

( )

(1)

50

( )

20.1

100					
% 3.10		% 9.47		% 11.75	
		% 6.20			
			% 4.64	9.50	
.( )			% 16		%
% 6.82	9.47				
		%3.51	7.20	%1.8	5.52
				% 10.1	13.63

:

## **Effect of Cool Storage Period and Wrapped on Fruit Losses of Two Local Grape Varieties (Balady and Helwany)**

**A. Aboud<sup>(1)</sup>**

### **ABSTRACT**

This study was conducted to examine the effect of storage period and fruit wrapped of two local grapes varieties (Balady and Helwany) using polyethylene bags of 50 µm thickness on some losses of grapes berry . the study estimated the weight loss percent, berry shatter, berry spoilage and the total losses for the varieties as a function to storage period and packing of grapes berry. Results showed that there is a high correlation between the storage period and the weight loss, berry shatter, spoilage and the total losses of fruits, where this action started after 3 weeks of the beginning of storage. The average percents of weight loss after 100 days storage were 11.75 % and 8.43% for Balady and Helwany respectively, the berry shatter percents were 6.20% and 5.52% respectively for Balady and Helwany, the spoilage percents were 9.50% and 7.20% for Balady and Helwany respectively and the total losses for tow varieties were 20.1% and 13.63% for Balady and Helwany respectively. The previous values decreased clearly by using bags of polyethylene of 50 µm thickness as follows: 9.47% and % 6.82 for weight losses, 3.10 % and 1.8% for berry shatter, 7.20% and 3.51% for spoilage and the total losses 16% and 10.1% for Balady and Helwany respectively.

**Key words:** Grape storage, Storage period, Weight loss, Helwany and Balady varieties, Berry shatter.

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% 0.4 2004  
(2006 ) 2000

(Winkler, 1982)

Vitis Vinifera (2006)

100  
%13 %20 %20 %30  
.Villalta *et al.*, (2008)

Smilanick *et al.*, (2003)

Aspergillus Botrytis cinerea

10000  
° 1 5 - 4 %19.3  
%10  
Crisosto *et al.*, (2001)

Brady and Morris. (2009)

° 1

.% 95 – 90

Vial *et al.*, (2005)

7

% 15

% 25

Harvey (1984)

berry schatter

.wilting

weight loss

stem browning

(2009)

80

30

( )

Al-Bachir (1998)

5 / Na<sub>2</sub>S<sub>2</sub>O<sub>5</sub> 3

1KGy

0.5kGy

Al- Bachir (1996)

( )

%66.5 49  
%39.2

9 6 3 %50 13.5 5.5 %63.3

(2008)

/ 1.5 / 6 %4

50

2008 2007

-

**Helwani**

Red Globe  
1500-500

(Brix) 28- 20

16

(Meja, 2007) (1998 )

**Baladi**

Regina

( )

---

15 (Brix)  
) .

(Meja, 2007) .(1998

( )

16

60 (TSS = 15 -16)  
( )

2

30

30 x 20 x 8

50 (PE)

- 90

(+1 °C +0.5°C)

% 95

-

-

:

(T1)

:

( 100 80 60 40 20)

60

3

(T2)

Exel SPSS15

:(weight loss)

15

20

:

0.1

$$w.l = m_b - m_a / m_b \times 100$$

%

: w.l

: m<sub>b</sub>

: m<sub>a</sub>

:(berry shatter)

(b.s)

: Spoilage

:(total loss)

(Al-Bachir,1996)

$$\frac{((\frac{-100}{100}) \times (\frac{-100}{100}))}{100} - 100 =$$

-1

(1)

%9.50 %11.75

%9.47

%6.82

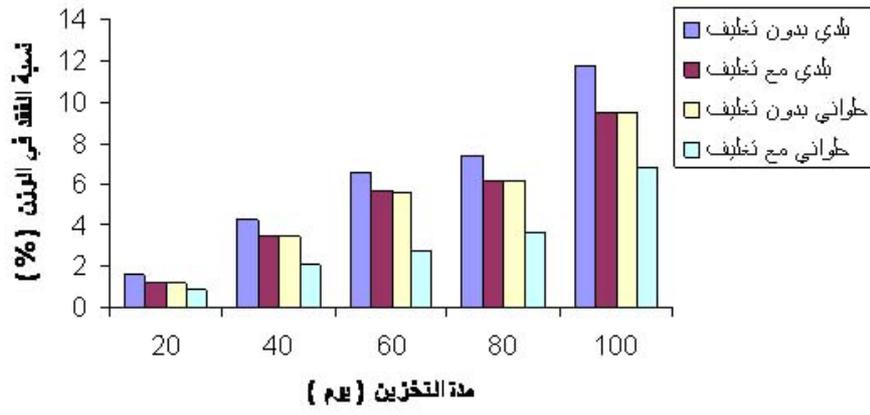
(1)

Wills *et al.*, (1998)

%20

%80

.(2009 ) .(2009 )



(1)

(1)

				( )
2T	1T	2T	1T	
0.90	1.22	1.21	1.62	20
2.12	3.47	3.5	4.27	40
2.73	5.61	5.7	6.6	60
3.63	6.18	6.2	7.41	80
6.82	9.47	9.50	11.75	100
3.24	5.19	5.22	6.33	
2.23	3.01	3.1	3.77	
2.1 =		1.36 =		L.S.D (0.05 %)
0.94 =		0.86 =		

.(Al-Bachir, 1996)

(2)

(2)

T2		T1		
6.82	9.41	9.47	11.75	
0.69		1.58		L.S.D (5 %)

-2

(berry shatter)

(Vial *et al.*, 2005)

100

% 5.52 % 6.2

%1.8 % 3.10

.(3)  
.% 5

3

(Crisosto *et al.*, 2002) %20

(3)

<b>T2</b>	<b>T1</b>	<b>T2</b>	<b>T1</b>	
1.80	5.52	3.10	6.20	
1.96		2.08		<b>L.S.D</b>

%1.2

Mitchell (1985)

Nelson (1983)

-3

(Franck *et al.*, 2005)

.(2009 ) (Al- Bachir,1996)

(4)

O<sub>2</sub>

CO<sub>2</sub>

( )

(2009 ) (2009 )

(4)

T2		T1		
3.51	7.20	4.64	9.50	
0.69 =		0.69 =		<b>L.S.D (0.05)</b>

Vial *et al.*, (2005)

% 15

%16 %20.1 100  
%10.1 %13.65

(5)

(2009 )

(Al-Bachir, 1996)

(5)

T2	T1	T2	T1	
10.1	16	13.63	20.1	
0.92 = 0.92 = 1.30 =				<b>L.S.D ( 0.05 )</b>

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432 .

SO<sub>2</sub> .(2009) .

.(2009) .

.(2006) .

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