

*Glomus mosseae*

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alkurtany@yahoo.com .

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2009

(Factorial Experiment within split plots Design )

/ 19.93

%338

/ 13.59

%265

/ 2.42

%229

173

%.119.0

%200

/ 23.1

:

( *Lycopersicon esculenatum*.Mill ) Tomato  
(*Solanaceaea*)

.(1989

)A B C

802386

210574

2008

. 2012 / 2 / 27

. 2012 / 5 / 20

(<sup>1-</sup> . )15242

.(2009)

/

%20

%5

.(2010 )

( 2000 )

.(1984 )

NO12

PS193

%16.1 25.2 25.3 25.6 27.0

Vesicular arbuscular  
(Symbiotic)

( )

Rhizobium  
(VAM) mycorrhiza

; 1995

; 2003

)

VAM

( 2004 ) Demir

( 1973

Sanders Tinker

) Kapoor

VAM

%47 12

polenyialanin Amminia

(2008

Jasmonic

soil mulching

(2010 )

( 2003 Taber)

.(2010 )

( 2002) Chaudhary (1997 Wien )

1- . 15.89 22.70 28.89  
.(1- . )11.29  
.(1996) Richard

2009

.(1980 )  
(V2 V1)

0.8

( M2 M1 M0) 4-3 (Glomus mosseae)  
.(F1 F0)

12

36

2 6.75= 4.5× 1.5

.(N% 46) 1- . 200 :  
(P %20 ) (1- . )100  
.(K% 41.5) 1- . 200  
)

2009/4/1

/ /

.1

	7.33	pH
%	0.71	
1- .	15	
1- .	256	
1- .	270	
1- .	4.9	
1- .	3.09	EC
1- /	5.5	CEC
1- .	600	
1- .	420	
1- .	80	

(2)

1.70 1- . 131.81  
 1- . 1- . 1- . 16.62 1- . 9.6 1- .  
 1- . 1- . 1- . 10.42 6.15 1.18 87

.(2000)

8.51 1- . 1.63 1- . 15.57  
 1- . 14.58 1- .  
 1.26 12.44 7.30 11.85

(1973 Tinker Sandors)

15.59 1- . 10.56 1- . 1.71 1- . 17.54  
 1- .  
 (3)

1- . 18.15 12.25 . 1.97  
 1- . 17.78  
 . 1- . 163.60

17.65 1- . 10.36 1- . 1.86 1- . 132.20 1- .  
 .(1- . )16.42

.(1973) Tinker Sandors

17.34 1- . 11.68 1- . 2.11 1- . 21.36 1- .  
 1- . 126.50 F0M0  
 ( 1985) Clarskon ; ( 2002) Chaudhary

V2M1F1  
 1- . 13.59 1- . 2.42  
 V2M0F0 . 19.93  
 1- . 173.00

(4)

.(2000)

.2

( . )	( . )	( . )	( . )	( . )	
10.42	6 .15	1.18	87.20	13.73	V1
16.62	9.6	1.70	131.81	13.69	V2
1.19	0.82	0.22	17.00	NS	LSD
12.44	7.30	1.26	108.10	11.85	F0
14.59	8.51	1.63	110.90	15.57	F1
1.19	0.82	0.22	N.S.	2.07	LSD
10.71	5.60	1.16	125.30	8.99	M0
15.59	10.56	1.71	97.00	17.54	M1
14.30	7.56	1.51	105.00	14.60	M2
1.45	1.00	0.27	20.9	2.52	LSD 0.05

.3

( . )	( . )	( . )	( . )	( . )	
7.25	3.77	0.81	87.00	9.35	V1M0
12.94	8.87	1.46	82.20	17.78	V1M1
11.06	5.81	1.26	92.50	14.06	V1M2
14.10	7.42	1.39	163.60	8.63	V2M0
18.15	12.25	1.97	112.60	17.30	V2M1
17.5	9.32	1.75	119.20	15.15	V2M2
3.0	2.09	0.484	25.7	4.41	LSD
9.30	5.63	0.97	84.80	11.04	V1F0
11.53	6.67	1.39	89.60	16.42	V1F1
15.59	8.90	1.54	131.30	12.65	V2F0
17.65	10.36	1.86	132.20	14.7	V2F1
3.01	2.58	0.421	26.1	4.58	LSD
9.91	5.11	0.99	126.00	8.10	F0M0
11.50	6.08	2.11	124.50	9.88	F1M0
13.76	9.43	1.32	92.40	13.73	F0M1
17.34	11.68	2.11	102.50	21.36	F1M1
13.67	7.34	1.46	105.80	13.71	F0M2
14.93	7.79	1.56	105.80	15.48	F1M2
4.81	2.94	0.50	41.1	3.27	LSD0.05

( . )	( . )	( . )	( . )	( . )	
6.04	3.10	0.66	78.97	8.43	V1M0F0
8.47	4.46	0.96	95.17	10.26	V1M0F1
11.13	7.96	1.13	83.90	12.46	V1M1F0
14.76	9.77	1.60	80.67	23.10	V1M1F1
10.74	5.78	1.12	91.77	12.23	V1M2F0
11.38	5.84	1.41	93.23	15.90	V1M2F1
13.77	7.14	1.33	173.00	7.76	V2M0F0
14.54	7.70	1.45	154.00	9.50	V2M0F1
16.38	10.90	1.51	100.90	14.96	V2M1F0
19.93	13.59	2.42	124.00	19.63	V2M1F1
16.60	8.85	1.71	120.00	15.23	V2M2F0
18.48	9.80	1.80	118.43	15.06	V2M2F1
4.16	2.97	0.57	38.50	4.71	LSD0.05

.2009 .

.2003 .

.10-7 (2) 34

.1980.

.2010 .

*G. mosseae*

1995 .

.1989.

.2000 .

.93-85: 7 5

.1984 .

.74-65:(1)2 : ( )

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**EFFECT OF MULCHING SOIL AND BIOFERTILIZER BY MYCORRHIZA FUNGI *Glomus mosseae* IN SOME CHARACTERES YIELD TOW CULTIVARS TOMATO *lycopersicon esculenatum* CULTIVATED IN GYPSIFEROUS SOIL.**

**Adbul alkareem Aariby**

**Athman Kalid**

**Rad oheab**

**ABSTRACT**

Field experiment was carried out during spring season 2009 on two Tomato cultivars ;superqueen and Berek under gypsiferous soil. and soil mulching with three level: with out mulching, mulching with plastic covers and mulching with strew and the other factor with out fungi inoculation and with fungi inoculation factorial experiment with in split plots design was used to study: Tomato cultivars as the main split plot . where as, the other two factors biological fertilization and soil mulching which were distributed randomly with in the main split plots. L.S.D test under %5 probability level was used to compare between the means of treatments . The results could be summarized as follows;

Tomato Berek cultivar was significant supereminent as compared with superqueen cultivar in most characteres yield. Micorrhizal inoculation increased significantly most studied properties as compared with the un inoculation treatments. Black plastic covers treatment was significant supereminent in early yield, total yield, NO.of fruits, yield per plant while With out mulch. second interation increased significantly most studied properties as compared with single factor. interaction between berek cultivar, black plastic mulching and micorrhizal biofertilization were supereminent for most of studied properties as compared with the effect of all single factors and the coupled interactions under investigation. Maximum early yield (13.59



t/h) by increasing percentage (338 %) and Maximum total yield (19.93 t/h) by increasing percentage (229%) and Maximum yield perplant(2.42 kg) by increasing percentage(265%) Maximum mean fruit weight funed in superqueen; with out mulching and with out fungi inoculation was (173 g) treatment by increasing percentage (119%) the interaction between superqueen cultuvar, black plastic mulching and micorrhizal biofertilization F1) Maximum, NO. of fruits (23.1) by increasing percentage(200%).

**Key words:** micorrhiza, mulching, Tomato cultivars.