#### Rhizoctonia solani

- <u>-</u>

/

Rhizoctonia solani

. R. solai

Monilai sp.

Trichoderma sp. Macrophomina sp. Penicillium sp. Alternaria sp.
Trichoderma . Aspergillus sp. Geotrichum sp. Cylindrocarpon sp.
.R. solai sp.

30.13

 25.58
 23.00
 24.30
 23.43
 26.35
 25.13

 33.52
 43.16
 26.1
 25.83
 27.45

 56.95
 54.83
 32.50
 32.40
 81.20

. 85.17

1985 Martyn)

.(1997 Agrios

.(2000 Aryanthum) (1996 Stan Menzies)

Rhizoctonia solani

.(2002

%10

.Aphenomyces solani

R. solani .(2003 ) Pythium aphanidermatum

. R. solani

: Rhizoctonia solani

R. solani

30 - 10

. 2010 / 6 / 7 . 2010 / 11 / 27

```
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  حسن
                                   )
       Domasch
                             (
(1981)
              Stephens
                                                                           .(1980)
                 (
                                    100
                                            .(1993
                    (1)
                                                                       24
0.45
                                             %15
PDA (Potato Dextros Agar)
                                                        9
                   0.5
                                     (
        2 \pm 25
                                                                        ) R. solani
                     25
                                                                    225
                                                                    <sup>5-</sup>10
       (PDA)
                                                          1
                         2 \pm 25
. (1971 Ellis
                 1980
                               Domsch)
       Bell)
                                 R. solani
                                                                          .(1989
                 : R. solani
                                                  15
                                      1
                                                                  R. solani
                                        9
   1
                                                                /
                                                      = 0
            =2
                                      =1
                                                                  =3
                                           =4
                                                              .(1923 Meckinney)
                100 × (
                                                                                %
    (L.S.D.)
                                                                     (2001 SAS)
                                                                       .0.05
```

: R. solani

(1) R.s5 % 80.0 32.5 %97.5

. R. solani

.1

%		
80.00	/	R.s 1
60.00	/	R.s 2
32.50	/	R.s 3
57.50	/	R.s 4
97.50	/	R.s 5
55.00	/	R.s 6
9.43	0.05	

: R. solani

R. solani (2)

4.0

%55.6

9

.R. solani

.2

%	/ R. solani			
55 (	4.00			
55.6	8.93			
0	9.00			
U	8.85			
0.55	8.90			
	8.83			
0.57	8.85			
0.57	8.78			
0.56	8.93			
0.30	8.53			
0	9.00			
	0.14	0.11	0.0	05

Geotrichum candidum Monilia sp.

حسن

Aspergillus Alternaria sp.

A. nigar Penicillium sp. niger
Trichoderma sp. Macrophomina sp.

A. niger Cylindrocarpon sp.

. .3

<sup>4</sup> 10 × /		
21.25	Geotrichum candidum	
14.75	Monilia sp.	
16.00	Alternaria sp.	
11.00	Aspergillus niger	
18.00	Penicillium sp.	
14.50	A. niger	
18.25	Macrophomina sp.	
12.50	Trichoderma sp.	
17.00	Cylindrocarpon sp.	
13.25	A. niger	

## : R. solani

Trichoderma sp. (1989) Bell 2
1.75 R. solani

.(2003 2002 )

.R. solani .4

7	
3.75	Geotrichum candidum
3.25	Monilia sp.
3.00	Alternaria sp.
2.50	Aspergillus niger
3.80	Penicillium sp.
2.50	A. niger
2.25	Macrophomina sp.
1.75	Trichoderma sp.
3.50	Cylindrocarpon sp.
2.50	Aspergillus niger

## :R.solani

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%25.58 %32.0

حسن

%24.30 %23.43 %26.35 %25.13 %30.13

%54.83

%56.95 .(5)

%26.13 %25.83 %27.45

R.solani

.5 R.solani

					N.30
	/	%	%		
1.97	0.35	43.16	32.00	30.13	Geotrichum candidum Monilia sp.
1.98	0.21	33.52	25.58	25.13	Alternaria sp. Aspergillus niger ( )
2.19	0.20	81.20	27.45	26.35	Penicillium sp. Aspergillus niger ( )
1.89	0.29	32.40	25.83	23.43	Macrophomina sp. Trichoderma sp. ( )
0.82	0.23	32.50	26.13	24.30	Cylindrocarpon sp. Aspergillus niger ( )
0.84	0.26	85.17	56.95	54.83	
0.75	N.S.	11.32	1.05	1.04	0.05

.2002 . Paecilomyces lilacinus Trichoderma harzianum

.5-1 :20.

حسن

.1993.

. 175 . . . .

Pythium

.2003.

Trichoderma harzianum

.103-96 :(3)8. *aphanidermatum* 

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# EVALUATION OF SOME FUNGI AND WATER EXTRACT OF SOME ORGANIC MANURE EFFICACY IN CONTROLLING OF RHIZOCTONIA SOLANI ON TOMATO.

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#### **ABSTRACT**

The study was conducted at College of Agric./Univ. of Baghdad to evaluate the efficiency of some isolated fungi and water extract of some organic manure in controlling *Rhizoctonia solani* on Tomato, showed that water extract of sewage wastes reduced significantly of *R. solai* growth. Results of tablature isolation showed presence of eight genus of fungi, *Monilai* sp., *Alternaria* sp., *Penicillium* sp., *Macrophomina* sp., *Trichoderma* sp., *Cylindrocarpon* sp., *Geotrichum* sp. and *Aspergillus* sp. *Trichoderma* sp. showed high antagonistic degree against *R. solai*. Combination of isolated fungi from sewage waste, cows, sheep, horses and poultry achieved reduction in percentage of pre mergence damping off at rate of 30.13%,25.13%,26.35%, 23.43%,24.30% respectively and post mergence damping off at rate of 32.00%, 25.58%, 27.45%,25.83% and 26.13% respectively, roots disease index were reduced to 43.16%,33.52%, 81.20%, 32.40% and 32.50% respectively in contrast with control treatment which revealed 54.83% pre emergence, 56.95% post emergence and 85.17% disease index.