(4)

41°F slow stream

Germinated in 3x7 in Petri dishes on blotters ✔ KCB Saturdays and Mondays. ♥

Remove samples ahead of Aeration of Pt in water SCS A. Hormay.

2, 3, 4, 5, 6 weeks

		No 1 64 seeds 9 days strat			✓No 2 64 seeds Samples 14 days strat			No 3 (83 seeds) 22 days strat			No 4 ✓38 seeds ✓6 days		
Date		Days	Ger	%	Days	Ger	%	Days	Ger	%	Days	Ger	%
April 15	← started →												
April 24	(start 9) ← out →												
" 26	8AM	2	12	19									
" 27	"	3	13	20									
" 28	"	4	15	23									
" 29	10AM	5	18	28	← strat 14 days out →								
" 29	10AM	5	18	28	0	0	0						
May 1	10AM	7	18	28	2	✓5	39						
" ✓	9AM	8	18	28	3	25	39						
" 4	9AM	10	18	(78)	5	28	(44)						
May 6	9AM	12						← strat 22 days out					
May 6	"	Qual.				Qual		0	4-3/4"				
May 8								0	53	64%			
May 9								2	60	72	← Roots 1/32 to 1/2"		
May 10								3	64	77	Out	4 ✓ - 1/4"	
May 11					(46 seeds)			4	64	71	1	—	
May 12					✓ Check			5	67	(81)	2	14 ✓	60
May 13									Qual.		3	192	(81)
May 15											5	277	91
" 18											8	218	92
" 21											May 21	Restrat (aerated)	
" 26											27 out 31	219	92
" 29											29 in 31	220	92
											June 3 out 36	221	93
											June 5 in 36	222	93

June	10 out	41	✓✓	93
"	12 in	41	✓✓	93
June	21 out	50	✓✓	93
June	23 in	50	✓✓5	95
June	28 out	55	✓✓8	(10 dead) 92

Sack

5-2

Date		Germinated
April	29 10AM	0
May	1 "	2
"	✓ "	3
"	4 "	5
"	8 "	9
"	10 "	11
"	12 "	13
		20

See page 3

Notes. Several roots curving in slow stream aeration on May 1 } Slow aeration
" " 1/8" " " on May 4 }

(1)

68-98°F

70°F last stream

Greenhouse

Aeration of Pt in water

A. Hormay

Date	No 1 (2 days strat 5r seeds) Days	Ger	%	107 seeds No Samples Days	Ger	%	No 3 Days	Ger	%	No 4 Days	Ger	%
April 27 8AM	←			— started								→
April 29 10AM	0	2	4	107 seeds								
May 1 " "	2	4	8									
" 2 " "	3	4	8	15	14							
" 4 9AM	5	5	10	18	17			Days				
" 6 9AM	7	6	Crud	22	21				Ger	%		
" 8 " "	9			27	25		June 4	52	59	55		
" 12	13			30	28		June 6	58	62	58		
" 20	21			35	33		June 8	60	67	63	3 decayed	
" 23	24			39	36		July 5	67	78	73		
" 26	27			40	37		July 11	73	82	77		
" 29	30			42	39		Aug. 11	105	86	80		
June 3	35			47	44							
" 7	39			51	48							
" 14	46			53	50							
" 21	53			55	51							

Germination - Strat

Time in

63 seeds Strat 4 days — 45°F — jar

May 1 2 PM	←			started →								
	Days	Ger	%				Sack			5 days strat		
" " "	0	0	0									
" 4 9AM	0	0	0									
" 6 9AM	1st sample out						2nd sample 5-r basis					
" 8 " "		1	1									
" 9							Some roots in strat 1/4" prob crushed seed.					
" 10 " "		6	10									
" 13		7	11					Days strat	Ger	%		
" 15		7	11									
" 16				Out				15	28	26	June 16 out	97 48
" 18		Crud		In			✓	15	54	15	June 17 in	97 48
" 20				Out	May 17	✓		24	69	9	July 6 out	103 57
" 24	→			In	May 19	✓		24	78	9	July 10 in	111 57
				Out	June 3	✓		29	82	6		
				In	June 5	✓		29	82			
				Out	June 10			34	85	3		
				(2) In	" 12			34	93			

Germinated in 37° in Petri dishes on blotters

41°F East stream

Aeration of Pt in water

A. Hormay

Date		No 1 8 days strat (47 seeds) Days	Ger	%	Samples No 2 (59 seeds) Days	Ger	%	No 3 (189 seeds) Days	Ger	%	No 4 Days	Ger	%
April	21	←			started			→					
April	29 noon	0 out	0	0									
May	1 " "	2	7	15	15 days strat								
May	2 " "	3	11	23									
May	4 9 "	5	12	26									
May	6 " "	7	12	26	← out →								
"	8 " "	9	14	30	2	39	66						
"	9	10	14	30	3	42	71	Rvats 1/32" in strat					
"	10	11	14	30	4	43	73	Out 6 -1/4"	3				
"	12	13	15	32					89	47			
"	13	14							139	74			
"	15	16							155	82			
"	18	19							156	83	Restrat		
								May 22 Restrat (aeration)				19	
								May 24 out	156	83	5-2	24	
								" 24 in	166	88		24	
								June 3 Out	166	88		29	
								June 5 in	166	88		29	
								June 10 out	166	88		34	
								" 12 in	169	89		34	
								June 21 out	176	93		43	
								June 23	183	end 6 decayed 97		43	

In non aerated H2O

Date		Check on No 2 (50 seeds) Days	Ger	%
May	6	← out →		
May	8		0	
May	9	Note! No real growth in strat		
May	10		0	
May	12		0	
May	13		0	end.

(198 seed) Check on No 3 aeration in non aerated water

Date		Out				Days	Ger	%
May	10							
May	13	3	0	0	June 12	32	9	7
May	15	5	2	1	June 13	33	11	8
May	20	10	3	2				
"	27	17	3	2				
"	29	19	3	2				
June	2	23	4	3				
"	3	24	4	3				
"	5	26	5	4				
"	9	27	6	4				

(MW)

No 2

Aeration @ 41°F

SCS Seed.

To compare with Modoc seed for rate of stratification

56 days start

288

					Days germ.
June	24	← into aeration		→	0
July	18	← out of aeration		→	1
"	19	Seeds ¼ to 1¼" long			
			%		
July	21	204	71		3
"	22	248	86		4
	28	253	88		10
"	31	253	88	= Viability of ~~Modoc~~ seed. SCS.	13