Measurement of the seeds weight

Replicate 1					
Seeds 0 mg/mL 0.2 mg/mL		0.6 mg/mL	1 mg/mL	5 mg/mL	
1	1 32.1 37.3		24.7	34	28
2	2 25.1 30.7		26.2	18.3	26.1
3	33.8	36.9	30.5	20.9	31.9
4	22.9	42.8	22.7	32.3	33.9
5	23.6	37.8	33.3	36.4	23.9
6	31.5	49.8	23.5	22.9	34.1
7	31.7	38.2	28.4	28.5	26.5
8	26.6	28.8	24.5	35.3	36.8
9	42.9	26.6	23.3	29.4	32.6
10	33.7	43.6	16.7	36.7	24.7
11	23.5	35.5	21.8	30.5	27.2
12	24.5	33.8	29.5	24.6	33.9
13	28.2	32.1	32	21.4	37.3
14	27.9	35.5	29.2	36.2	24.5
15	26.5	36.3	36.6	23.1	30.5
16	23.3	36.8	23	18.9	35.8
17	27.7	28.5	32.6	24.7	33.5
18	38.3	32	20.3	29	33.4
19	30.5	40.2	31.5	31.4	27.7
20	21.8	32.2	25.2	34.4	24.1
Replicate 2					
Seeds	0 mg/mL	0.2 mg/mL	0.6 mg/mL	1 mg/mL	5 mg/mL
1	27.8	24.7	27.3	31.6	20.8

2 40.2 32.5		33.3	31.1	33.6
36.1	19	22.1	22.7	36.4
25.3	20.8	32.5	30.8	29.8
34.1	27.6	22.6	33.6	26.1
32.7	25.5	32.8	27.5	25.1
43.3	21.1	25	33.6	33.5
31.2	32.6	24.6	22.3	27.3
25	19.6	22.1	35.4	25
28.5	21.4	18.2	22.3	25.5
38.9	24.6	25.4	35.2	28.7
33.4	19.8	28.1	26.1	23.8
26	27.8	26	27.3	28
28	12.3	28.2	22.4	28
47.3	22.8	24.1	26.8	30.5
		35.3	30.9	34.2
34.1	15.6	28.1	20	29.9
40	26	23.6	24.8	26.4
25.8	24.5	18.2	19.4	34.5
23	21.5	25.8	22.8	
0 mg/mL	0.2 mg/mL	0.6 mg/mL	1 mg/mL	5 mg/mL
				33.6
				26.5
				33.9
				24.7
				35.8
		30	31.1	39.1
42 23.1				
41.7	24.7	31.3	33	38.9
	36.1 25.3 34.1 32.7 43.3 31.2 25 28.5 38.9 33.4 26 28 47.3 38.1 34.1 40 25.8 23 0 mg/mL 51.5 32.6 23.8 28.5 25.2	36.1 19 25.3 20.8 34.1 27.6 32.7 25.5 43.3 21.1 31.2 32.6 25 19.6 28.5 21.4 38.9 24.6 33.4 19.8 26 27.8 28 12.3 47.3 22.8 38.1 21.3 34.1 15.6 40 26 25.8 24.5 23 21.5 0 mg/mL 0.2 mg/mL 51.5 39.7 32.6 21.8 23.8 33.5 28.5 18.6 25.2 18.7	36.1 19 22.1 25.3 20.8 32.5 34.1 27.6 22.6 32.7 25.5 32.8 43.3 21.1 25 31.2 32.6 24.6 25 19.6 22.1 28.5 21.4 18.2 38.9 24.6 25.4 33.4 19.8 28.1 26 27.8 26 28 12.3 28.2 47.3 22.8 24.1 38.1 21.3 35.3 34.1 15.6 28.1 40 26 23.6 25.8 24.5 18.2 23 21.5 25.8 0 mg/mL 0.2 mg/mL 0.6 mg/mL 51.5 39.7 24.7 32.6 21.8 23.2 23.8 33.5 25.4 28.5 18.6 27.3 25.2 18.7 23.4	36.1 19 22.1 22.7 25.3 20.8 32.5 30.8 34.1 27.6 22.6 33.6 32.7 25.5 32.8 27.5 43.3 21.1 25 33.6 31.2 32.6 24.6 22.3 25 19.6 22.1 35.4 28.5 21.4 18.2 22.3 38.9 24.6 25.4 35.2 33.4 19.8 28.1 26.1 26 27.8 26 27.3 28 12.3 28.2 22.4 47.3 22.8 24.1 26.8 38.1 21.3 35.3 30.9 34.1 15.6 28.1 20 40 26 23.6 24.8 25.8 24.5 18.2 19.4 23 21.5 25.8 22.8 0 mg/mL 0.2 mg/mL 0.6 mg/mL 1 mg/mL 51.5 39.7 24.7 31.3 32.6 21.8 23.2 32.6 23.8 33.5 25.4 23.2 28.5 18.6 27.3 24.1 25.2 18.7

9	9 24.8 32		29.3	29.8	45.1
10	40.1	32.7	32.9	24.4	39.9
11	28.8	29.1	21.1	22.3	40
12	31.7	23.4	27	29.4	37.8
13	41.5	21.7	18	22.2	31.6
14	39.4	28.1	28	27.1	36.8
15	28.3	22.1	37.9	24.1	33.4
16	33.6	17	22.7	19.2	35.5
17	34.5	31.7	30	30.9	39.2
18	37	24.8	25.5	29.1	39.9
19	49.5	26.1	24.5	18.2	33.6
20	44.4	36	22.8	33.2	33.6
Replicate 4					
Seeds	0 mg/mL	0.2 mg/mL	0.6 mg/mL	1 mg/mL	5 mg/mL
4			00.0		
1	34.9	18.3	20.9		
2	34.9 38	18.3 22.3	20.9		
2	38	22.3	24.8		
2	38 33.7	22.3 27	24.8 28.5		
2 3 4	38 33.7 31.8	22.3 27 21	24.8 28.5 22.8		
2 3 4 5	38 33.7 31.8 33.5	22.3 27 21 41.5	24.8 28.5 22.8 30.7		
2 3 4 5 6	38 33.7 31.8 33.5 25.1	22.3 27 21 41.5 23.3	24.8 28.5 22.8 30.7 39.4		
2 3 4 5 6 7	38 33.7 31.8 33.5 25.1 31.9	22.3 27 21 41.5 23.3 27.1	24.8 28.5 22.8 30.7 39.4 22.9		
2 3 4 5 6 7 8	38 33.7 31.8 33.5 25.1 31.9 43.1	22.3 27 21 41.5 23.3 27.1 41	24.8 28.5 22.8 30.7 39.4 22.9 29.2		
2 3 4 5 6 7 8 9	38 33.7 31.8 33.5 25.1 31.9 43.1 34	22.3 27 21 41.5 23.3 27.1 41 25.3	24.8 28.5 22.8 30.7 39.4 22.9 29.2 25.6		
2 3 4 5 6 7 8 9	38 33.7 31.8 33.5 25.1 31.9 43.1 34 48.8	22.3 27 21 41.5 23.3 27.1 41 25.3 36.4	24.8 28.5 22.8 30.7 39.4 22.9 29.2 25.6 26.6		
2 3 4 5 6 7 8 9 10 11	38 33.7 31.8 33.5 25.1 31.9 43.1 34 48.8 25.5	22.3 27 21 41.5 23.3 27.1 41 25.3 36.4 34.6	24.8 28.5 22.8 30.7 39.4 22.9 29.2 25.6 26.6 25.9		
2 3 4 5 6 7 8 9 10 11	38 33.7 31.8 33.5 25.1 31.9 43.1 34 48.8 25.5 53.9	22.3 27 21 41.5 23.3 27.1 41 25.3 36.4 34.6 34.4	24.8 28.5 22.8 30.7 39.4 22.9 29.2 25.6 26.6 25.9 25.2		

16	32.2	23.9	29.5		
17	38.4	37.1	28.7		
18	27	27.2	26.1		
19	55.9	23.5	40.1		
20	28.3	34.4	27.1		
				566.6/20	544.7/20
Average				28.3	27.2
Replicate 5					
Seeds	0 mg/mL	0.2 mg/mL	0.6 mg/mL	1 mg/mL	5 mg/mL
1	33.8	18	28.9		
2	14.6	23.9	29.3		
3	30.2	28.1	29.7		
4	23.9	26.2	26.5		
5	29.1	26.6	32.4		
6	33.4	40.5	24.8		
7	20.9	29.7	38.5		
8	18.9	30.7	37.9		
9	23.6	30.8	29.4		
10	19.2	27.3	36		
11	30.8	42.3	24		
12	19	43.3	27		
13	26.6	21.3	24.3		
14	25.6	28.8	36.5		
15	24.1	38.5	28.4		
16	23.5	37	35.2		
17	19.6	26.5	28.4		
18	24.8	32.2	33.4		
19	19.4	33.3	30		
20	19	45.8	27		
				594.0/19	607.2/20
Average				31.3	30.4
,		•	•		

	Meas	urement of th	ne seedlings	' size		% close 0	% close 0.2	% close 0.6	0/ -1 4	0/ -1 5
	IVICAS		ic securings	3120					% close 1	% close 5
Dan Parts 4						19%	40%	56%	82%	99%
Replicate 1	0 / 1				- , ,	0/ 61 10	0/ / 1 100	0/ 61 100	0/ 61 14	0/ 61 15
		0.2 mg/mL	0.6 mg/mL		5 mg/mL	% of dead 0	% of dead 0.2	% of dead 0.6	% of dead 1	% of dead 5
1	1.18	†			0	19%	19%	19%	19%	19%
2	2.48	!	4.37	0.7	0					
3	1.14		0.93		0	% not open 0	-	% not open 0.6	-	% not open 5
4	1.58		1.61	1.09	0	0%	21%	37%	63%	80%
5	0.93		1.11	2.07	0					
6	5.03		1.61	1.31	0					
7	3.14		2.28		0					
8	2.72		1.44	0	0					
9	2.66		3		0					
10	2.23		1.05		0					
11	4.83		0		0					
12	2.17		0		0					
13	1.66		0		0					
14	3		0	0	0					
15	7.99		0	0	0					
16	8.19		0	0	0					
17	6.09	0	0	0	0					
18	0	0	0	0	0					
19	0	0	0	0	0					
20	0	0	0	0	0					
Average	3.35		2.4	1.39						
# of dead seeds	3		10	14	20					
# of living seeds	17		10	6	0					
σ	2.21	0.83	1.73	0.47	0					
Replicate 2										
Seeds					5 mg/mL					
1	1.98									
2	3.14		3.72		0					
3	5.48									
4	2.41				0					
5	2.31				0					
6	5.55	0	1.24	0	0					

7	4.36	0	1	0	0			
8	5	0		0	0			
9		0		0	0			
10		0		0	0			
11	4.9	0		0	0			
12		0		0	0			
13		0		0	0			
14		0		0	0			
15		0		0	0			
16		0		0	0			
17		0		0	0			
18		0		0	0			
19		0		0	0			
20		0		0	0			
				-				
Average	4.13	1.71	1.76	1.19	/			
# of dead seeds	1	15		19	20			
# of living seeds	19	5		1	0			
σ	2	0.61	0.9	0	0			
Replicate 3								
Replicate 3 Seeds	0 mg/mL	0.2 mg/mL	0.6 mg/mL	1 mg/mL	5 mg/mL			
	0 mg/mL 7.29	0.2 mg/mL 1.75		1 mg/mL 0.85	5 mg/mL			
Seeds								
Seeds 1	7.29	1.75	0.73	0.85	0			
Seeds 1	7.29 4.79	1.75 1.72	0.73 1.45 1.43	0.85 1.07	0			
Seeds 1 2 3	7.29 4.79 2.2 2.29 4.35	1.75 1.72 1.67 1.18 2.31	0.73 1.45 1.43 0.67 1.03	0.85 1.07 0	0 0 0			
Seeds 1 2 3 4 5 6	7.29 4.79 2.2 2.29 4.35 2.32	1.75 1.72 1.67 1.18 2.31 2.33	0.73 1.45 1.43 0.67 1.03 1.78	0.85 1.07 0	0 0 0			
Seeds 1 2 3 4 5 6 7	7.29 4.79 2.2 2.29 4.35 2.32 0.93	1.75 1.72 1.67 1.18 2.31 2.33 2.33	0.73 1.45 1.43 0.67 1.03 1.78	0.85 1.07 0 0	0 0 0 0			
Seeds 1 2 3 4 5 6 7	7.29 4.79 2.2 2.29 4.35 2.32 0.93 1.83	1.75 1.72 1.67 1.18 2.31 2.33 2.33 3.43	0.73 1.45 1.43 0.67 1.03 1.78 1.3	0.85 1.07 0 0 0	0 0 0 0 0 0 0			
Seeds 1 2 3 4 5 6 7 8 9	7.29 4.79 2.2 2.29 4.35 2.32 0.93 1.83 0.98	1.75 1.72 1.67 1.18 2.31 2.33 2.33 3.43 2.21	0.73 1.45 1.43 0.67 1.03 1.78	0.85 1.07 0 0 0 0	0 0 0 0 0 0 0			
Seeds 1 2 3 4 5 6 7 8 9 10	7.29 4.79 2.2 2.29 4.35 2.32 0.93 1.83 0.98	1.75 1.72 1.67 1.18 2.31 2.33 2.33 3.43 2.21 2.07	0.73 1.45 1.43 0.67 1.03 1.78 1.3 1.62 3.16	0.85 1.07 0 0 0 0 0	0 0 0 0 0 0 0 0			
Seeds 1 2 3 4 5 6 7 8 9 10 11	7.29 4.79 2.2 2.29 4.35 2.32 0.93 1.83 0.98 0.89	1.75 1.72 1.67 1.18 2.31 2.33 2.33 3.43 2.21 2.07 0.88	0.73 1.45 1.43 0.67 1.03 1.78 1.3 1.62 3.16	0.85 1.07 0 0 0 0 0 0	0 0 0 0 0 0 0			
Seeds 1 2 3 4 5 6 7 8 9 10 11	7.29 4.79 2.2 2.29 4.35 2.32 0.93 1.83 0.98 0.89 1.53 1.93	1.75 1.72 1.67 1.18 2.31 2.33 2.33 3.43 2.21 2.07 0.88	0.73 1.45 1.43 0.67 1.03 1.78 1.3 1.62 3.16 0	0.85 1.07 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0			
Seeds 1 2 3 4 5 6 7 8 9 10 11 12	7.29 4.79 2.2 2.29 4.35 2.32 0.93 1.83 0.98 0.89 1.53 1.93 2.32	1.75 1.72 1.67 1.18 2.31 2.33 2.33 3.43 2.21 2.07 0.88 0	0.73 1.45 1.43 0.67 1.03 1.78 1.3 1.62 3.16 0 0	0.85 1.07 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0			
Seeds 1 2 3 4 5 6 7 8 9 10 11 12 13	7.29 4.79 2.2 2.29 4.35 2.32 0.93 1.83 0.98 0.89 1.53 1.93 2.32 1.83	1.75 1.72 1.67 1.18 2.31 2.33 2.33 3.43 2.21 2.07 0.88 0 0	0.73 1.45 1.43 0.67 1.03 1.78 1.3 1.62 3.16 0 0 0	0.85 1.07 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0			
Seeds 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	7.29 4.79 2.2 2.29 4.35 2.32 0.93 1.83 0.98 0.89 1.53 1.93 2.32 1.83 0	1.75 1.72 1.67 1.18 2.31 2.33 2.33 3.43 2.21 2.07 0.88 0 0 0	0.73 1.45 1.43 0.67 1.03 1.78 1.3 1.62 3.16 0 0 0 0	0.85 1.07 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0			
Seeds 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	7.29 4.79 2.2 2.29 4.35 2.32 0.93 1.83 0.98 0.89 1.53 1.93 2.32 1.83 0	1.75 1.72 1.67 1.18 2.31 2.33 2.33 3.43 2.21 2.07 0.88 0 0 0 0	0.73 1.45 1.43 0.67 1.03 1.78 1.3 1.62 3.16 0 0 0 0 0	0.85 1.07 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0			
Seeds 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	7.29 4.79 2.2 2.29 4.35 2.32 0.93 1.83 0.98 0.89 1.53 1.93 2.32 1.83 0 0	1.75 1.72 1.67 1.18 2.31 2.33 2.33 3.43 2.21 2.07 0.88 0 0 0	0.73 1.45 1.43 0.67 1.03 1.78 1.3 1.62 3.16 0 0 0 0 0 0 0	0.85 1.07 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0			

19	0	0	0	0	0
20	0	0	0	0	0
Average	2.53	1.99	1.46	0.96	/
# of dead seeds	6	9	11	18	20
# of living seeds	14	11	9	2	0
σ	1.72	0.64	0.7	0.11	0
-			-	-	-
Replicate 4					
	0 mg/mL	0.2 mg/mL	0.6 mg/mL	1 mg/mL	5 mg/mL
1	5.9	1.44	0.69	0.84	0
2	4.17	1.54	0.99	1.02	0
3	1.49	2.43	2.42	1	0
4	3.58	1.48	2.24	0	0
5	2.59	2.56	1.04	0	0
6	1.98	1.84	1.34	0	0
7	3.18	4.75	3.57	0	0
. 8	1.89	1.06	2.03	0	0
9	1.18	1.52	2.49	0	0
10	1.95	2.87	2.35	0	0
11	1.47	1.89	4.52	0	0
12	1.72	1.41	3.42	0	0
13	3.13	4.36	0	0	0
14	1.03	3.22	0	0	0
15	1.45	0	0	0	0
16	2.32			0	0
		0	0		
17	0.99	0	0	0	0
18	0	0		0	
19	0	0	0	0	0
20	0	0	0	0	0
A	0.05	0.01	0.00	0.05	
Average	2.35	2.31	2.26	0.95	
# of dead seeds	3	6	8	17	20
# of living seeds	17			3	
σ	1.26	1.09	1.1	0.09	0
Davidad 5					
Replicate 5					
Seeds					5 mg/mL
1	10.19	0.77	2.33	1.88	1.48

2	1.75	3.6		2.13	0	
3	2.11	4.73	0.91	1.12	0	
4	1.85	4.67	1.25	1.67	0	
5	6.49	0.8	1.86	1	0	
6	4.16	5.08	1.77	0	0	
7	3.98	3.25	0	0	0	
8	3.9	4.23	0	0	0	
9	1.27	3.48	0	0	0	
10	2.26	2.73	0	0	0	
11	3.39	2.75	0	0	0	
12	2.63	3.75	0	0	0	
13	2.15	1.08	0	0	0	
14	4.78	1.7	0	0	0	
15	0	1.99	0	0	0	
16	0	3.71	0	0	0	
17	0	3.02	0	0	0	
18	0	1.76	0	0	0	
19	0	0	0	0	0	
20	0	0	0	0	0	
Average	3.64	2.95	1.61	1.56	1.48	
# of dead seeds	6	2	14	14	19	
# of living seeds	14	18	6	5	1	
σ	2.28	1.32	0.45	0.43	0	
Total Average :	3.2	2.24	1.9	1.21	0.3	
Total σ:	1.89	0.9	0.98	0.22	0	