

(Zea mays L.)

	(5)		<i>(Zea mays L.)</i>
	/	(19.7 14.2 10 4.3 1.9)	
(24)		(50 10 5)	
		Control	
	()		
	(60)	/	/
		:	
. 5 ⁻⁴	2 ⁻¹	DNA	-1
. 2	5 ⁻¹	RNA	-2
			-3
			-4

Abstract

A green house experiment was designed to investigate the influence of presoaking of seed in (5 , 10 and 50) ppm solution of kinetin on the leaf content of nucleic acids under different levels of salinity .

Seed of *Zea mays* L. (synthetic variety) were soaked separately for 24 hr in (5,10 and 50) ppm solution of kinetin (KIN) while seeds which were soaked in distilled water serve as control .

Ten seeds from each treatment and the control were sown in each pots of (30×25) cm containing soil of the following electrical conductivities (1.9 , 4.3 , 10 , 14.2 and 19.7) mmh/cm.

The leaf content of total nucleic acids were determined by using the method which described by Cherry while the leaf content of DNA was determined by using the method which described by Burton.

Salinity levels inhibited the RNA synthesis while DNA increased only in (3.4) mmh/cm . Kinetin increased the content of DNA and RNA in leaves in different levels of salinity.

(KIN)

(8)

(19) Smith . (11 10 16)

(3)

(/ 100)

/ 20

(15)

(3)

. (24)

(⁴-10x1)

(1)

(30-)

(ECs)

/ (19.7 14.2 10.0 4.3 1.9)

(5)

(⁵ ⁴ ³ ² ¹)

(¹)

(1)

(50 10 5)

(24)

/ (5)

(30x25)

(

)

/

(60)

/ (10)

DNA

(5) Cherry

. (L.S.D)

RNA

(4) Burton

RNA (1) (5 4 3) (2)
 10.53 / %1 (5.75 6.29 8.85)
 (2)

DNA (5 4)
 (22 17 9 2)
 (7 14) P

In Vitro

RNA ase (12)
 (20) RNA
 -2

(3)
 (3.35 2.96 2.84) %1 DNA
 RNA / 2.4 /
 (9.24 9.19 8.44) %1
 6.76 (50 10 5)
 (50)

(1)

(13)

(4) RNA
 %1
 (4) %5 (5)
 / 5.30 / 5.9 RNA

DNA

(5 4 3 1) (50)
 / (6.6 6.8 10.0 11.5)
 (10) / (4.9 5.3 6.2 8.2)
 (5 4 3)

(¹)

(5)

3)

(21 18

. (18)

(6)

. DNA	(2)	RNA	-1
. (3)			-2
(4)			-3
DNA			

RNA

20.23

(2)

/			
DNA	RNA	/	
2.99	10.53	1.9	1
3.23	10.50	4.3	2
3.08	8.85	10.0	3
2.79	6.29	14.2	4
2.9	5.75	19.7	5
0.28	0.19	5%	L.S.D
0.41	0.27	1%	L.S.D

(3)

/			
DNA	RNA		
2.44	6.76		
2.84	8.44	5	
2.96	9.19	10	
3.35	9.24	50	
0.24	0.25	5%	L.S.D
0.31	0.26	1%	L.S.D

(4)

/			
DNA	RNA	/	
2.25	8.2		
3.2	11.1	5	1
2.4	11.3	10	
4.1	11.5	50	
3.0	9.2		
3.3	10.3	5	2
3.2	11.2	10	
3.4	11.3	50	
2.7	6.2		
2.9	9.0	5	3
3.4	10.2	10	
3.3	10.0	50	
2.3	5.3		
2.4	5.9	5	4
3.2	6.95	10	
3.25	6.8	50	
1.9	4.9		
2.4	5.9	5	5
2.6	6.3	10	
2.7	6.6	50	
0.54	0.45	5%	L.S.D
0.70	0.58	1%	L.S.D

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