

SOS embryos

April 4/44
Hormay

Growth excised embryos SOS seed soaked 24hrs

Date	Hours	Days	33°F	41	45	55	61	72	81°	93	99	104
April 3	10AM	0	0	0	0	0	0	0	0	0	0	0
" 4	8AM	22	0	0	0	0	0	1/8"	1/8"	1/4"	3/8"	no growth
" 4	12noon	26	"	"	"	"	Curving	in	in			
" 4	5PM	31	"	"	"	T		22	22hrs			
" 5	8AM	46	"	"	"	Curving	3/16	1/4				
" 5	5PM	55	"	"	"	1/16	1/4	3/8				
6	8AM	70	"	"	"	1/8	3/8	1/2				
6	5PM	79				1/8 +	1/2					
7	8AM	94				3/16						
8	8AM	118				Curving	1/4					
10	8AM	166				1/4	3/8					
11	8AM	190				3/8	1/2					
12	8AM	214				1/2						
15	8AM	286				Curving						
18	8AM	358				1/16						
19	"	382				1/8						
22	"	454				3/16						
25		526				1/4						
29		622				1/2						
May 8		838				Curving						
May 16		1030				1/8						
June 6		1534				1/4						
Aug 19						3/8" root ← estimated						
						84 days →						
		1/8" growth	.125	.125	.125	.125	.125	.125				
		No days	43	16	6	3	1.6	.92				
		Growth per day (inches)	.00291	.00782	.02083	.0417	.0782	.1360				

$$\frac{1}{24} = .416$$

April 4/44

Rate of germination of
excised embryos at various
temperatures

SCS seed
soaked 24 hours.

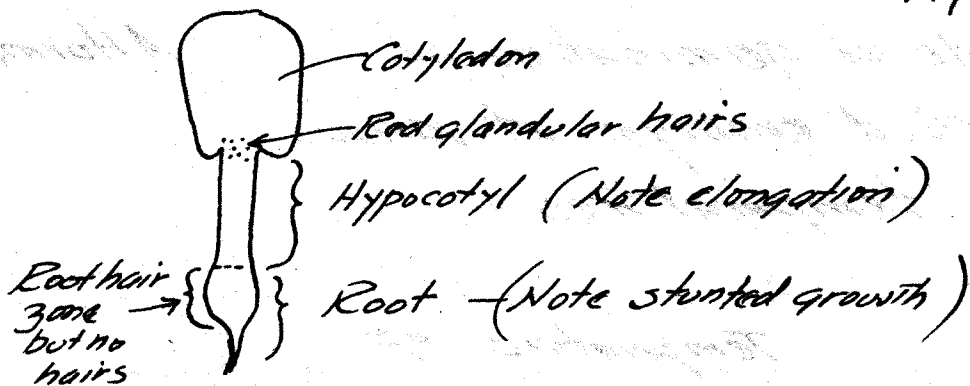
Date	Hours		Temperature °F					
	33	41	45	55	61	72		
April 3, 10 AM	Excised and into chambers							
" 4 5 PM	No growth	No growth	No growth	Slight	Roots curving Prob started 17 noon	Roots 1/8" long Prob started 8 AM		
" 5 8 AM	46" 1.9"	" " "	" " "	Roots curving	3/16" (1)	1/4" Hypo 9 growth		
✓ 5 5 PM	55" 2.3"	" " "	" " "	" 1/16" (2)	1/4" "	3/8" " "		
6 8 AM	70" 2.9"	" " "	" " "	1/8" "	3/8" "	1/2" root hairs starting		
6 5 PM	79" 3.3"	" " "	" " "	1/8" "	1/2" Cots pink 1/2" root bulge	5/8" Cots red 1/8" root hairs		
7 8 AM	94" 3.9"	" " "	" " "	3/16" (3) " cots white	5/8" Cots pink 1/8" Hypo 3/4 Roots start rig to emg ate	3/4" Cots red Hypo " 1/4" Roots 1/2" grow 1/2" slowly hairs develop		
8 8 AM	118" 4.9"	" " "	Roots curving (5)	1/4" cots white	" "	3/4" Hypo 1/4" 1/4" Roots 1/2" root hairs abundant		
9								
10 8 AM	166" 6.9"	" " "	1/4" Pink	3/8" Pink	3/4" "	3/4" " "		
11 8 AM	190" 7.9"	" " "	3/8" "	1/2" "	1" Hypo 1/2" Roots 5/8"	1/8" Hypo 1/2" Roots 3/4"		
12 8 AM	214" 8.9"	" " "	1/2" Hypo 3/16 Roots 5/16	1/2" Hypo 5/16 Roots 3/16	↑ Hypo 3/8" Roots 3/4"	↑ Hypo 1/2" Roots 1"		
13 8 AM	238" 9.9"	" " "	3/4" Hypo 1/4 Root 1/2	" "	" "	" "		
14 8 AM	262" 10.9"	" " "	1" Roots 5/8 Hypo 1/4	" "	" "	Hypo 3/4" Roots 1"		

✓ Seedling drawing on back side of page.

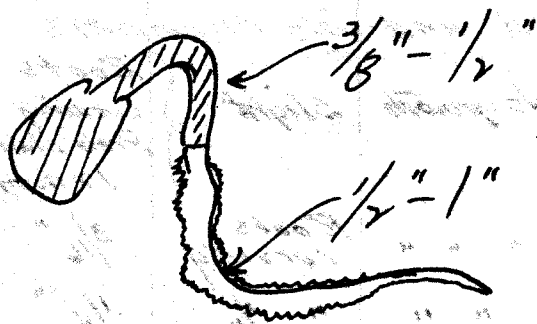
77°F

April 5 5PM

74°F



April 10 8AM



Date	33°F	41°F	45°F	55°F	61°F	72°F	Days
April 15 B.A.M.	no ger.	a few roots	Hypo 1/4	Hypo 3/8	Hypo 7/8"	Hypo 1"	14
April 18 B.A.M.	" "	curving	Roots 7/8	roots curled			15
" 19 "	" "	1/16"	Hypo 1/4	Hypo 5/8	Hypo 1"	Hypo 1"	16
" 22 B.A.M.	" "	1/8"	Hypo 3/8	Hypo 3/4	end	end	19
" 25 "	" "	3/16"	Hypo 3/4"	Hypo 1"			22
		1/4" cats pink	" 1"				
			best root growth.				
29	" "	1/8" cats pink					26
May 1	Trace	3/4"					28
May 4		Hypo 3/16"					
May 8	Some curving	Roots - 1/16"					35
May 11							38
May 13							40
May 16	1/8" curving						43
" 20		Hypo 3/8	Roots 1/4				47
Seed Planted in tar pots							
April 19	37°F	85°F	45°F	55	61	72	April 19
April 22	0	1"	started	0	0	0	0
" 26		head	0	0	0	0	0
" 29			1"	0			3/4"
June 6	1/4" root						64
June 24	1/4" hypo	3/4" Hypo					82
August 19	1/2" hypo (end)	2" Hypo.					107