# Supplementary material: Greater phage

## genotypic diversity constrains arms-race

### coevolution

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Treatment	Time contrast	Odds-ratio	SE	z-ratio	p-value
Phage 1	1/2	0.08660000000	0.0579000	-3.66000	0.00074700
Phage 1	1/3	0.25500000000	0.1730000	-2.02000	0.10800000
Phage 1	2/3	2.94000000000	1.5100000	2.10000	0.08990000
Phage 2	1 / 2	0.00000000812	0.0000354	-0.00427	1.00000000
Phage 2	1/3	0.00000000571	0.0000249	-0.00435	1.00000000
Phage 2	2/3	0.70300000000	0.4320000	-0.57300	0.83500000
Phage 1 and 2	1/2	0.06480000000	0.0538000	-3.30000	0.00282000
Phage 1 and 2	1/3	0.01870000000	0.0157000	-4.76000	0.00000583
Phage 1 and 2	2/3	0.28900000000	0.1240000	-2.90000	0.01030000

Table S2. The proportion of phage susceptible and resistant bacterial populations when tested between three bacteria and phage time points (Tp) in each treatment. Values given to 3 significant figures.

Treatment	Bacteria Tp	Phage Tp	Susceptible	Resistant	SE
Phage 1	Day 4	Day 4	0.02780	0.972	0.01180
Phage 1	Day 4	Day 8	0.07640	0.924	0.06920
Phage 1	Day 4	Day 12	0.00694	0.993	0.00694
Phage 1	Day 8	Day 4	0.34000	0.660	0.11800
Phage 1	Day 8	Day 8	0.13900	0.861	0.07970
Phage 1	Day 8	Day 12	0.07640	0.924	0.06920
Phage 1	Day 12	Day 4	0.31200	0.688	0.10800
Phage 1	Day 12	Day 8	0.13900	0.861	0.08350
Phage 1	Day 12	Day 12	0.07640	0.924	0.06920
Phage 2	Day 4	Day 4	0.00000	1.000	0.00000
Phage 2	Day 4	Day 8	0.00000	1.000	0.00000
Phage 2	Day 4	Day 12	0.04170	0.958	0.04170
Phage 2	Day 8	Day 4	0.09720	0.903	0.04790
Phage 2	Day 8	Day 8	0.04170	0.958	0.03480
Phage 2	Day 8	Day 12	0.00000	1.000	0.00000
Phage 2	Day 12	Day 4	0.31200	0.688	0.11400
Phage 2	Day 12	Day 8	0.23600	0.764	0.09500
Phage 2	Day 12	Day 12	0.05560	0.944	0.04270
Phage 1 and 2	Day 4	Day 4	0.01390	0.986	0.01390
Phage 1 and 2	Day 4	Day 8	0.06250	0.938	0.04120
Phage 1 and 2	Day 4	Day 12	0.04860	0.951	0.02800
Phage 1 and 2	Day 8	Day 4	0.13900	0.861	0.05830
Phage 1 and 2	Day 8	Day 8	0.11800	0.882	0.06680
Phage 1 and 2	Day 8	Day 12	0.09720	0.903	0.06790
Phage 1 and 2	Day 12	Day 4	0.18100	0.819	0.08870
Phage 1 and 2	Day 12	Day 8	0.16000	0.840	0.07910
Phage 1 and 2	Day 12	Day 12	0.22200	0.778	0.09960

Table S3. Multiple pairwise comparisons comparing the probability of a bacterial clone being phage susceptible over time (1, 2 and 3 corresponding to days 4, 8 and 12) within each treatment. Tests performed on the log odds ratio scale and p-values adjusted using the Tukey method of comparing a family of three estimates. Significant contrasts in bold. Values given to 3 significant figures.

Treatment	Contrast	Odds-ratio	SE	z-ratio	p-value
Phage 1	1/2	10.600	10.300	2.4500	0.037800
Phage 1	1/3	68.700	73.700	3.9400	0.000237
Phage 1	2/3	6.460	7.160	1.6800	0.212000
Phage 2	1 / 2	2.680	2.720	0.9740	0.593000
Phage 2	1/3	15.200	17.500	2.3700	0.047000
Phage 2	2/3	5.680	6.680	1.4800	0.302000
Phage 1 and 2	1 / 2	0.950	0.899	-0.0547	0.998000
Phage 1 and 2	1/3	0.598	0.561	-0.5480	0.847000
Phage 1 and 2	2/3	0.630	0.590	-0.4940	0.874000