

(*Zea mays L .*)

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2006 – 2005

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Typic Torrfluvents

Effect of Fuel - Oil Application on some Physical Properties of Soil , Growth ,and yield of Corn (*Zea mays L.*)

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ABSTRACT

Afield experiment was Conducted at Soffia district – Ramadi city during Fall Season of 2005 – 2006 in a Sandy Loam Soil Classified as Typic Torrfluvents . the aim of this experiment is to Study the effect of fuel - oil on some physical Properties of Soil and some growth Parameters and yield of Corn (*Zea mays L.*) . Results Showed a Significant increase in Mean weight diameter , increase in available Water , and decrease in buik density , Saturled hydraulic Conductivity and infiltration rate respectively. Result also Showed a Significant increase in all Studied growth Parameters and yield of Corn .

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(1)
(11) (10) (9) (8) (7) (6) (5) (4) (3) (2)

(15) (14) (13) (12)

Mechanism

:

Binding

Bridging

Coating

Lubrication and Redistribution

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)
(
Water Holding Capacity

(10)

Contact Angle

-

(15)

(-)

Blocking

17,5 100 ² 1750

(30 -0) (Ap)

(1)

(30-0) A

(1)

		%	%	(Ec)	pH		1			
- . 1	3- .	15-3/1	SP	1- .			685	172	143	
15.5	1.36	22.24	34.20	1.51	7.2 8	Na	K	Mg	Ca	
							3-			
							3.90	3.20	1.50	7.40

Soil

Coarse – Loamy ,
Soffia Silty Loam

Soffia Series

Typic Torrfluvents

Taxonomy

mixed , hyper thermic

Fuel – oil

. TyPe

0.05

% 20

Zea)

. (² / 0,67)

%1

5012

(mays L.

R.C. B.D

. (17) (16)

)

(B.D)

(S.H.C)

(A.w)

(MWD

. (I)

. (/)

() (300)

()

(19)

(18)

(20)

Cold method

(22)

(22)

. Double ring infiltrometer ()

(/)

() (300)

. (23)

: -1

(2)

			%				
(/)	(/)	()	15-3/1	3-	(/)	()	
6.20	6.65	53.70	22.24	1.36	2.90	0.32	
5.50	5.89	47.13	23.34	1.33	2.60	0.53	

M. W. D.

-

(2)

0.53

0.32

(15) (12) (10)

S. H. C.

-

% 10.34

(12) (11)

A.W.

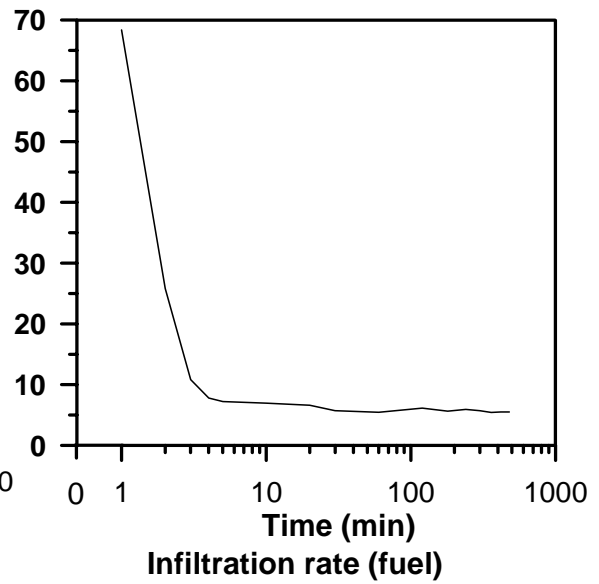
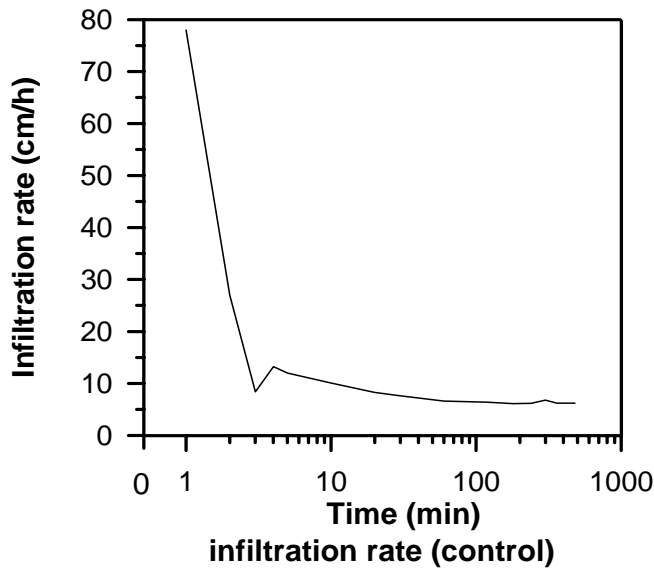
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15 - 3/1

% 23.34 % 22.24 (2)

. (15) (9)

B. D. -
1.33³ / 1.36
(16) (11) (2) 3 /
(2)
% 11.43 / 5.89 / 6.65
/ 5.50 / 6.20
%11.29
(-)
(/) (1) (9) (5)



(1)

-2

(3)

(290) (270) ()

(104) (115) 300

(7817)

/ (8354) /

. (12) (11) (9)

(3)

/	300 ()	()	
7817	104	270	
8354	115	290	

(17) .1

.2

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.2000 . -9

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.1995 . -10

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.1983 . -11

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.2006 . -12

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.2001 . -13

.174 – 165 :(3) 14 .

.1998 . -14

././.

.1997 . -15

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- .1988 . -16
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- .1994 . -17
- / / /
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