

Supplementary Tables

Table S1.

predictor	df(n)	df(d)	<i>F</i>	<i>p</i>
Resources	1	20	0.07	0.796
TimeStep	1	116	30.68	< 0.001
Organism	1	20	3.84	0.064
Resources : TimeStep	1	116	0.01	0.939
Resources: Organism	1	20	0.39	0.538
TimeStep: Organism	1	116	17.59	< 0.001
Resources: TimeStep : Organism	1	116	12.40	< 0.001

Table S1. Phenotypic diversification. Results of the analysis of variance (type I) for the linear mixed effects model of the phenotypic diversification (i.e., number of novel infectivity and resistance profiles).

Table S2.

predictor	df(n)	df(d)	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>
			Beta-diversity		Beta-diversity (turnover)	
Resources	1	20	1.31	0.266	2.43	0.135
Organism	1	20	9.08	0.007	0.58	0.453
Resources : TimeStep	1	20	0.19	0.661	7.00	0.016

Table S2. Beta-diversity. Results of the analysis of variance for the linear model of the beta-diversity (i.e., changes in phenotypic composition over time).

Table S3.

predictor	df	χ^2	<i>p</i>
Resources	1	4.38	0.036
TimeShift	2	11.50	0.003
Resources : TimeShift	2	10.15	0.006

Table S3. Infection probability. Results of likelihood ratio tests for the generalized linear mixed effects model (binomial distribution; link function=logit) of the infection probability.

Table S4.

predictor	df	χ^2	<i>p</i>
Network size	1	22.93	<0.001
Resources	1	3.69	0.055
TimeStep	1	0.03	0.852
Resources : TimeStep	1	0.37	0.544

Table S4. Perfectly nested contemporary networks. Results of likelihood ratio tests for the generalized linear mixed effects model (binomial distribution; link function=logit) of the probability for a network to be perfectly nested.

Table S5.

predictor	df	χ^2	<i>p</i>
Resources	1	1.31	0.253
TimeStep	1	0.02	0.879
Resources : TimeStep	1	0.23	0.632

Table S5. Connectance of contemporary networks. Results of likelihood ratio tests for the generalized linear mixed effects model (binomial distribution; link function=logit) of the connectance of the contemporary networks.

Table S6.

predictor	df(n)	df(d)	<i>F</i>	<i>p</i>
Network size	1	14	33.05	< 0.001
Connectance	1	10	7.54	0.020
TimeStep	1	16	2.48	0.136
Resources	1	9	0.52	0.487
TimeStep : Resources	1	9	21.42	0.001

Table S6. Nestedness of the contemporary networks. Results of the analysis of variance (type I) for the linear mixed effects model of the nestedness of the contemporary networks.**Table S7.**

predictor	df(n)	df(d)	<i>F</i>	<i>p</i>
Connectance	1	8	0.62	0.45
Resources	1	8	0.14	0.138
Connectance : Resources	1	8	10.89	0.011

Table S7. Nestedness of the global networks. Results of the analysis of variance for the linear model of the nestedness of the global networks.