

( )

(1)

2002

B A

%

%

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(1)

## **Chemical and Physical Changes in Olive Fruits «Ashrasi-Type II» During Growth and Maturation Period**

**Sheimaa El-Abadi<sup>(1)</sup>**

### **ABSTRACT**

During the season of 2002, samples of olive fruit were taken (Ashrasi type) from Ninawah horticulture's station that belongs to the ministry of agriculture in Iraq. The purpose of this research is to study some physical and chemical characteristics during the growing period, from July until October. Those characteristics include moisture, ash, oil content, chlorophyll A & B, protein, pH and carbohydrate, In addition to fruit length, size, weight, radius, and rigidity. The results showed significant increase in moisture, oil, weight, size and length of the fruit were studied. Significant reduction was noticed in the percentages of the protein, carbohydrate, ash and the fruit rigidity. The highest values of chlorophyll were observed during The month of September. October considered as the best time to harvest olive fruits for pickle purpose.

**Key words:** Olive fruit, Moisture, Ashrasi Type, Oil, Chlorophyll, Protein, pH, Carbohydrate.

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1986 )  
 % 50  
 (1999 )  
 / 3.7 - 0.3 / 1.5  
 (2000) 1996  
 (2000) Gharbi  
 (1975) Daoud .  
 % 17.1 8.9  
 (1979) Romas  
 %1.44 Hojiblanco  
 (1983)  
 (%16.94 1.8 2.35 71.98)  
 (1987) Kiritsakis  
 %50 . %1.6 1.6 %5.8 %19.1 %22  
 B A  
 (1983) (1987 )  
 100/ 0.446 2.467 B A

105 (1973) Pearson :

(1973) Pearson :  
5 450

(1973) Pearson :  
(1983) :**B A**  
664 644 spectrophotometer  
. %85

AOAC soxhlet :  
(1980)

AOAC Philips pH meter :  
Buffer solution (1980)

(1987) :  
:  
( + + + )-100=  
(2000)

50 :  
Cylinder 50 metler :

( ) 50 :

Pentrometer :

2 2 /

Duncan test : -1  
(1980) .005

(1)

5-3

(1985 )  
( 100/ 1.91 2.87) B A

(1990) Isabel

( )

( )

%6.94

(1994) Tombesi

45

120-60

pH

42.53

21.91

(1994) Tombesi

(1)

67.64	56.55	55.76	51.42	%
0.98	1.10	1.47	2.13	%
2.53	2.67	3.88	3.90	%
1.51	2.87	2.20	2.37	100/ A
0.78	1.91	1.08	1.03	100/ B
6.94	3.25	0.75	0.02	%
0.072	0.071	0.071	0.07	%
7.00	7.10	7.20	7.30	pH
21.91	36.43	38.14	42.53	%

0.05

\*

(2)

%  
(%64.15 0,90 1.77 3 2.66 0.76)

.<sup>3</sup> / 0.30

(2)

0.76	0.68	0.35	0.32	( )
2.66	2.59	0.64	0.51	(3 )
1.77	1.50	1.25	1.10	( )
64.15	56.61	50.83	40.45	%
0.32	0.36	0.55	0.62	2 /
0.90	0.70	0.50	0.45	( )

. 0.05

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- 1999 10 9/2
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