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Effect of Phosphorus Application on the Vegetative Growth of Three Wheat Varieties

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ABSTRACT

The aim of this study was to investigate the effect of split phosphorus application on the vegetative growth of three wheat varieties. The results showed that split phosphorus application gave higher fresh and dry weights and greater height of wheat plants as compared to one dressing of P fertilizer. Intisar variety produced higher vegetative growth than Tummooz-2 and Abu-Garib-3.

.(1986)

(1999)

(2- 4 1998 3-)

) %75

(%22

/ 30

1999

(1) (%38.41 %33.9 %27.67)

27

² 2.08

20 (20-20) NP

/ P₂O₅ 20

(/ 0.16) / P₂O₅

/ P₂O₅ 40

45

/ 40

103

45

(C.R.D)

%5

:1

22.00	%
48.00	%
1.07	%
30.89	
23.22	100/
7.31	5:1 PH _w
0.31	5:1 EC
0.62	/ Mg ⁺⁺
1.96	/ Ca ⁺⁺
0.15	/ K ⁺
0.61	/ Na ⁺
0.42	/ HCO ₃ ⁻
0.30	/ CO ₃ ⁼
0.32	/ SO ₄ ⁼
0.83	/ Cl ⁻
6.43	ppm
0.26	%
3.55	%
24.12	%
38.41	%
33.92	%

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(3 2)

20

2-

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:2

	/ 40	/ 20	/ 20	
36.76	34.40	45.30	30.60	2/
55.32	58.50	51.23	56.23	انتصار
26.92	26.56	29.46	26.73	3/
	39.15	42.00	37.85	
	/ 40	/ 20	/ 20	
40.55	41.59	24.66	37.96	2/
62.32	65.24	58.34	63.38	انتصار
33.63	31.65	34.31	34.94	3/
	46.16	44.92	54.42	

.5%

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	/ 40	/ 20	/ 20	
2.50	2.60	2.56	2.43	2/
1.66	1.80	1.50	1.70	انتصار
1.94	1.70	2.50	1.63	3/
	2.03	2.18	1.92	
	/ 40	/ 20	/ 20	
3.41	3.46	3.34	3.33	2/
2.46	2.60	2.26	2.53	انتصار
2.53	2.53	3.23	2.46	3/
	2.86	2.98	2.77	

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(5 4)

%14.97

%9.96

(5/)

:4

	/ 40	/ 20	/ 20	
40.12	43.50	39.46	37.40	2/
51.05	61.80	47.16	44.20	انتصار
29.10	31.80	36.83	18.66	3/
	45.70	41.15	37.42	
	/ 40	/ 20	/ 20	
52.44	56.33	51.56	49.43	2/
63.01	73.83	59.10	56.10	انتصار
41.15	43.96	48.90	30.60	3/
	58.04	53.18	45.37	

% 9.47

%17.21

%47.42

3-

2-

%75.42 %27.24

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%125.32

%53.12 %20.15 3- 2-

%65.49 %29.46

(5/)

:5

	/ 40	/ 20	/ 20	
7.0	7.40	7.36	6.23	2/
10.23	61.80	8.86	10.56	انتصار
4.58	5.43	5.90	2.43	3/
	8.03	7.37	6.41	
	/ 40	/ 20	/ 20	
10.93	11.41	11.25	10.15	2/
14.15	15.15	12.85	14.46	انتصار
8.55	9.38	9.88	6.41	3/
	11.98	11.32	10.34	

%21.5)

(Ph7.6)

(

(1981) .(Mengel and Kirkiby, 1987)

(Bhat and Nye, 1974)

. %60

.(Rana et al., 1987; Ruhel and Deo, 1980)

3-

1986)

(1998

.1998

.1981

.1999

.1986

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