

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

游雅雯、游銅錫

E-mail: 9806851@mail.dyu.edu.tw

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-hexenoate, methyl 3-hydrocaproate, 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

Table of Contents

封面內頁	
簽名頁	
授權書	iii
中文摘要	iv
英文摘要	vi
誌謝	vii
目錄	ix
圖目錄	viii
表目錄	xiv

1. 緒論	1
2. 文獻回顧	3
2.1 鳳梨之簡論	3
2.1.1 簡介	3
2.1.2 鳳梨之組成分	4
2.1.3 鳳梨之品種	8
2.1.4 臺灣目前主要栽種品種	9
2.1.5 鳳梨之揮發性成分	12
2.2 酵母菌及發酵溫度之介紹	13
2.2.1 酵母菌之營養需求	13
2.2.2 酵母菌及發酵溫度	13
2.2.3 發酵的生化作用	14
2.2.4 酵母於酒精類飲料之貢獻	15
2.3 釀酒原料	16
2.4 果膠之製備	17

- 2.5 釀酒製程中加酸之目的17
- 2.6 酵母營養素18
 - 2.6.1 酵母輔助劑18
- 2.7 酒類香氣成分19
 - 2.7.1 醇類化合物19
 - 2.7.2 酸類化合物21
 - 2.7.3 酯類化合物24
 - 2.7.4 含硫化合物24
- 3. 材料與方法27
 - 3.1 實驗材料27
 - 3.1.1 原料27
 - 3.1.2 果膠酵素27
 - 3.1.3 酵母菌種類27
 - 3.1.4 砂糖27
 - 3.1.5 食用酸28
 - 3.2 果汁加工設備28
 - 3.3 試藥及儀器設備28
 - 3.3.1 試藥28
 - 3.3.2 儀器設備29
 - 3.4 實驗流程30
 - 3.4.1 鳳梨果肉釀造酒之製備30
 - 3.5 分析方法31
 - 3.5.1 可溶性固性物 31
 - 3.5.2 pH值31
 - 3.5.3 可滴定酸度31
 - 3.5.4 還原糖含量測定33
 - 3.5.5 褐變度含量33
 - 3.5.6 游離二氧化硫34
 - 3.5.7 總二氧化硫34
 - 3.5.8 酒精度35
 - 3.5.9 總酸總酯36
 - 3.5.10 雜醇油測定37
 - 3.5.11 甲醇之檢測37
 - 3.5.12 蒸餾酒香氣成分分析之前處理40
 - 3.5.13 揮發性成分之分析40
 - 3.5.14 官能品評41
- 4. 結果與討論43
 - 4.1 鳳梨酒發酵條件之探討 43
 - 4.1.1 鳳梨酒在發酵期間可溶性固形物之變化43
 - 4.1.2 鳳梨酒在發酵期間pH值之變化43
 - 4.1.3 鳳梨酒在發酵期間可滴定酸之變化43
 - 4.1.4 鳳梨酒在發酵期間還原糖之變化46
 - 4.1.5 鳳梨酒在發酵期間褐變度(A420)之變化46
 - 4.1.6 鳳梨酒中二氧化硫之變化50
 - 4.1.7 鳳梨酒在發酵期間酒精度之變化50
 - 4.2 鳳梨蒸餾酒發酵條件之探討50
 - 4.2.1 鳳梨蒸餾酒總酸總酯之含量50
 - 4.2.2 鳳梨蒸餾酒雜醇油之含量56
 - 4.2.3 鳳梨酒收酒量之比較56
 - 4.2.4 鳳梨蒸餾酒甲醇含量之變化59
 - 4.3 嗜好性官能品評59
 - 4.4 鳳梨蒸餾酒香氣成分之比較64
 - 4.4.1 以不同菌種及不同原料處理所製備鳳梨蒸餾酒中之共同香氣成分64

4.4.2發酵菌種不同對鳳梨蒸餾酒中香氣成分之影響	67
4.4.3 以全果、果肉、果皮所釀製鳳梨蒸餾酒中鳳梨特有香氣成分之比較	67
4.4.4官能品評中接受性最高之鳳梨蒸餾酒特有香氣成分	68
5. 結論	79
參考文獻	81
附錄	86

圖目錄

圖3.1 鳳梨酒及鳳梨蒸餾酒之製作流程圖	32
圖3.2 甲醇檢測之標準曲線圖	39
圖4.1 鳳梨酒發酵期間糖度之變化	44
圖4.2 鳳梨酒在發酵期間pH之變化	45
圖4.3 鳳梨酒在發酵期間可滴定酸之變化	47
圖4.4 鳳梨酒在發酵期間還原糖之變化	48
圖4.5 鳳梨酒在發酵期間色澤之變化	49
圖4-6鳳梨酒中游離二氧化硫含量之比較	51
圖4-7鳳梨酒中總二氧化硫之含量	52
圖4.8鳳梨酒在發酵期間酒精度之變化	53
圖4.9鳳梨蒸餾酒總酸之含量	54
圖4.10鳳梨蒸餾酒總酯之含量	55
圖4.11不同製程鳳梨蒸餾酒中雜醇油之含量	57
圖4.12不同製程鳳梨蒸餾酒中甲醇含量之比較	60

表目錄

表2.1 台灣鳳梨栽培面積及產量	5
表2.2 民國96年台灣鳳梨種植面積及產量	6
表2.3 鳳梨基本成分分析	7
表2.4 西班牙雪禮及芬蘭漿果酒中所含風味成分之濃度	20
表2.5 各種酒類中雜醇含量	22
表2.6 苯乙醇在各種酒類中之含量	23
表2.7 酯在酒中的風味特徵及閾值	25
表4.1 以鳳梨製酒收率之比較(以鳳梨原料為1公斤計)	58
表4.2 鳳梨酒之嗜好性品評結果	61
表4.3 鳳梨蒸餾酒之嗜好性品評結果	62
表4.4鳳梨蒸餾酒之嗜好性品評結果(續)	63
表4.5 鳳梨蒸餾酒香氣成分含量之比較	69

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