

... , ... , ... , ...

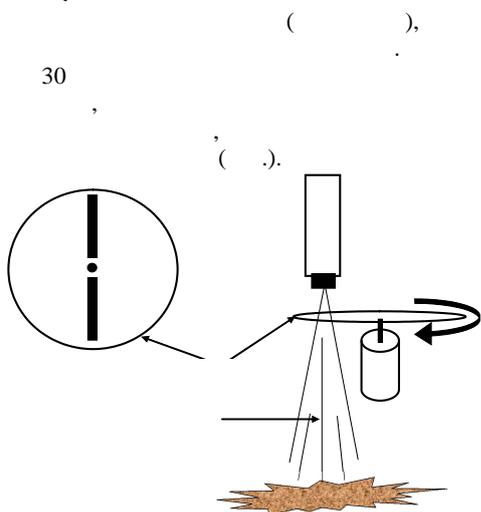
$t_3 -$  ,  $Q -$  .  
 200 200 , 10 . ( 10 . )  
 2,04 49 70% 1,41  
 20 1 . , 1,0 1,48  
 35 51% .  
 0,01 1  
 30-40%. [3] - 1,75 1,72 51 59%

[1].

40, 60

[2].

[4].



(Q):  $Q = T/t_n$

(H)

$H = Ie/h^2 t$ ,  $Ie -$

,  $h -$   
 ,  $t -$

200 - 67,5%, 20 - 70%, - 1 - 75%. 55%.

1.		4				120	
		40					
			%		%	%	±
		2,88	-	2,92	-	55,0	-
200	10	4,29	149	4,96	170	67,5	+12,5
100	5	2,81	98	2,42	83	50,0	-5,0
20	1	3,88	135	4,40	151	70,0	+15,0
10	0,5	3,50	122	4,05	139	66,7	+11,7
5	0,25	2,64	92	2,88	99	60,0	+5,0
2,5	0,125	2,87	100	2,99	102	60,0	+5,0
2	0,1	2,18	76	2,57	88	47,5	-2,5
1	0,05	2,57	89	3,07	105	67,5	+12,5
1	0,025	2,44	85	2,37	81	63,3	+8,0
1	0,01	4,36	151	4,64	159	75,0	+20,0

( . 2)

1

0,01

2.		4				80	
		40				40	
			%		%	%	±
		5,32	-	5,31	-	70	-
40	(120)	4,57	86	4,06	75	60	86
15	10 (120)	5,03	95	4,63	87	60	86
20	1 (120)	5,52	104	4,92	93	73	104
1	0,01 (120)	6,57	123	6,55	123	80	114
1	0,01 (180)	4,43	83	5,16	97	70	100

1,25 1,24 24 23% 14%.

$t = t_3/Q$ ,

180 ( ) , 120  
 , 0,01 ( )  
 1 )

10  
 200

( .3).

3.								
10	40		(1)		(2)		1	
	( )		200		0,01		1	
	1	2	1	2	1	2	1	2
	6,03	5,73	4,20	4,99	7,11	8,77	5,27	5,52
	6,37	7,26	4,85	5,36	6,50	7,34	4,43	5,81

3,  
 0,01 , 40  
 120 . , 10  
 7,11 ,  
 1,08 18% ,  
 40 .

1. [ ] / . .  
 // ( ) - : 2002. 2.  
 [ ] / . . // . . - .  
 „ « » - : 2007. 3. . .  
 - : 2008. 4. [ ] / . . // . .  
 [ ] / . . // V  
 « » - - : 2009.

**Acting Mechanism of the Preplant Pulse Irradiation of Seeds with Ionized Plasma**

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**Summary.** The preplant plasma processing of seeds activated all vital processes and favored the better use of agricultural crop potential. An advantage of pulse irradiation over the permanent impact of ionized low-temperature plasma was noted, which resulted in higher crop yields at relatively low radiation doses.

**Key words:** seeds, plasma, pulse stimulation, new technologies, crop yield.