

*Allium sativum* L.

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2010 – 2009

/

)

Split Plot

(

( *Allium sativum* L.) Garlic

Amaryllidaceae

)

. ( 1994

. ( 1995 )

%31

% 6.2

. ( 1994 )

Allicin

Saniewska 1999 Mirelman Ankri )

. ( 1996

. 2011 / 1 / 13

. 2011 / 4 / 10

2000

/ 1500 2000 2000 1999  
 . ( 2001 FAO)

9/20 )

( 1993 ) Rekowska Orlowski

( 3/20 ) ( 10/20 10/5

11/5 )

. ( 11/20

( 1995 ) Kasrawi Qaryouti

( 1999 ) D' Anna

(2003) Shshidul

13.36 4.65

3.83

/ 8.87 / 31.83

( 2005 ) Jamil

/ 5.98

( 2007 )

Islam

/ 3.59

/ 5.80

%39

Mulching

( 2005 Whiting )

. ( 2001 Garza )

-1

2010 - 2009 / ( )

75 1.5 36 15

10) ( <sup>2</sup> 3 ) ( <sup>3</sup> )

( 1989 )

( 20 - 20 - 20 ) K P N Better Land

-2

Split-Plot ( R.C.B.D. )

Main Plot

Sub Plot

12 36

%5

( 2001 ) SAS

(1

2009 / 9 / 28 -

2009 / 10 / 12 -

2009 / 10 / 26 -

(2) :

- ( )  
-  
-  
-

5

2010 / 5 / 2

:

-1 ( ) -2 ( / ) -3 ( )  
-4 ( / ) -5 ( )  
-7 ( ) -8 ( <sup>3</sup> ) -9 ( / )  
-10 ( ) -11 ( % )  
-12 ( / )

**.1**

الصفة	رمل /غم/كغم	غرين /غم/كغم	طين /غم/كغم	النسجة	PH	N /ملغم/كغم	P /ملغم/كغم	K /ملغم/كغم	E.C ms/cm	O.M /غم/كغم	الكلس /غم/كغم	الجبس /غم/كغم
القيمة	62	31	7	رملية غرينية	7.18	26	4.50	25	3.35	6.5	186	150

2010/9/28

( 2 )

( %28.06 ) ( %62.63 ) ( %75.64 ) ( %187.10 )

2010/10/26

2010/10/12

**.2**

( % )	( )	( )	/	( )	
16.43 a	52.31 a	1.37 a	12.23 a	69.45 a	
16.67 a	35.78 a	1.06 b	9.00 b	66.74 a	
18.87 a	18.22 b	0.78 c	7.52 b	54.23 b	

%5

\*

( 3 )

( %110.11 ) ( %108.62 ) ( %27.92 ) ( %61.09 ) ( %137.68 ) ( %31.41 )

( %19.37 )

**.3**

( / )	( )	( % )	( )	( / )	( <sup>3</sup> )	( )	
1.87 a	31.94 a	21.94 b	3.39 a	9.15 a	33.11 a	3.89 a	
1.59 a	27.10 a	24.42 a	3.59 a	7.21 ab	26.55 a	3.59 a	
0.89 b	15.31 b	26.19 a	2.65 b	5.68 b	13.93 b	2.96 b	

%5

\*

( 4 )

( )

( %228.53 ) ( %75.67 ) ( 81.81 ) ( %34.86 )

( %47.18) ( %46.22) ( %39.34)

**.4**

( % )	( )	( )	/	( )	
22.49 a	15.56 c	0.74 c	6.60 c	52.35 c	
15.28 b	36.04 b	1.10 b	9.80 b	62.29 b	
15.38 b	39.03 b	1.14 b	9.93 b	68.64 ab	
16.14 b	51.12 a	1.30 a	12.00 a	70.60 a	

%5

\*

( 5 )

(<sup>3</sup> 15.16)

( %26.51) ( %30.91)

( %16.67)

.5

( / )	( )	(%)	( )	( / )	) ( <sup>3</sup>	( )	
0.95 b	16.31 b	28.20 a	2.52 b	6.54 b	15.16 c	3.06 b	
1.07 b	18.28 b	21.54 b	2.86 b	6.28 b	17.11 bc	3.06 b	
1.31 b	22.52 b	22.29 b	3.08 b	7.30 b	24.31 b	3.44 b	
2.46 a	42.03 a	24.17 b	4.37 a	9.28 a	41.55 a	4.35 a	

%5

\*

( 6 )

( %30.01 )

( %13.57 )

.6

( % )	( )	( )	/	( )		
17.17 b	19.99 ef	0.90 de	8.26 def	55.60 def		
15.37 b	56.06 b	1.45 b	13.06 b	69.60 abc		
13.57 b	55.85 b	1.40 b	12.00 bc	73.33 ab		
17.01 b	77.36 a	1.73 a	15.60 a	79.26 a		
20.30 b	19.90 ef	0.77 ef	6.66 fg	57.60 cde		
16.89 b	34.39 de	1.12 cd	9.40 de	65.16 bcd		
14.12 b	37.61 cd	1.08 cd	9.33 de	69.93 abc		
15.37 b	51.24 bc	1.28 bc	10.60 bcd	74.26 ab		
30.01 a	6.81 f	0.55 f	4.88 g	43.86 f		
13.57 b	17.67 ef	0.73 ef	6.93 efg	52.13 ef		
15.87 b	23.65 def	0.93 de	8.46 def	62.66 bcde		
16.04 b	24.75 de	0.90 de	9.80 cd	58.26 cde		

%5

\*

( 7 )

) ( 4.93 )  
 ( / 3.26 ) ( 55.74 ) ( 4.92 ) ( / 11.33 ) ( <sup>3</sup> 56.46

( <sup>3</sup> 8.22 ) ( 2.55 )  
 ( / 0.55 ) ( 9.44 ) ( / 3.95 )  
 . ( 2.16 )

( %29.79 )

. ( %18.05 )

.7

المعاملات	الصفات	قطر الرأس ( سم )	حجم الرأس ( سم <sup>3</sup> )	عدد الفصوص (فص/رأس)	وزن الفص ( غم )	النسبة المئوية للمادة الجافة (%)	وزن الرأس ( غم )	الحاصل (طن/هكتار)
الموعد الأول	بدون غطاء	3.37 bc	18.13 bcd	9.00 abc	2.16 b	25.80 abc	19.45 bcd	1.13 bcd
	غطاء شفاف	3.52 b	24.37 bc	7.72 bc	3.27 ab	18.05 e	25.25 bc	1.48 bc
	غطاء اصفر	3.73 b	33.13 b	8.58 abc	3.19 ab	18.89 de	27.34 b	1.60 b
	غطاء اسود	4.93 a	56.46 a	11.33 a	4.92 a	25.03 abc	55.74 a	3.26 a
الموعد الثاني	بدون غطاء	3.28 bcd	19.13 bcd	6.66 bcd	3.01 ab	29.00 ab	20.05 bcd	1.17 bcd
	غطاء شفاف	3.02 bcd	16.06 cd	5.66 cd	3.06 ab	19.96 cde	17.32 bcd	1.03 bcd
	غطاء اصفر	3.31 bcd	22.46 bcd	6.46 cd	3.43 ab	23.60 bcde	22.18 bcd	1.30 bcd
	غطاء اسود	4.73 a	48.53 a	10.06 ab	4.85 a	25.12 abc	48.84 a	2.86 a
الموعد	بدون غطاء	2.55 d	8.22 d	3.95 d	2.39 b	29.79 a	9.44 d	0.55 d
	غطاء شفاف	2.63 cd	10.53 cd	5.46 cd	2.25 b	26.62 ab	12.29 cd	0.71 cd

. %5

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. ( 2007 )

. ( 2002 Mahmood )

Co<sub>2</sub>

Munguia )

( 4 )

. ( 2000

. 2007 .

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. (2) (29)

. 1989 .

- -

. 1994 .

. 1995 .

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## **EFFECT OF CULTURE DATE AND MULCHING IN GROWTH AND YIELD OF GARLIC ( *Allium sativum* L. )**

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### **ABSTRACT**

A field experiment was conducted in College of Agriculture / Tikrit University during 2009 – 2010 season to study the effect of three dates ( 28 September , 12 October , 26 October 2010 ) and four colors from plastic mulching ( control , colorless , yellow , black ) , The experiment was factorial according to split plot design with three replication results showed that was significant increment vegetative growth and yield characters when used first date except the percentage of dry material of vegetative growth , there was non significant difference among the dates and the percentage of dry material for cloves , the difference was significant for the third date . For mulching , the black plastic had the significant increment for all vegetative growth and yield characters except the percentage of dry material of vegetative growth and cloves , the significant increment was for control , which the first date the significant increment , by using by black plastic , in all vegetative growth and yield characters except the percentage of dry material of vegetative growth and cloves , the significant increment was for the third date for control .