Comparative Studies on the Production Processes and Flavor Quality of Pineapple Spirit

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ABSTRACT

In this thesis, Agricultural No. 17 pineapple was used as raw material after divide into six kinds of samples: whole, pulp, peel, cooked whole, cooked pulp, and cooked peel, to make pineapple wines. These wines were then distilled to make pineapple spirits. The effects of different cooking pretreatment and kinds of yeasts (Pasteur champagne and PY2104) added on the quality and flavor of pineapple spirits were then studied.

Among the pineapple wines prepared in this thesis, the wine made from pineapple whole using Pasteur champagne as fermentation yeast was found to be more acceptable. It was found to have faster fermentation rate, more acidity, and more flavor.

The pineapple wines prepared were conducted to distill to make pineapple spirits. After three months’ storage at room temperature, the spirit made from cooked whole pineapple and fermented using Pasteur champagne as fermentation yeast was found to be more acceptable. It is probably because that this spirit has higher intense aroma than others. The spirits that made using Pasteur champagne as fermentation yeast were found to have higher amount of volatile compounds than those fermented using PY2104 as fermentation yeast.

Ethyl hexanoate and methyl 3-methylthiopropionate were the major volatile compounds of the pineapple spirit made from whole pineapple. Their content in the pineapple spirit made from pineapple pulp or pineapple peel were found to be higher than those prepared from pineapple pulp or peel. Ethyl trans-4-hexenaote, methyl 3-hudrocaproate, butyl butylate, and pyridine were only found in the pineapple spirits made with pineapple pulp.

Keywords : pineapple、cooked with sugar、after、after、spirit、volatile compound

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