

Table of Contents

Abstract	I
Acknowledgement	II
Table of Contents	III
List of Abbreviations	V
List of Tables	VII
List of Figures	X
Introduction	1
Review of Literature	4
Pomegranate	4
Origin and Cultivating Regions	8
Physiochemical properties of pomegranate	9
Bioactive components	11
Sensory properties of pomegranate fruit	16
Pomegranate Juice	16
Cloudy stability of pomegranate	18
Carrot	20
World Production	21

Carrot cultivation	22
Physiochemical properties of carrot	23
Carrot Juice	31
Cloudy stability of carrot	32
Materials and Methods	40
Materials	40
Methods	40
Results and Discussion	49
Part1: Effect of arils or juice incubation temperature on physicochemical and sensory evaluation of pomegranate juice during storage period.	49
Part2, section A: Effect of commercial pectic enzyme on physicochemical and sensory evaluation of carrot juice during storage period.	73
Part2, section B: Effect of hydrocolloid as (CMC) on physicochemical and sensory evaluation of carrot juice during storage period.	101
Summary	132
References	139
الموجز العربي	أ
الملخص العربي	ب

List of Abbreviations

ABTS	2, 2'-azino-bis (3-ethylbenzothiazoline-6-sulfonic acid)
ANOVA	Analysis of variance
BD	Browning degree
CJC	Carrot juice concentrate
CMC	Carboxy methylcellulose
DPPH	2, 2-diphenyl-1-picrylhydrazyl
EA	Ellagic acid
EMT	Enzymatic mash treatment
ETs	Ellagitannins
FAO	Food and Agriculture Organization
FG	Flaxseed gum
GTs	Gallotannins
HHP	High hydrostatic pressure
HMF	5-hydroxymethylfurfural
HPP	High pressure processing
LBG	Locust bean gum
LDL	Low Density Lipoprotein
LMP	Low-methoxy pectin
MAP	Modified atmosphere packaging

PAJS	Pomegranate arils juice sample
PEF	Pulsed Electric Field
PIJS	Pomegranate incubated Juice Sample
PJ	Pomegranate juice
PVPP	Poly Vinyl Poly Pyrrolidone
RDA	Recommended Daily Allowance
RV	Relative viscosity
SD	Standard deviation
TA	Titrateable acidity
TAA	Total amino acid
TBA	Thiobarbituric acid
TEAC	Trolox equivalent antioxidant capacity
TPC	Total phenolic content
TPs	Total phenolics
TS	Total sugar
TSS	Total Soluble Solids
XG	Xanthan gum

List of Tables

Table No.	Title	Page No.
I.	Principal constituents of different parts of pomegranate tree and fruit.	5
1.	Effect of arils or juice incubation at different temperature on pH of pomegranate juice during storage period.	50
2.	Effect of arils or juice incubation at different temperature on total Acidity (%) of pomegranate juice during storage period.	51
3.	Effect of arils or juice incubation at different temperature on ascorbic acid (mg/100g) of pomegranate juice during storage period.	52
4.	Effect of arils or juice incubation at different temperature on TSS % of pomegranate juice during storage period.	54
5.	Effect of arils or juice incubation at different temperature on total phenolic contents (mg/100ml) of pomegranate juice during storage period.	55
6.	Effect of arils or juice incubation at different temperature on anthocyanin contents (mg/100g) of pomegranate juice during storage period.	58
7.	Effect of arils or juice incubation at different temperature on antioxidant scavenging activity; 2, 2-Diphenyl-1-Picrylhydrazyl (DPPH) % of pomegranate juice during storage period.	59
8.	Effect of arils or juice incubation at different temperature on antioxidant 2, 2'-azino-bis-3-ethylbenzthiazoline-6-sulphonic acid (ABTS) % of pomegranate juice during storage period.	60
9.	Effect of arils or juice incubation at different temperature on turbidity (O.D.) of pomegranate juice during storage period.	62
10.	Effect of arils or juice incubation at different temperature on color index of pomegranate juice during storage period.	64
11.	Effect of arils or juice incubation at different temperature on color L, a', b' of pomegranate juice during storage period.	66
12.	Effect of arils or juice incubation at different temperature on microbiological evaluation of pomegranate juice during storage period.	68
13.	Effect of arils or juice incubation at different temperature on sensory evaluation of pomegranate juice during storage period.	70
14.	Total acidity (%) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	74
15.	pH changes in cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	75
16.	TSS % in of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	78

17.	HMF (mg/100ml) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	79
18.	Carotenoids (mg/L) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	82
19.	Flavonoids (mg/100ml) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	84
20.	Total phenolic compounds (mg/100g) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	86
21.	2, 2-Diphenyl-1-Picrylhydrazyl (DPPH) % of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	88
22.	2, 2'-azino-bis-3-ethylbenzthiazoline-6-sulphonic acid (ABTS) (mg/100ml) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	89
23.	Turbidity changes (OD) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	92
24.	Color index of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	93
25.	Color L, a', b' of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	95
26.	Microbial count, yeast and mold of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	97
27.	Sensory evaluation of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	100
28.	Total Acidity (%) of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	102
29.	pH of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	104
30.	TSS % of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	105
31.	HMF (mg/100ml) of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	107

32.	Carotenoids contents (mg/L) of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	108
33.	Flavonoids contents (mg/100ml)of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	110
34.	Total phenolic compounds (mg/100g) of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	112
35.	Scavenging activity (DPPH) %of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	114
36.	ABTS (mg/100ml) of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	115
37.	Turbidity (OD) of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	119
38.	Color index of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	121
39.	Color L, a', b' of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	123
40.	Total bacterial count, yeast and mold of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	126
41.	Sensory evaluation of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	127

List of Figures

Figure No.	Title	Page No.
I	World Carrot Production	22
II	Chemical structure of common carotenoids	28
1.	Effect of arils or juice incubation at different temperature on pH of pomegranate juice during storage period.	50
2.	Effect of arils or juice incubation at different temperature on total Acidity (%) of pomegranate juice during storage period.	51
3.	Effect of arils or juice incubation at different temperature on ascorbic acid (mg/100g) of pomegranate juice during storage period.	53
4.	Effect of arils or juice incubation at different temperature on TSS % of pomegranate juice during storage period.	54
5.	Effect of arils or juice incubation at different temperature on total phenolic contents (mg/100ml) of pomegranate juice during storage period.	56
6.	Effect of arils or juice incubation at different temperature on anthocyanin contents (mg/100g) of pomegranate juice during storage period.	57
7.	Effect of arils or juice incubation at different temperature on antioxidant scavenging activity; 2, 2-Diphenyl-1-Picrylhydrazyl (DPPH) % of pomegranate juice during storage period.	60
8.	Effect of arils or juice incubation at different temperature on antioxidant 2, 2'-azino-bis-3-ethylbenzthiazoline-6-sulphonic acid (ABTS) % of pomegranate juice during storage period.	61
9.	Effect of arils or juice incubation at different temperature on turbidity (O.D.) of pomegranate juice during storage period.	63
10.	Effect of arils or juice incubation at different temperature on color index of pomegranate juice during storage period.	64
11.	Effect of arils or juice incubation at different temperature on color L, a', b' of pomegranate juice during storage period.	67
12.	Effect of arils or juice incubation at different temperature on sensory evaluation of pomegranate juice during storage period.	71
13.	Total acidity (%) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	74
14.	pH changes in cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	76
15.	TSS % in of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	77

16.	HMF (mg/100ml) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	80
17.	Carotenoids (mg/L) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	82
18.	Flavonoids (mg/100ml) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	84
19.	Total phenolic compounds (mg/100g) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	86
20.	2, 2-Diphenyl-1-Picrylhydrazyl (DPPH) % of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	88
21.	2, 2'-azino-bis-3-ethylbenzthiazoline-6-sulphonic acid (ABTS) (mg/100ml) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	90
22.	Turbidity changes (OD) of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	92
23.	Color index of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	93
24.	Color L, a', b' of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	96
25.	Sensory evaluation of cloudy carrot juices produced by using commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	99
26.	Total Acidity (%) of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	103
27.	pH of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	104
28.	TSS % of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	106
29.	HMF (mg/100ml) of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	107
30.	Carotenoids contents (mg/L) of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ±	108

	1.	
31.	Flavonoids contents (mg/100ml)of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	110
32.	Total phenolic compounds (mg/100g) of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	112
33.	Scavenging activity (DPPH) %of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	114
34.	ABTS (mg/100ml) of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	116
35.	Turbidity (OD) of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	120
36.	Color index of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	121
37.	Color L, a', b' of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ± 1.	124
38.	Sensory evaluation of cloudy carrot juices prepared by using hydrocolloid Carboxymethyl cellulose (CMC) plus commercial pectin enzyme with different incubation time during storage period at 4 °C ±1.	128

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Abstract

In this study, effect of incubation of arils or juice at different temperature on physiochemical and organoleptic properties of pomegranate juice at zero time and during storage periods (three months) and select the most suitable method to produce favorable juice especially in nutrients and organoleptic properties. The data showed that all samples had highest content of phenolic and antioxidants.

While the second part included two sections of carrot juice production using commercial pectin enzymes 0.08% with different incubation times at temperature 50 °C ranging from sixty to hundred fifty minutes to detect the most suitable way and time to produce juice with high quality and producing stable colloid suspension with fine physiochemical and organoleptic characteristics and it was shown the most incubated specimen has the best characteristics.

Increase cloud stabilization, Hydrocolloids like (CMC) had been studied in different values to test the best amount to produce juice with high nutritional and organoleptic characteristics and it was shown that the specimen with 0.30% has the best characteristics. The results showed that improvement in odor, taste, aroma and appearance compared to control.

Key words:

Pomegranate juice - arils incubation- juice incubation- Carrot juice- Commercial pectin enzymes- Hydrocolloids- Carboxymethyl cellulose