

dactylifera L Phoenix.

(2) (1)

1- . (10 5) / (2009)
1- . 25
1- . (20 15)
1- . 25
1- . 5

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.dactylifera L. Phoenix

**Effect of Some Plant Extracts and Gibberellic
Acid in Fruit Drop and Improvement of Some
Qualities of Date Palm Fruits
Phoenix dactylifera L. var. Braim**

H. J. Shareef⁽¹⁾ and N. S. Jameel⁽²⁾

ABSTRACT

The study was conducted at the growing season 2009 in one of an orchard in Abu-Al-Khaseeb region – Basrah, studied the effects of spraying of GA3 concentration of 25 mg.l⁻¹ and spraying of liquorice extract concentration (5, 10) g.l⁻¹ and spraying of Roselle extract concentration (15, 20) g.l⁻¹ as well as compared treatment (spraying with distilled water) in two stage hababok and Kemri on fruit drop and qualities of Braim cultivar. showed results that the spray in hababok stage and treatment of GA3 concentration 25 mg.l⁻¹ increased of weight and size of the fruit significantly and did not show significant differences between the spray at the stage of hababok and Kemri in influencing the T.S.S., while treatment of spraying liquorice extract concentration of 5 gm.l⁻¹ increased total soluble solids and dry matter significantly, wherever spraying at the stage of Kemri with GA3 increased significantly in water content of fruits, while spraying in hababok stage increased in dry matter content of the fruits and did not show significant differences between the results of treatments or the stage of spraying in effect of Drop fruits for a cultivar of Braim through the stages of growth and maturity (Khalal, Rutab and Tammar) this results confirms that the phenomenon of drop fruit under the influence of genetic type male and female cultivar.

Key Word: Date Palm, Fruits drop, Plant extracts, GA3, Braim cultivar, *Phoenix dactylifera* L.

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Areaceae

Phoenix dactylifera L.

(2002 Kruger, 1998)

.(Vis *et al.*,1971 Brown and Perkins,1969)

(1995)
.(1990)
(1999)

180

45 30

(2000)

(1972)

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(2005

1- . 250

(2004)

1- . 4

(2006)

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1- . 20

1- . 15

8

(2008)

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1- . 5

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/ (2009)
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2009/4/25

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Tween 20
Contamination 1-

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10 1- 5
°50 15)
30) (1999) (

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20 1- 15
°50 15
30

:GA₃

) / 25

GA₃

.(2004

:

.(Tween 20

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-1

.¹⁻ . 5

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.¹⁻ . 10

-3

.¹⁻ . 15

-4

.¹⁻ . 20

-5

.¹⁻ . 25

-6

15

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()

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10

:

$$100 \times \frac{\quad}{\quad + \quad} = \%$$

:

-1

30

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()

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:(2009)

$$100 \times \frac{\quad}{\quad + \quad} = \%$$

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-2

10

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500

10

: -

: -3

: -

Hand Refractometer

. Shirkov (1968)

° 20

: -

10

72 ° 70 Oven Vaccum

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100× _____ = %

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100× _____ = %

Factorial

(R.C.B.D.)

(

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experiments

(R.L.S.D.)

.(1980)

%5

(1)

(2009)

(2009)

(1999)

(1)

23.09	2.04	3.14	4.38	13.53		
22.73	1.91	3.09	4.00	13.73	¹⁻ . 5	
21.24	1.82	2.96	3.17	13.29	¹⁻ . 10	
22.32	1.87	3.08	4.11	13.26	¹⁻ . 15	
22.29	1.88	2.92	3.91	13.58	¹⁻ . 20	
21.29	1.60	2.77	3.38	13.54	¹⁻ . 25	
23.4	2.19	3.33	4.42	13.46		
22.56	2.06	3.21	4.22	13.07	¹⁻ . 5	
22.16	1.94	2.97	3.67	13.58	¹⁻ . 10	
22.4	1.96	3.00	4.09	13.35	¹⁻ . 15	
21.95	1.95	2.80	3.99	13.21	¹⁻ . 20	
21.43	1.76	2.86	3.74	13.07	¹⁻ . 25	
ns	ns	ns	ns	ns	R.L.S.D.	

(2)

6.67
¹⁻ . 25 6.30
5.29 7.30

(2)

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	25 1-	20 1-	15 1-	10 1-	5 1-		
6.67a	7.43	7.15	7.04	6.78	6.24	5.37	
6.30b	7.17	6.57	6.46	6.43	5.98	5.20	
R.L.S.D. 0.35 0.40 ns	7.30a	6.86b	6.75b	6.61b	6.11c	5.29d	

(3)

3 7.02
 1- 25 3 6.63
 3 5.57 3 7.69

(3)

(³)

	25 1-	20 1-	15 1-	10 1-	5 1-		
7.02a	7.83	7.53	7.41	7.14	6.57	5.66	
6.63b	7.55	6.91	6.81	6.77	6.29	5.48	
R.L.S.D. 0.35 0.40 ns	7.69a	7.22b	7.11b	6.96b	6.43c	5.57d	

(4)

1- 5
 1- 10
 1- 15

% 65.65

% 70.02

1- . 25

(4)

.(%)

	25 1-	20 1-	15 1-	1- . 10	1- . 5		
67.66	66.80	66.35	67.12	67.57	70.55	67.48	
67.12	64.50	65.96	67.84	67.45	69.47	67.32	
R.L.S.D. ns 0.60 ns	65.65 b	66.16 b	67.48 ab	67.51 ab	70.02 a	67.40b	

(5)

%13.58

%11.90

1- . 25

1- . 20

%15.73

%11.29

1- . 5

(5)

.(%)

	25 1-	20 1-	15 1-	1- . 10	1- . 5		
6.67a	15.56	12.61	10.86	11.62	10.26	10.52	
6.30b	15.90	13.94	13.31	13.29	12.32	12.76	
R.L.S.D. 1.65 2.57 ns	15.73 a	13.28 a	12.08 b	12.45 b	11.29 b	11.64b	

(6)

% 88.09
% 86.41

1- . 25

1- . 5

25

% 88.71

% 84.26

1

(6)

.(%)

	1- . 25	1- . 20	1- . 15	1- . 10	1- . 5		
88.09a	84.43	87.38	89.14	88.37	89.74	89.47	
86.41 b	84.10	86.05	86.69	86.71	87.68	87.23	
R.L.S.D. 1.62 2.52 ns	84.26 b	86.71 a	87.91a	87.54 a	88.71 a	88.35a	

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(1990

.(1986 Cleland)

1- . 5

(2002)
)

(2008

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-(2009) .
Phoenix dactylifera L.
98 :
-(1972) .
1058 .
- .25 -1 :(2002) .
GA3 .(2006) .
70 :
- 485 : .(1980) .
-(2004) .
95 :
NAA .(2000) .
73 :
.(1999) .
Allium cepa
- Phoenix*105 :
.34-24 :(35) 3 « » .(2009) .
dactylifera L.
.(2008) .
Phoenix dactylifera L.
85 :
.(1999) .
-(2005) .
Cucumis Cucumis melo var . *flexuosus* Naud
93 :*sativus* L.

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(1990) .

405

(2002) .

Glycrrhiza glabra

(2008)

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