

Evolutionary Dynamics

Figure 2: global infectivity and resistance

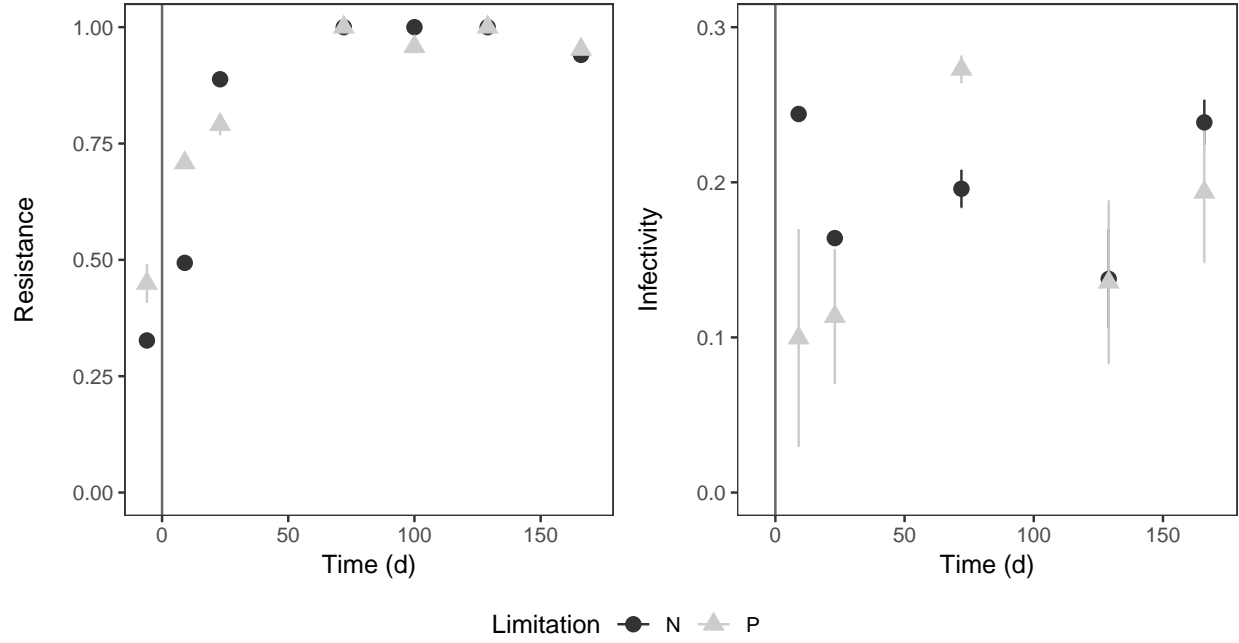


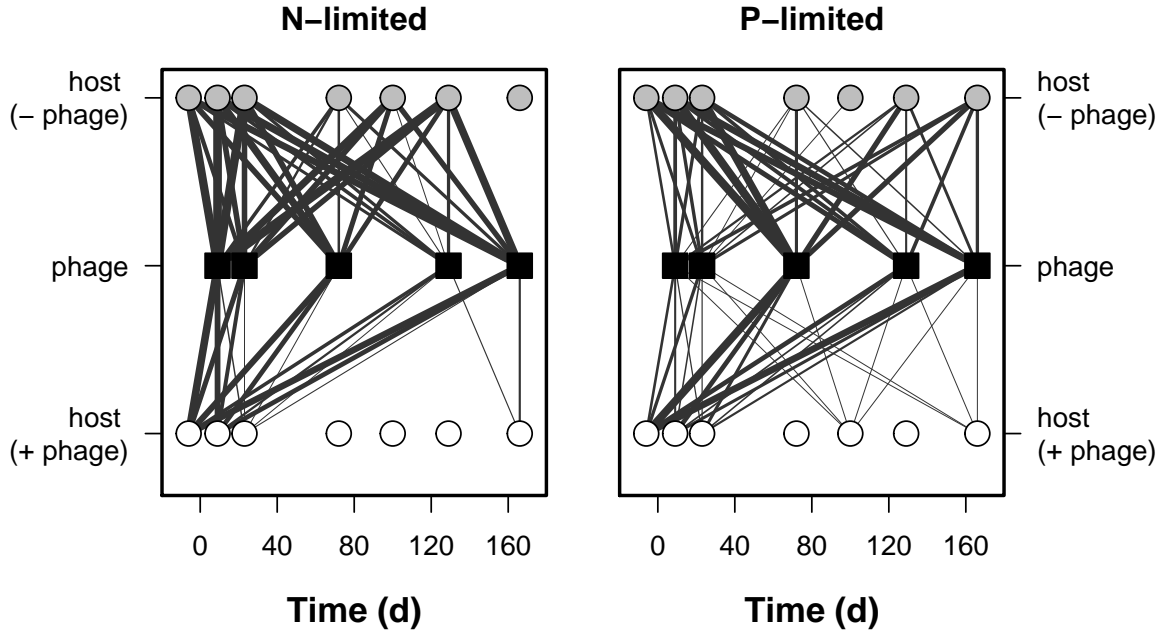
Table 1: Resistance RMANOVA results

	numDF	denDF	F-value	p-value
(Intercept)	1	601	713.8	0
lim	1	4	6.29	0.0662
bac.time	1	601	222.7	0
lim:bac.time	1	601	4.397	0.03643

Table 2: Infectivity RMANOVA results

	numDF	denDF	F-value	p-value
(Intercept)	1	601	37.55	1.61e-09
lim	1	4	4.127	0.112
phage.time	1	601	0.6392	0.4243
lim:phage.time	1	601	7.533	0.006239

Figure 3: Co-evolutionary dynamics



RMANOVA for Interaction Strengths

Table 3: RMANOVA results for interaction strengths between phage and control hosts

	numDF	denDF	F-value	p-value
(Intercept)	1	282	57.34	5.257e-13
lim	1	4	14.63	0.01869
phage.time	1	282	2.084	0.1499
bac.time	1	282	0.01975	0.8883
lim:phage.time	1	282	7.253	0.007504
lim:bac.time	1	282	0.002479	0.9603
phage.time:bac.time	1	282	1.558	0.213
lim:phage.time:bac.time	1	282	0.02579	0.8725

Table 4: RMANOVA results for interaction strengths between phage and treatment hosts

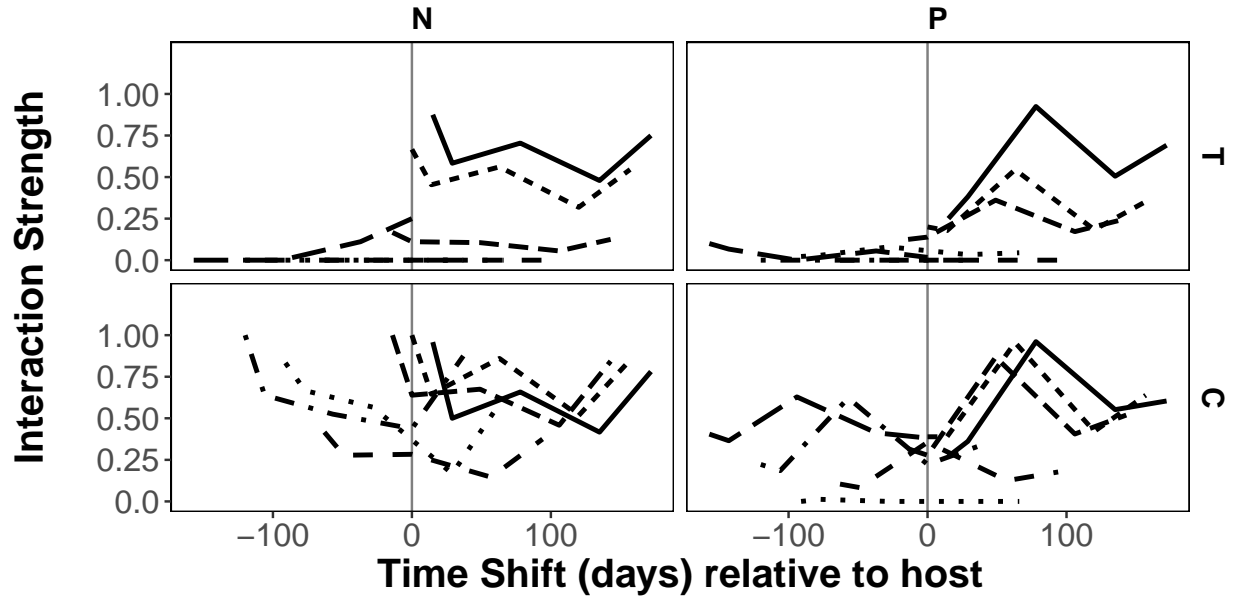
	numDF	denDF	F-value	p-value
(Intercept)	1	597	125.8	0
lim	1	4	18.28	0.01289
phage.time	1	597	2.97	0.08535
bac.time	1	597	98.06	0
lim:phage.time	1	597	32.17	2.207e-08
lim:bac.time	1	597	22.06	3.274e-06
phage.time:bac.time	1	597	1.611	0.2048

	numDF	denDF	F-value	p-value
lim:phage.time:bac.time	1	597	24.68	8.861e-07

	AIC	BIC	logLik	L.Ratio	p-value
model.ar	169.1	260.1	-65.57	NA	NA
model.arma1	115.5	211.3	-37.76	55.63	8.769e-14
model.arma2	98.61	199.2	-28.31	18.91	1.37e-05

	Std.Error	t-value	p-value
(Intercept)	0.07713	9.872	7.099e-22
trtT	0.08638	-3.702	0.0002276
limP	0.09298	-4.93	0.007875
phage.time	0.0006172	-1.916	0.05569
bac.time	0.001005	0.1231	0.9021
trtT:limP	0.1078	1.856	0.06381
trtT:phage.time	0.0007027	1.008	0.3136
limP:phage.time	0.0007399	3.511	0.0004695
trtT:bac.time	0.001097	-3.091	0.00206
limP:bac.time	0.001136	-0.02436	0.9806
phage.time:bac.time	8.462e-06	-1.811	0.07056
trtT:limP:phage.time	0.0008774	-0.9831	0.3258
trtT:limP:bac.time	0.001294	1.933	0.05351
trtT:phage.time:bac.time	9.205e-06	2.014	0.04427
limP:phage.time:bac.time	9.576e-06	0.4493	0.6533
trtT:limP:phage.time:bac.time	1.086e-05	-1.801	0.07197

Fig 4: Evolutionary Time-shifts



Time-shift statistics

Table 7: RMANOVA results for time shifts (Figure 4).

	Std.Error	t-value	p-value
(Intercept)	0.03853	16.31	1.635e-52
trtT	0.04353	-10.05	0.0001667
limP	0.04541	-6.084	0.001735
time.shift	0.0003838	-2.211	0.02726
trtT:limP	0.05345	4.45	0.006701
trtT:time.shift	0.0004238	4.997	7.002e-07
limP:time.shift	0.0004391	3.912	9.853e-05
trtT:limP:time.shift	0.0005044	-3.341	0.0008681