

Application of Lactic Acid Bacteria in Chinese-Type Sausage for Undesired Microorganism Inhibition Flavor

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ABSTRACT

ABSTRACT Lactobacillus is grouped into the GRAS (generally recognized as safe) class and has been widely used in the food industry for many years. It has the ability to inhibit the growth of food-borne microorganisms and other undesired food microorganisms. It also was continuously recognized with its every kind of nourishment health care function. Lactobacillus therefore has become one of the most popular research topics at the present time. In this study, several microorganisms belong to Lactobacillus were isolated from commercial beef products and inoculated into Chinese-type sausage, to investigate they ability in inhibiting the growth of food-borne microorganisms and other undesired food microorganisms and their ability in contributing special flavor in Chinese-type sausage. The sausage that inoculated Bacillus microorganisms were vacuum packed and stored at 4 for at least four weeks. During storage, lactic acid bacteria number, aerobic plate count number, lactic acid content, acetic acid content and pH value of the sausage were analyzed and the sensory evaluation was conducted. Research result showed that after sausage storage the lactic acid bacteria counts increased from originally 106 CFU/g to finally 107 CFU/ g, along with ferment time increasing pH value of sausage quickly descending, and lactic acid content increasing up to fourth week. After the fourth week, amount of the aerobic count have no longer increase. Sensory evaluation result showed that those sausages inoculate with B2 or B5 Bacillus microorganisms have better preference. During storage, the rancidity for those fried sausages inoculated wit Lactobacillus microorganisms used in this study were found decreased. Keyword: lactic acid bacteria, Chinese-type sausage, flavors and aroma, probiotcis

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Table of Contents

目錄 封面內頁 簽名頁 授權書.....	iii	中文摘要.....	iii
.....iv 英文摘要.....	ivvi 誌謝.....	vi
.....viii 目錄.....	viiiix 表目錄.....	ix
.....xii 圖目錄.....	xii	.....xiv 第一章緒論.....	xiv
.....1 第二章 文獻回顧 2.1 乳酸菌之簡介.....	1	.....7 2.3 乳酸菌保存食品的主要機制.....	7
.....4 2.2 乳酸菌在食品上的利用.....	4	.....10 2.4 發酵肉製品的歷史.....	10
.....16 2.6 乳酸菌在肉製品上之功用.....	16	.....19 2.7 RAPD-PCR.....	19
.....21 2.8 肉類香味化學.....	21	.....23 第三章 乳酸菌? 之篩選及生長性狀之探討 摘要.....	23
.....39 3.2 實驗材料與設備.....	39	.....38 3.1 前言.....	38
.....42 3.4 結果與討論.....	42	.....40 3.3 實驗方法.....	40
.....52 第四章 乳酸菌抑菌性之測試 摘要.....	52	.....45 3.5 結論.....	45
.....54 4.2 實驗材料與設備.....	54	.....53 4.1 前言.....	53
.....57 4.4 結果與討論.....	57	.....56 4.3 實驗方法.....	56
.....65 第五章 利用逢機複製DNA片段多態型分析應用於乳酸菌分類 摘要.....	65	.....58 4.5 結論.....	58
.....66 5.1 前言.....	66	.....67 5.2 實驗材料與設備.....	67
.....69 5.3 實驗方法.....	69	.....70 5.4 結果與討論.....	70
.....72 5.5 結論.....	72	.....75 第六章 中式乳酸菌發酵香腸貯存期間微生物之變化 摘要.....	75
.....76 6.1 前言.....	76	.....77 6.2 實驗材料與設備.....	77
.....77 6.2 實驗材料與設備.....	77	.....78 6.3 實驗方法.....	78
.....79 6.4 結果與討論.....	79	.....81 6.5 結論.....	81
.....90 第七章 中式發酵香腸風味喜好性之探討與香氣成分分析 摘要.....	90	.....91 7.1 前言.....	91
.....91 7.1 前言.....	91	.....92 7.2 實驗.....	92

材料與設備.....	93	7.3 實驗方法.....	94	7.4 結果與討論.....	110
第八章篩選出之乳酸菌? 之鑑定 摘要.....	111	7.1 前言.....	112	7.2 實驗材料與設備.....	113
.....	112	7.3 實驗方法.....	114	7.4 結果與討論.....	115
.....	114	7.5 結論.....	118	第九章 總結論.....	119
.....	118	參考文獻.....	120	表目錄 表2.1 乾燥香腸自然熟成之微生物.....	17
表2.2 肉品中重要的菌?及使用的目的.....	18	表2.3 機酸之呈味性.....	26	表2.4 熱反應香味物質可能進行的化學反應及產物.....	37
.....	26	表3.1 分離菌株之初步鑑定.....	46	表3.2 分離菌株之生理特性.....	47
.....	46	表3.3 分離菌株之生化特性.....	49	表3.4 分離菌株之碳水化合物利用性.....	51
.....	49	表4.1 分離菌株之發酵液對 <i>M. luteus</i> , <i>S. aureus</i> , <i>B. cereus</i> 之抑制情形.....	60	表4.2 分離菌株發酵液不同處理方法對 <i>M. luteus</i> 之抑制情形.....	61
.....	60	表4.3 加熱處理之pH 2發酵液對 <i>M. luteus</i> 之抑制情形.....	63	表4.4 加熱處理之pH 4發酵液對 <i>M. luteus</i> 之抑制情形.....	64
.....	63	表6.1 中式香腸配方.....	80	表7.1 中式乳酸菌發酵香腸4 貯存期間色澤嗜好性官能評估結果.....	99
.....	80	表7.2 中式乳酸菌發酵香腸4 貯存期間風味嗜好性官能評估結果.....	100	表7.3 中式乳酸菌發酵香腸4 貯存期間嗜嗜嗜好性官能評估結果.....	101
.....	100	表7.4 中式乳酸菌發酵香腸4 貯存期間整體嗜好性嗜好性官能評估結果.....	102	表7.5 由香腸樣品中鑑定到的揮發性成分.....	103
.....	102	表7.6 未發酵香腸與發酵香腸樣品中之總揮發性成分之含量比較.....	106	圖目錄 圖2.1 同型發酵乳酸菌及異型發酵乳酸菌之代謝途徑.....	6
.....	103	圖2.2 乳酸菌在食品類上之應用.....	8	圖2.3 有機酸抑菌之作用機制.....	12
.....	8	圖2.4 肉類風味形成之因子.....	24	圖2.5 梅納反應的基本反應機制.....	31
.....	12	圖2.6 梅納反應第一步，醱與胺基酸進行縮合.....	32	圖2.7 Amadori重組反應(路徑一).....	33
.....	24	圖2.8 Amadori重組反應(路徑二).....	34	圖5.1 RAPD-PCR再現性之評估.....	73
.....	31	圖5.2 RAPD-PCR再現性之評估.....	73	圖5.3 分離菌株之RAPD-PCR分析試驗.....	74
.....	32	圖6.1 中式發酵香腸4 貯存期間pH之變化.....	82	圖6.2 中式發酵香腸4 貯存期間乳酸菌數之變化.....	83
.....	34	圖6.2 中式發酵香腸4 貯存期間好氣菌數之變化.....	86	圖6.3 中式發酵香腸4 貯存期間好氣菌數之變化.....	86
.....	73	圖6.4 中式發酵香腸4 貯存期間乳酸含量之變化.....	88	圖6.5 中式發酵香腸4 貯存期間醋酸含量之變化.....	89
.....	73	圖8.1 B2菌株經電腦鑑定之結果.....	116	圖8.2 B5菌株經電腦鑑定之結果.....	117
.....	73	116	117

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