

APPENDIX

1. RAW DATA

Table 1: Root length of *V. wittrociana* in relation to different detergent concentrations

Root length [cm] (± 0.1 cm)					
0.0 vol. %	0.4 vol. %	0.8 vol. %	1.4 vol. %	2.0 vol. %	5.0 vol. %
1.7	2.3	3.2	1.8	2.3	0.5
4.0	3.7	1.8	1.2	1.0	1.5
3.5	3.2	2.3	2.0	1.2	1.1
3.2	3.0	2.7	1.3	1.4	0.8
2.9	2.0	3.0	1.7	2.0	0.5
3.7	2.8	1.8	1.0	1.3	0.7
3.2	3.5	2.3	1.4	1.9	0.4
3.3	3.1	2.3	1.5	1.5	1.1
3.9	2.4	1.4	1.9	2.1	0.9
1.9	2.4	2.2	1.6	2.0	0.7
3.7	2.4	2.9	0.8	1.8	1.0
2.2	2.7	2.5	1.7	1.3	0.9
3.2	2.8	2.7	2.3	1.7	0.8
2.9	2.9	1.4	1.5	1.7	
3.8	2.9	2.9	1.6	1.6	
2.8	2.1	3.3	1.5	0.9	
3.4	2.4	2.5	1.6	1.7	
2.5	3.1	1.7		1.3	
2.6	3.1	1.9		1.3	
2.5	2.3	2.7		0.9	
2.9	3.2	1.8		1.5	
2.6	3.2	2.2			
3.5	3.3				
3.1	3.3				
2.7	3.4				
3.8	2.9				
2.5	1.7				
2.9	2.3				
2.9	3.9				
4.4	3.9				
3.0	4.1				
3.1	3.8				
2.8					

Table 2: Stem length of *V. wittrociana* in relation to different detergent concentrations

Stem length [cm] (± 0.1 cm)					
0.0 vol. %	0.4 vol. %	0.8 vol. %	1.4 vol. %	2.0 vol. %	5.0 vol. %
6.8	4.7	3.0	5.1	4.3	3.2
5.5	5.9	4.4	3.7	2.6	2.3
7.6	7.2	3.6	3.5	5.5	2.8
5.1	6.4	5.2	3.3	4.2	3.0
7.1	6.8	4.0	4.1	4.1	2.7
6.2	5.5	4.2	4.0	4.1	4.0
6.4	5.0	5.7	4.3	3.3	3.5
7.3	6.6	4.4	4.1	2.7	2.4
5.5	5.4	3.7	4.6	3.5	3.4
7.3	6.3	5.8	4.2	3.1	3.2
6.0	7.0	4.2	3.9	4.2	3.2
6.2	6.1	5.2	3.2	4.4	3.0
5.9	6.9	4.3	3.6	3.1	2.3
6.0	4.9	4.4	4.1	5.4	
4.8	5.9	4.9	3.7	3.5	
6.1	6.8	4.3	4.4	4.4	
5.6	6.1	4.0	4.5	4.8	
6.6	5.9	4.3		3.8	
6.1	5.9	3.0		3.2	
6.6	5.5	5.2		4.2	
4.7	6.5	5.5		3.5	
6.1	6.3	4.4			
6.7	7.2				
7.7	5.8				
6.5	6.3				
5.6	5.6				
5.3	5.3				
6.7	5.3				
5.4	6.2				
7.1	5.9				
7.5	6.3				
6.0	5.8				
5.9					

2. HISTOGRAMS FOR THE DISTRIBUTION OF ROOT LENGTH

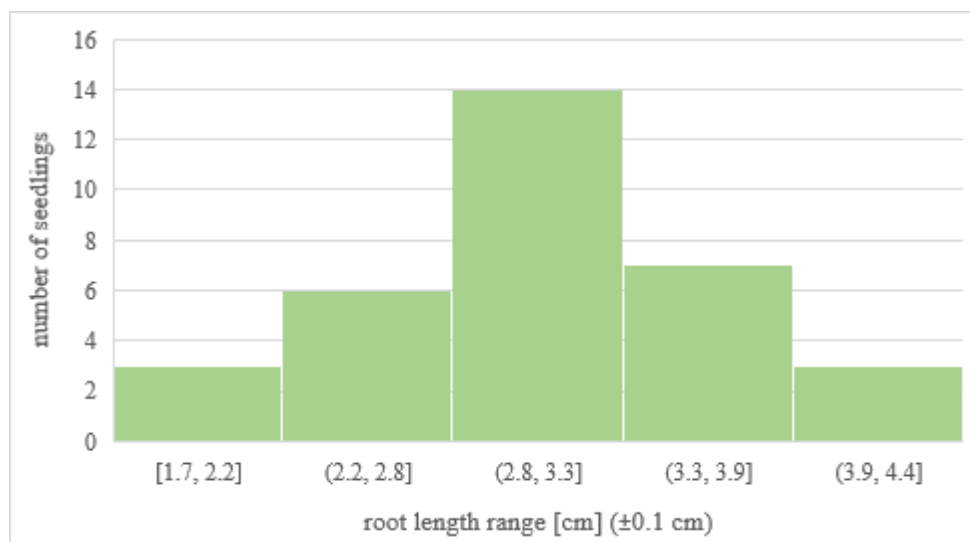


Figure 1: Histogram for the distribution of root lengths at the control



Figure 2: Histogram for the distribution of root lengths at the 0.4 vol. % concentration

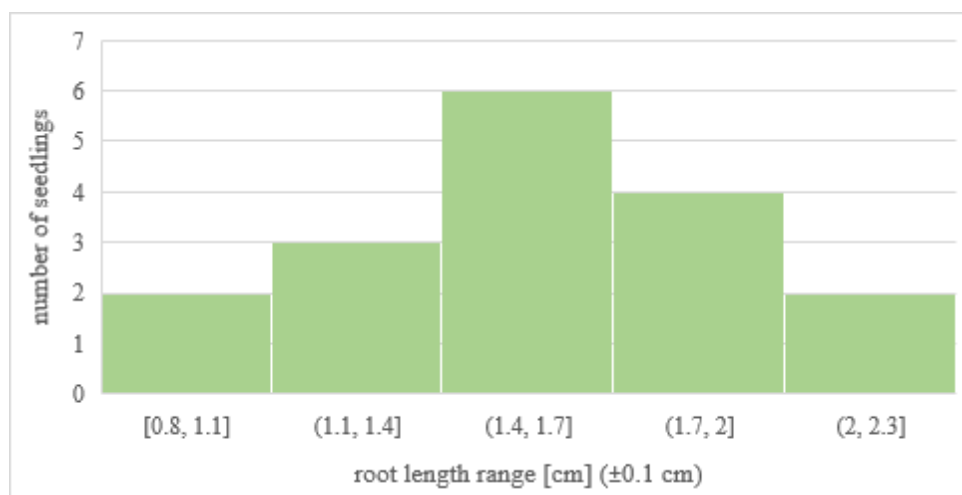


Figure 3: Histogram for the distribution of root lengths at the 1.4 vol. % concentration

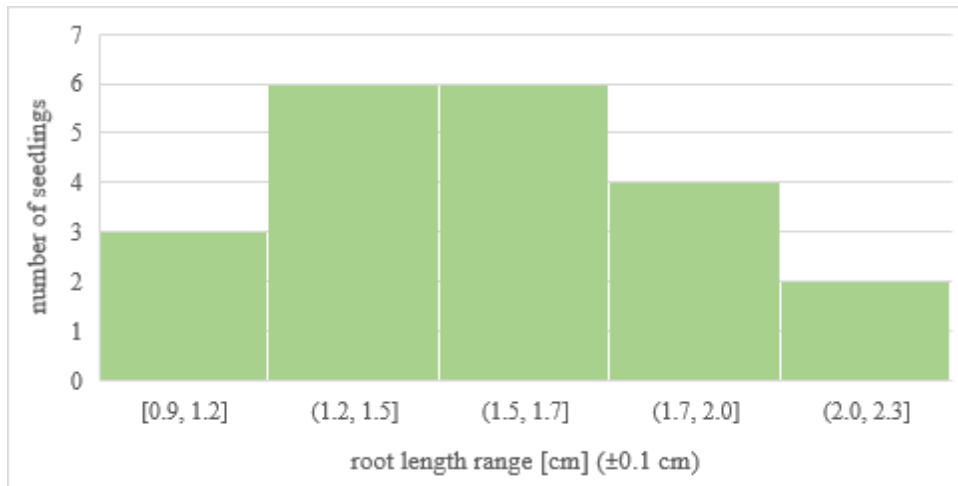


Figure 4: Histogram for the distribution of root lengths at the 2.0 vol. % concentration

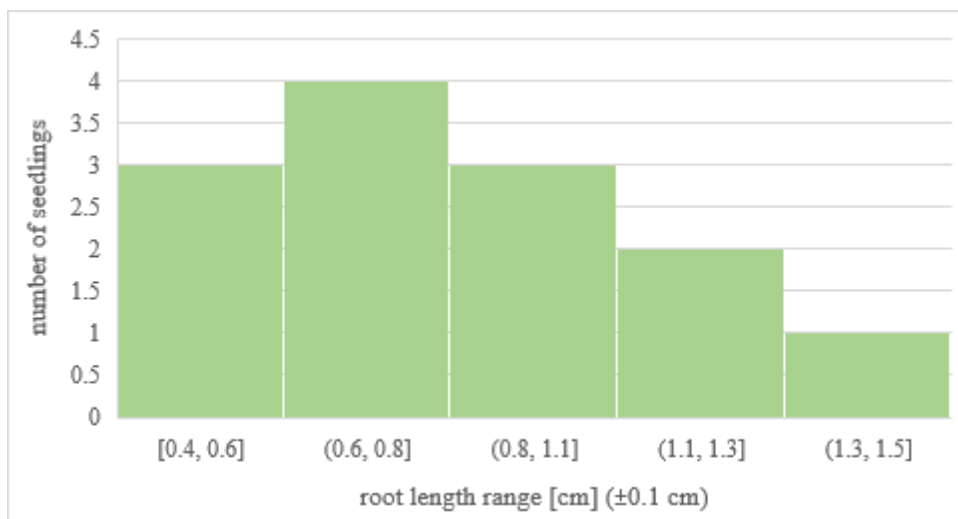


Figure 5: Histogram for the distribution of root lengths at the 5.0 vol. % concentration

3. HISTOGRAMS FOR THE DISTRIBUTION OF STEM LENGTH

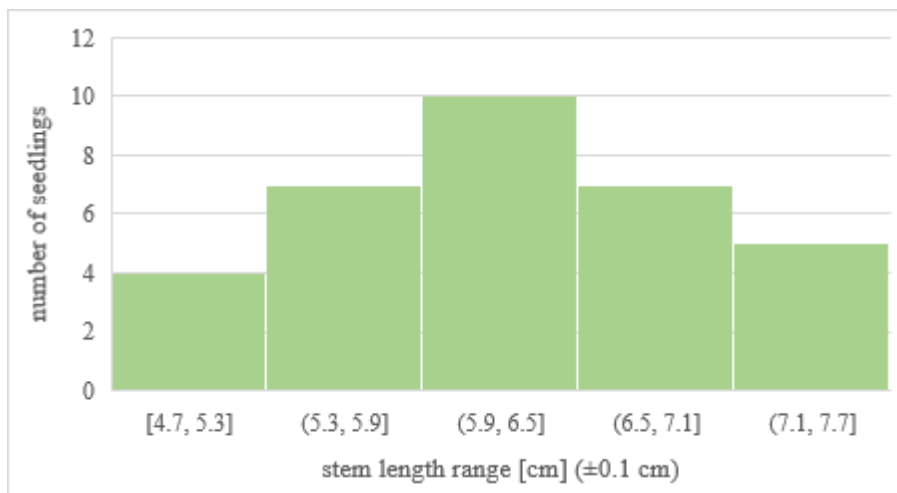


Figure 6: Histogram for the distribution of stem lengths at the control

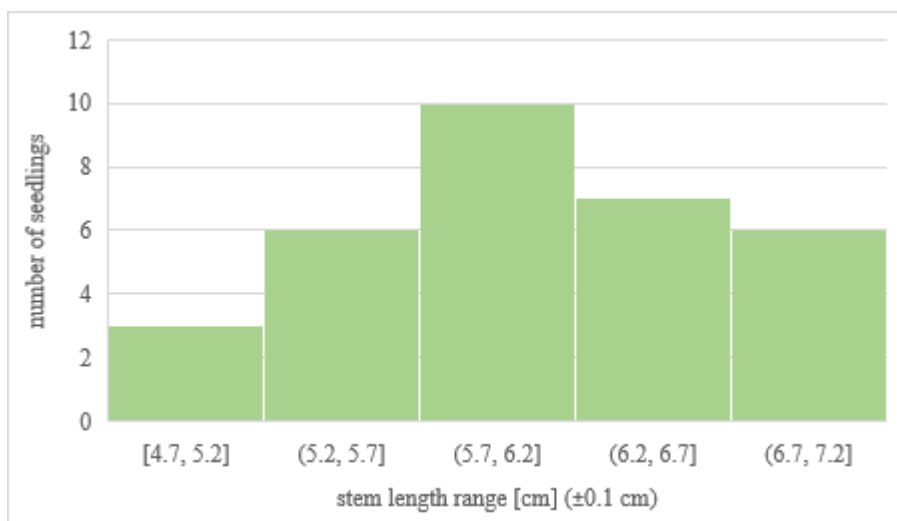


Figure 7: Histogram for the distribution of stem lengths at the 0.4 vol. % concentration

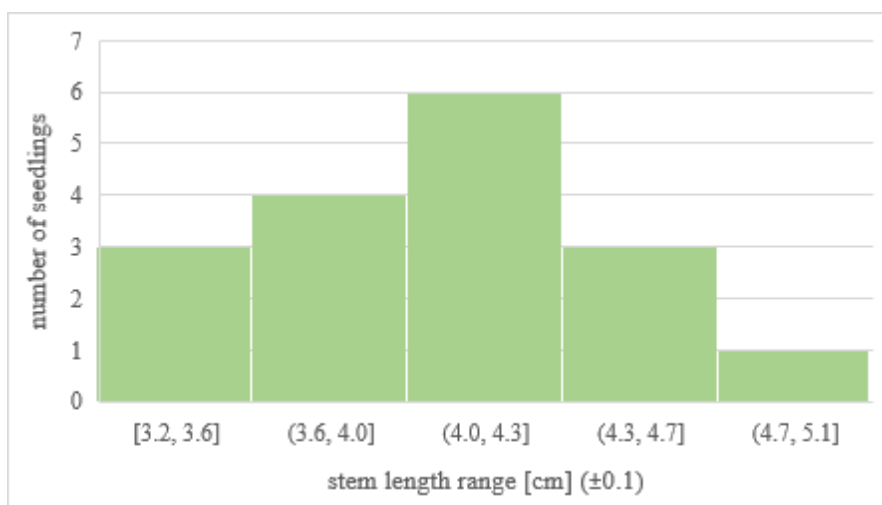


Figure 8: Histogram for the distribution of stem lengths at the 1.4 vol. % concentration

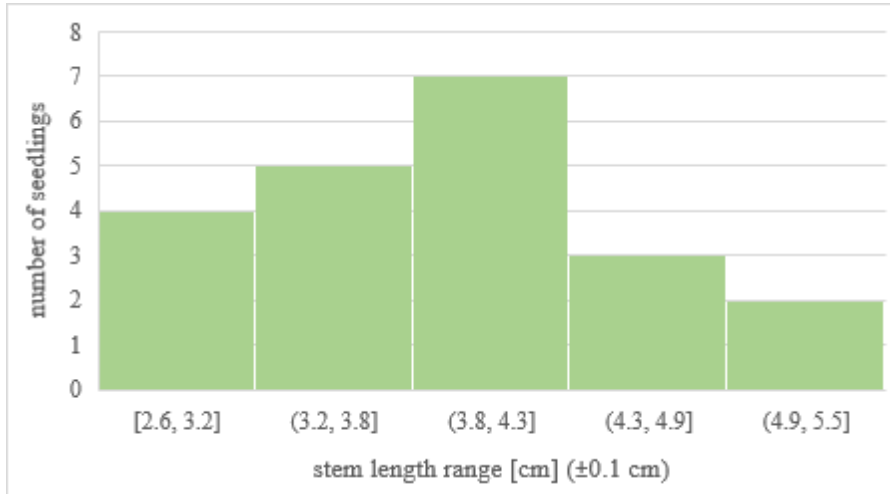


Figure 9: Histogram for the distribution of stem lengths at the 2.0 vol. % concentration

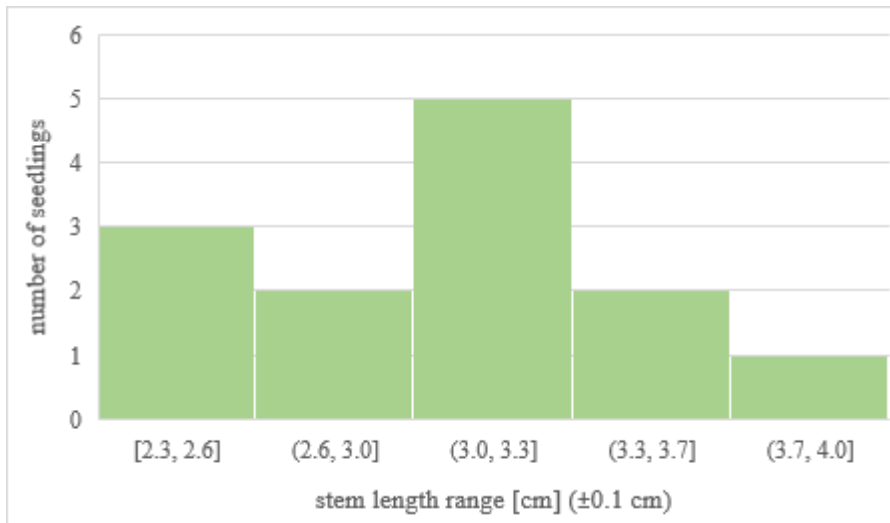


Figure 10: Histogram for the distribution of stem lengths at the 5.0 vol. % concentration

4. TUKEY HSD TEST FOR ROOT LENGTH

Table 3: Tukey HSD results for the statistically significant differences of root length at different concentrations

Treatments pair	Tukey HSD Q statistic	Tukey HSD p-value	Tukey HSD inference
0.0 vol. % vs 0.4 vol. %	1.35	0.900	insignificant
0.0 vol. % vs 0.8 vol. %	7.16	0.001	** p<0.01
0.0 vol. % vs 1.4 vol. %	13.8	0.001	** p<0.01
0.0 vol. % vs 2.0 vol. %	14.9	0.001	** p<0.01
0.0 vol. % vs 5.0 vol. %	18.5	0.001	** p<0.01
0.4 vol. % vs 0.8 vol. %	5.91	0.001	** p<0.01
0.4 vol. % vs 1.4 vol. %	12.6	0.001	** p<0.01
0.4 vol. % vs 2.0 vol. %	13.6	0.001	** p<0.01
0.4 vol. % vs 5.0 vol. %	17.4	0.001	** p<0.01
0.8 vol. % vs 1.4 vol. %	6.66	0.001	** p<0.01
0.8 vol. % vs 2.0 vol. %	7.13	0.001	** p<0.01
0.8 vol. % vs 5.0 vol. %	11.7	0.001	** p<0.01
1.4 vol. % vs 2.0 vol. %	0.08	0.900	insignificant
1.4 vol. % vs 5.0 vol. %	5.29	0.004	** p<0.01
2.0 vol. % vs 5.0 vol. %	5.44	0.002	** p<0.01

5. TUKEY HSD TEST FOR STEM LENGTH

Table 4: Tukey HSD results for the statistically significant differences of root length at different concentrations

Treatments pair	Tukey HSD Q statistic	Tukey HSD p-value	Tukey HSD inference
s0.0 vol. % vs 0.4 vol. %	1.62	0.848	insignificant
0.0 vol. % vs 0.8 vol. %	13.2	0.001	** p<0.01
0.0 vol. % vs 1.4 vol. %	15.0	0.001	** p<0.01
0.0 vol. % vs 2.0 vol. %	16.9	0.001	** p<0.01
0.0 vol. % vs 5.0 vol. %	19.9	0.001	** p<0.01
0.4 vol. % vs 0.8 vol. %	11.6	0.001	** p<0.01
0.4 vol. % vs 1.4 vol. %	13.6	0.001	** p<0.01
0.4 vol. % vs 2.0 vol. %	15.4	0.001	** p<0.01
0.4 vol. % vs 5.0 vol. %	18.6	0.001	** p<0.01
0.8 vol. % vs 1.4 vol. %	2.64	0.428	insignificant
0.8 vol. % vs 2.0 vol. %	3.57	0.124	insignificant
0.8 vol. % vs 5.0 vol. %	8.30	0.001	** p<0.01
1.4 vol. % vs 2.0 vol. %	0.73	0.900	insignificant
1.4 vol. % vs 5.0 vol. %	5.57	0.002	** p<0.01
2.0 vol. % vs 5.0 vol. %	5.14	0.005	** p<0.01