

园艺与食品科学

新型食品抗菌剂富马酸糠醇甲酯的抗菌活性及稳定性研究

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摘要 研究合成了一种具有 α,β -不饱和羰基结构的化学抗菌剂——富马酸糠醇甲酯, 并对其抗菌活性进行研究。结果表明, 其抑菌谱较广, 对细菌、酵母和霉菌均具有较强的抑制作用, 同时可以有效延长混合微生物的生长适应期, 显著降低其生长量, 而且效果明显优于常用抗菌剂苯甲酸钠, 另外, 糠醇甲酯具有较好的热稳定性并且在不同pH均表现良好的抗菌活性, 说明它可以用于更多食品的防腐, 是一种具有广泛开发前景的抗菌剂。

关键词 [抗菌剂](#); [富马酸糠醇甲酯](#); [抗菌活性](#); [稳定性](#)

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Study on Antimicrobial Activity and Stability of New Food Preservative Methyl-furfuryl Fumarate

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Abstract

In this article a new preservative, Methyl-furfuryl fumarate, was prepared. And its antimicrobial activity was studied. The result of antimicrobial activity showed that it could inhibit bacteria, yeast and mold remarkably. At the same time it could effectively prolong adaptive phase and decrease growth quantity of milk spoilage microorganism and its effect was better than common preservative sodium benzoate. Furthermore it had better heat stability and could be used at different pH value. These suggested that it could be used for many kinds of foods. Therefore it had wide prospect of development and application.

Key words [preservative](#); [Methyl-furfuryl fumarate](#); [antimicrobial activity](#); [stability](#)

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