period. The bran extracts prepared from 50°C to 200°C exhibited emulsifying activity.

Keywords: [wheat bran](#), [subcritical water extraction](#), [antioxidative ability](#), [emulsifying ability](#)

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