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## Optimum Fermentation Condition for Manufacturing Apple Vinegar Using Rce Wine Cake

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Rice wine cake, as a food industry by-product, was contained variety of nutrient, such as amino acid, peptides and nucleic acid etc. Although rice wine cake has variety of nutrient, it treated with food waste, that be not applied food industry. Vinegar was known by most ancient civilization and it is a solution of acetic acid used for flavoring and preserving a wide range of foods. vinegar is widely produced from rice, malt, apples, wine and various other starting materials. In a recent, it was reported that the production of a new type of vinegar rich in amino acid, organic acid and certain minerals.

This study was performed to investigate optimum processing condition of vinegar using rice wine cake.

Optimum initial concentration of alcohol, acetic acid and added rice wine cake for manufacturing apple vinegar were 6%, 3% and 0.8%, respectively. Also, optimum temperature for fermentation was 27°C and static cultivation method were effective in higher yield of acetic acid fermentation.