S2 File. Viability.

Section 2.1

Viability *B. megaterium* CCT 7729 (L1); MM, MMM, and MMC; 3 and 14h; bonferroni means st

Bartlett's test for equal variances: chi2(5) = 9.4599 Prob>chi2 = 0.092

L1	Summary of Viability (LOG de UFC mL -1)	
Treatment	Mean	Std. Dev.
MM 3	149.915	10.486395
MM 14	250	36.062446
MMM 3	125.89	1.4547516
MMM 14	55.222221	33.533288
MMC3	176.25	7.4246212
MMC 14	299.33334	19.79899
Total	163.88095	85.971661

Analysis of Variance

Source	SS	df	MS	F	Prob > F
Between groups	91973.8605	5	18394.7721	35.80	0.0000
Within groups	4110.78485	8	513.848106		
Total	96084.6454	13	7391.12657		

Comparison of Viability (LOG de UFC mL -1) by *B. megaterium* CCT 7729 (L1); 3 and 14h Bonferroni)

Row Mean / Col Mean	MM3	MM14	MMM3	MMM14	MMC3
MM14	100.085				
	0.034				
MMM3	-24.025	-124.11			
	1.000	0.005			
MMM14	-94.6928	-194.778	-70.6678		
	0.027	0.000	0.077		
MMC3	26.335	-73.75	50.36	121.028	
	1.000	0.175	0.615	0.006	
MMC14	149.418	49.3333	173.443	244.111	123.083
	0.003	0.918	0.000	0.000	0.009

Section 2.2

Viability, by *B. megaterium* CCT 7730 (L2); MM, MMM AND MMC, 3 and 14h

Bartlett's test for equal variances: chi2(5) = 20.9112 Prob>chi2 = 0.001

Viability, by *B. megaterium* CCT 7730 (L2); MM, MMM and MMC; 3 and 14h

Test: Equality of populations (Kruskal-Wallis test)

L2	_Obs	_RankSum
MM3	2	11.00
MM14	2	25.00
MMM3	2	15.00
MMM14	2	20.00
MMC3	3	9.00
MMC14	2	11.00

chi-squared = 8.967 with 5 d.f.

probability = 0.1104

chi-squared with ties = 8.967 with 5 d.f.

probability = 0.1104

Section 2.3

Viability *B. megaterium* CCT 7729 (L1); MM3 X *B. megaterium* CCT 7730 (L2); MM3, MM14 and MMM3, bonferroni means st

Bartlett's test for equal variances: chi2(3) = 5.8072 Prob>chi2 = 0.121

Summary of Viability		
L1 x L2	(LOG de UFC mL -1)	
Treatments	Mean	Std. Dev.
L1 MM3	149.915	10.486395
L2 MM3	83.833332	4.4783447
L2 MM14	239.25	.35355339
L2 MMM3	127.25	1.0606602
Total	150.06208	60.773067

Analysis of Variance

Source	SS	df	MS	F	Prob > F
Between groups	25722.2895	3	8574.0965	261.27	0.0000
Within groups	131.270049	4	32.8175122		
Total	25853.5596	7	3693.36565		

Comparison of Viability (LOG de UFC mL -1) by *B. megaterium* CCT 7729 (L1); MM3 x *B. megaterium* CCT 7730 (L2); MM3, MM14 and MMM3

(Bonferroni)

Row Mean- / Col Mean	L1 MM3	L2 MM3	L2 MM14
L2 MM3	-66.0817		
	0.002		
L2 MM14	89.335	155.417	
	0.001	0.000	
L2 MMM3	-22.665	43.4167	-112
	0.100	0.010	0.000

Section 2.4

Viability; *B. megaterium* CCT 7729 (L1); MM3 X *B. megaterium* CCT 7730 (L2); MMM14, MMC3 and MMC15, bonferroni means st

Bartlett's test for equal variances: chi2(3) = 9.8573 Prob>chi2 = 0.020

Test: Equality of populations (Kruskal-Wallis test)

L1 X L2	_Obs	_RankSum
L1 MM3	2	17.00
L2 MMM14	2	12.00
L2 MMC3	3	9.00
L2 MMC14	2	7.00

chi-squared = 5.733 with 3 d.f.

probability = 0.1253

chi-squared with ties = 5.733 with 3 d.f.

probability = 0.1253

Section 2.5

Viability; *B. megaterium* CCT 7729 (L1); MM14 X *B. megaterium* CCT 7730 (L2); MM3, MM14 and MMM3, bonferroni means st

Bartlett's test for equal variances: chi2(3) = 10.5843 Prob>chi2 = 0.014

Test: Equality of populations (Kruskal-Wallis test)

L1 X L2	_Obs	_RankSum
L1 MM14	2	13.00
L2 MM3	2	3.00
L2 MM14	2	13.00
L2 MMM3	2	7.00

chi-squared = 6.000 with 3 d.f.

probability = 0.1116

chi-squared with ties = 6.000 with 3 d.f.

probability = 0.1116

Section 2.6

Viability; *B. megaterium* CCT 7729 (L1); MM14 x *B. megaterium* CCT 7730 (L2); MMM14, MMC3 and MMC14, bonferroni means st

Bartlett's test for equal variances: chi2(3) = 8.8615 Prob>chi2 = 0.031

Test: Equality of populations (Kruskal-Wallis test)

L1 x L2	_Obs	_RankSum
L1 MM14	2	17.00
L2 MMM14	2	12.00
L2 MMC3	3	9.00
L2 MMC14	2	7.00

chi-squared = 5.733 with 3 d.f.

probability = 0.1253

chi-squared with ties = 5.733 with 3 d.f.

probability = 0.1253

Section 2.7

Viability *B. megaterium* CCT 7729 (L1); MMM3 X *B. megaterium* CCT 7730 (L2); MM3, MM14 and MMM3, bonferroni means st

Bartlett's test for equal variances: chi2(3) = 4.1104 Prob>chi2 = 0.250

| Summary of Viability
| (LOG de UFC mL -1)

L1 X L2	Mean	Std. Dev.
L1 MMM3	125.89	1.4547516
L2 MM3	83.833332	4.4783447
L2 MM14	239.25	.35355339
L2 MMM3	127.25	1.0606602
Total	142.03741	58.009799

Analysis of Variance

Source	SS	df	MS	F	Prob > F
Between groups	26895.5563	3	8965.18543	1755.25	0.0000
Within groups	25.5381761	5	5.10763523		
Total	26921.0945	8	3365.13681		

Comparison of Viability (LOG de UFC mL -1) by *B. megaterium* CCT 7729 (L1); MMM3 X *B. megaterium* CCT 7730 (L2); MM3, MM14 and MMM3

(Bonferroni)

Row Mean- / Col Mean	L1 MMM3	L2 MM3	L2 MM14
L2 MM3	-42.0567		
	0.000		
L2 MM14	113.36	155.417	
	0.000	0.000	
L2 MMM3	1.36	43.4167	-112
	1.000	0.000	0.000

Section 2.8

Viability; *B. megaterium* CCT 7729 (L1); MMM3 X *B. megaterium* CCT 7730 (L2); MMM14, MMC3 and MMC14, bonferroni means st

Bartlett's test for equal variances: chi2(3) = 16.9681 Prob>chi2 = 0.001

Test: Equality of populations (Kruskal-Wallis test)

L1 X L2	_Obs	_RankSum
L1 MMM3	3	18.00
L2 MMM14	2	18.00
L2 MMC3	3	9.00
L2 MMC14	2	10.00

chi-squared = 4.855 with 3 d.f.

probability = 0.1828

chi-squared with ties = 4.855 with 3 d.f.

probability = 0.1828

Section 2.9

Viability, *B. megaterium* CCT 7729 (L1); MM14 X *B. megaterium* CCT 7730 (L2); MM3, MM14 and MMM3, bonferroni means st

Bartlett's test for equal variances: chi2(3) = 11.3444 Prob>chi2 = 0.010

Test: Equality of populations (Kruskal-Wallis test)

L1 X L2	_Obs	_RankSum
L1 MMM14	3	8.00
L2 MM3	2	7.00
L2 MM14	2	17.00
L2 MMM3	2	13.00

chi-squared = 6.644 with 3 d.f.

probability = 0.0841

chi-squared with ties = 6.644 with 3 d.f.

probability = 0.0841

Section 2.10

Viability; *B. megaterium* CCT 7729 (L1); MMM14 X *B. megaterium* CCT 7730 (L2) MMM14, MMC3 and MMC14, bonferroni means st

Bartlett's test for equal variances: chi2(3) = 9.2083 Prob>chi2 = 0.027

Viability, by *B. megaterium* CCT 7729 (L1); MMM14 X *B. megaterium* CCT 7730 (L2) MMM14, MMC3 and MMC14

Test: Equality of populations (Kruskal-Wallis test)

L1 X L2	_Obs	_RankSum
L1 MMM14	3	11.00
L2 MMM14	2	18.00
L2 MMC3	3	15.00
L2 MMC14	2	11.00

chi-squared = 3.855 with 3 d.f.

probability = 0.2776

chi-squared with ties = 3.855 with 3 d.f.

probability = 0.2776

Section 2.11

Viability; *B. megaterium* CCT 7729 (L1); MMC3 X *B. megaterium* CCT 7730 (L2) MM3, MM14 and MMM3, bonferroni means st

Bartlett's test for equal variances: chi2(3) = 4.7675 Prob>chi2 = 0.190

Summary of Viability (LOG de UFC mL -1)		
L1 X L2	Mean	Std. Dev.
L1 MMC3	176.25	7.4246212
L2 MM3	83.833332	4.4783447
L2 MM14	239.25	.35355339
L2 MMM3	127.25	1.0606602
Total	156.64583	61.902602

Analysis of Variance

Source	SS	df	MS	F	Prob > F
Between groups	26747.0941	3	8915.69804	466.60	0.0000
Within groups	76.4305717	4	19.1076429		
Total	26823.5247	7	3831.9321		

Comparison of Viability (LOG de UFC mL -1) by *B. megaterium* CCT 7729 (L1); MMC3 X *B. megaterium* CCT 7730 (L2) MM3, MM14 and MMM3

(Bonferroni)

Row Mean-| / Col Mean	L1 MMC3	L2 MM3	L2 MM14
L2 MM3	-92.4167		
	0.000		
L2 MM14	63	155.417	
	0.001	0.000	
L2 MMM3	-49	43.4167	-112
	0.002	0.003	0.000

Section 2.12

Viability; *B. megaterium* CCT 7729 (L1); MMC3 X *B. megaterium* CCT 7730 (L2) MMM14, MMC3 and MMC14, bonferroni means st

Bartlett's test for equal variances: chi2(3) = 10.3204 Prob>chi2 = 0.016

Viability, by *B. megaterium* CCT 7729 (L1); MMC3 X *B. megaterium* CCT 7730 (L2) MMM14, MMC3 and MMC14

Test: Equality of populations (Kruskal-Wallis test)

L1 X L2	_Obs	_RankSum
L1 MMC3	2	17.00
L2 MMM14	2	12.00
L2 MMC3	3	9.00
L2 MMC14	2	7.00

chi-squared = 5.733 with 3 d.f.

probability = 0.1253

chi-squared with ties = 5.733 with 3 d.f.

probability = 0.1253

Section 2.13

Viability; *B. megaterium* CCT 7729 (L1); MMC14 X *B. megaterium* CCT 7730 (L2) MM3, MM14 and MMM3; bonferroni means st

Bartlett's test for equal variances: chi2(3) = 8.1483 Prob>chi2 = 0.043

Viability, by *B. megaterium* CCT 7729 (L1); MMC14 X *B. megaterium* CCT 7730 (L2) MM3, MM14 and MMM3

Test: Equality of populations (Kruskal-Wallis test)

L1 X L2	_Obs	_RankSum
L1 MMC14	2	15.00
L2 MM3	2	3.00
L2 MM14	2	11.00
L2 MMM3	2	7.00

chi-squared = 6.667 with 3 d.f.

probability = 0.0833

chi-squared with ties = 6.667 with 3 d.f.

probability = 0.0833

Section 2.14

Viability; *B. megaterium* CCT 7729 (L1); MMC14 X *B. megaterium* CCT 7730 (L2) MMM14, MMC3 and MMC14; bonferroni means st

Bartlett's test for equal variances: chi2(3) = 9.1364 Prob>chi2 = 0.028

Viability, by *B. megaterium* CCT 7729 (L1); MMC14 X *B. megaterium* CCT 7730 (L2) MMM14, MMC3 and MMC14

Test: Equality of populations (Kruskal-Wallis test)

L1 X L2	_Obs	_RankSum
L1 MMC14	2	17.00
L2 MMM14	2	12.00
L2 MMC3	3	9.00
L2 MMC14	2	7.00

chi-squared = 5.733 with 3 d.f.

probability = 0.1253

chi-squared with ties = 5.733 with 3 d.f.

probability = 0.1253