



Title: A Lab-Scale Method for Developing Antimicrobial Paper Coating Application on Food Packaging

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Paper and paperboard materials, important with their suitability for food contact applications because of their structural advantage. Impart antimicrobial properties to the nutrients where contact the paper surface is field that are receiving the It is worth mentioning attention for research and development. Coatings applications of paper surface in food packaging is important with respect to bestow antimicrobial features. In order to determine suitable coating material and substrates, there is a need for lab-scale design. For this application method, # 0 and # 3 drawdown bar and 3 kinds of paper, type chosen. Wrapping paper, paper board and test liner were the base paper. Starch used as a binder. Distilled water was used for cooking the starch. Antimicrobial coating color added the starch solution 10% (w/w). Paper surfaces were coated with the prepared coating color using a # 0 drawdown bar. It was paid attention that the maximum amount of coating applied on one side, was 4.5 g/m². According to results, coating application change depending on paper. While paperboard absorbed more antimicrobial emulsion, wrapping paper absorbed almost half of coating color at the same coating surface thickness. Similarly; # 0 drawdown bar was suitable for coating wrapping paper, # 3 drawdown bar was more suitable for test liner paper and paper board.

Biography

Ahsen Ezel Bildik has completed her PhD from Istanbul University and postdoctoral studies from Istanbul University Department of Forest Product Chemistry and Tehnology.