

Growth rate stratified bitterbrush seed
at various temperatures

19 May 10/73
A Hervey

(Based on growth of radical to 14 mm)

Temperatures °F

	50°	59°	68°	77°	86°	95°	104°	113°	122°	131°
Growth period days	4.70	3.70	2.75	2.25	1.5	No growth				
" " hours										
Growth rate mm/day	2.98	3.78	5.09	6.22	3.11	0				

	Germination - mortality %								
Normal germ	100	100	100	43	0	0	0	0	
Abnormal "	0	0	0	57	56	0	0	0	
No growth	0	0	0	0	44	100	100	100	
Dead	0	0	0	0	0	8	15	100	

Growth excised embryos at various temperatures

(Based on growth of radical to 14 mm)

	12.30	6.00	3.90	2.75	1.85	1.50	4hrs	4hrs
Growth period days								
Growth rate mm/day	1.14	2.33	3.59	6.77	7.57	9.33		

	Germination mortality							
Normal germ	100	100	100	100	100	100	100	
Abnormal "	0	0	0	0	0	0		
No growth	0	0	0	0	0	0	✓	
Dead	0	0	0	0	0	0	100	100 lethal