

Trial run

Bitterbrush Germination

Experiment Fluctuation Treatment 35° → 45°F Location _____
 Seed: Name Wheeler Source _____ Collection date _____

Viability: By excise % From this test %

Date	Time of Day	Germ. time (days)	Tips (No) (%)	Germination (No) (Cum) (%)	No of Days Treat.
1978					
Aug 1	8AM		seeds (wet) into 45°F		
	4PM		" out 45°F and into 35°F		
	Short. schedule 8hrs at 45°F, 8A to 4P, 16hrs at 35°, 4P to 8A				
			Sample (only) (246)		
Aug 1	8AM		Into 45°F	—	
	4PM		Out 45° In 35		
" 2	8AM		Out 35° In 45°		
	4PM		Out 45° In 35		
" 3	8AM		" "		
	4PM		" "		
" 4	8AM		Fluctuation		
	4PM		Turned " In 35°F 5F		
" 5	8AM		" 35 In 60°F		
	4PM		In 37°F		
" 6	7AM		Ave in 37.5° 4hrs x 3		
	12 midnight		out @ 60°F 4hrs		
" 7	6AM		out 37.5°F after 6hrs		
	8AM	0	2hrs @ 60°F 25% tips	0 0 0	
" 8	8AM	1	2hrs @ 68°F 45% "	1 1	To 2mm left
" 9	"	2	4hrs " " "	2 3	To 3mm All out
			Into 45°		
" 9	12 noon		Into 35°F		
	4PM		Into 45°F		
10	8AM		Out 45 In 35 55% tips	0 3	Prominent tips
	12 noon		In 45°		
	4PM		Out 45 In 35		
11	8AM		Out 35 In 45 65% tips	0 3	
	12 noon				
	4PM		Out 35 In 45		
12			@ 45°		
13			@ 45°		
14	8AM		Out 45 In 35	0 3	
	12 noon		Out 35 In 45		
	4 PM		Out 45 In 68		
16	8AM		At 68°	2 5	

Fluctuation 35°-45°F Cont'd

(240)(216V)(32NV)

1978	Date	Time Germ of time day (days)	Tips	Germination No Com %		
Aug	17	8:00	@68° Into 35°	8	13	
"	"	4:00	out 35° In 45°	-	13	
Aug	18	8 AM	out 45°F In 35°	-	13	
"	"	12 noon	at 35 In 45	-	13	
"	"	4 PM	out 45 In 68°F	-	13	
"	21	8 AM	at 68°F In 35°	11	24	
"	"	4 PM	at 35° In 45°	0	24	
"	22	8 AM	out 45° In 35°	0	24	
"	23	8 AM	at 35° In 45°	0	24	
"	24	1 PM	out 45° In 68°	0	24	
"	25	8 AM	@68° Into 45°F 90% tips	4	28	Bulging
"	28	8 AM	at 45° Into 68°F	3	31	
"	29	8 AM	@68°F	4	35	
"	30	8 AM	@68°F	7	42	
"	31	8 AM	@68°F Into <u>41°F</u>	0	42	
"	31	12 noon	at 41° In 45°	0	42	
Sept	1	8 AM	@45°	0	42	Many super bulging
"	5	8 AM	out 45° In 41°	1	43	Most on verge germ
"	6	8 AM	out 41° In 45° (2 hrs)	0	43	
"	7	8 AM	at 45 In 41° 31° (6 hrs)	0	43	
"	8	8 AM	out 31° In 45°	0	43	
"	11	8 AM	out 45° In 68°	3	46	
"	12	8 AM	@68	17	63	
"	13	8 AM	" "	5	68	
"	14	8 AM	Into 45°F	1	69	
"	15	8 AM	@ 45°F	0	69	

Fluctuations 35°-45° Cont'd

(41°-45°)
(45-68°)

1978

Date	Time of day	Carmination	No	Cum %	
Sept 18	8AM at 45° <u>In 41° F</u>		1	70	
" 25	9AM 0 out 41 In 68		0	70	Most bulging tips
" 26	8AM 1 @ 68°F		43	113	To 6mm
" 27	8AM 2 @ 68°F		73	136	To 10mm
" 28	8AM 3 @ 68°F <u>Into 45°</u>		0	136	
" 29	8AM @ 45°		0	136	
Oct 2	8AM "		1	137	
" 10	6AM 0 " Into 68°F		4	141	
" 11	8AM 1 @ 68°F		15	156	
" 12	10AM 2 "		7	163	
" 13	8AM 3 out 68° <u>In 45° F</u>		1	164	208
" 23	8AM 0 @ 45° Into 68°F		1	165	38
" 24	8AM 1 @ 68°F To 3mm Ave		12	177	246
" 25	8AM 2 " To 4mm		4	181	
" 26	" 3 " To 8mm <u>In 45°</u>		1	182	
30	" @ 45°		0	182	
Nov 6	" 0 out 45° In 68°		1	183	
" 7	9AM @ 68°		7	190	
" 12	10AM 9 "		8	198	
" 13	8AM " " Into 45°		0	198	
" 22	8AM at 45 In 68°		0	198	
" 23	9AM @ 68°		2	200	
24	" "		8	208	

Fluctuations 35°-45° Cont'd

(41-45)

(45-68)

1978	Time of		Germination		
Date	day		No	com	%
			(248)	(716V)	(32NV)
Nov 25	8AM	@68°	0	208	
26	8AM	"	0	208	
28	"	Into 45°	0	208	
Dec 1	"	@45°	0	208	
4	"	at 45°-68	0	208	
5	"	@68	0	208	
6	"	" 6am	1	209	
7	12 noon	" Remaining	39 excised		
			7V and 32NV		

7
716

End

216
32
248