

Supporting Information. Lohr, J.N., and C.R. Haag. 2020. Parasite-driven replacement of a sexual by a closely related asexual taxon in nature. *Ecology*.

Appendix S1

Table S1: Host and parasite origins for the outdoor experiment (experiment 1) and the laboratory experiment (experiment 2). Ponds used both for *G. vavrai* spores in experiment 2 and for *D. pulex* in experiment 1 were previously uninfected (an uninfected *Daphnia* sample was obtained from these ponds for experiment 1).

Pond	Coordinates	Breeding type	<i>D. pulex</i> used in	<i>G. vavrai</i> spores used in
AB2-1	59°49'51.6"N 23°13'57.0"E	Sexual	Experiment 1, Pair 1	
ALB-7	59°49'53.1"N 23°14'02.3"E	Sexual	Experiment 1, Pair 2	
ALO-1	59°50'06.3"N 23°15'58.5"E	Sexual	Experiment 1, Pair 3	Experiment 2
F-4	59°49'46.6"N 23°14'44.1"E	Sexual		Experiment 2
KV1-1	59°50'59.8"N 23°15'15.9"E	Sexual	Experiment 1, Pair 4	
LAG-3	59°49'39.6"N 23°11'41.3"E	Sexual	Experiment 1, Pair 5	
LH-1	59°51'02.7"N 23°15'00.2"E	Sexual		Experiment 2
M-1	59°49'26.7"N 23°14'50.8"E	Sexual		Experiment 1
M-60	59°49'19.2"N 23°14'57.5"E	Sexual	Experiment 1, Pair 6	Experiment 2
N-69	59°49'19.6"N 23°15'36.8"E	Sexual	Experiment 1, Pair 7	
N-74	59°49'19.2"N 23°15'35.9"E	Sexual		Experiment 2
RO1-3	59°50'17.4"N 23°15'07.5"E	Sexual	Experiment 1, Pair 8	
RO1-6	59°50'14.1"N 23°15'04.7"E	Sexual		Experiment 1
SK-47	59°49'57.0"N 23°15'19.7"E	Sexual		Experiment 2
VIN-4	59°49'53.5"N 23°12'26.5"E	Sexual	Experiment 1, Pair 9	
VIW-3	59°49'49.8"N 23°12'01.1"E	Sexual	Experiment 1, Pair 10	
FU1-57	59°49'59.2"N 23°16'08.5"E	Asexual	Experiment 1, Pair 1	
FU2-83	59°50'10.6"N 23°16'34.8"E	Asexual	Experiment 1, Pair 2	
M-69	59°49'10.8"N 23°14'49.6"E	Asexual	Experiment 1, Pair 3	Experiment 2
N-80	59°49'20.3"N 23°15'35.9"E	Asexual		Experiment 1*
SK-30	59°49'52.1"N 23°15'19.6"E	Asexual	Experiment 1, Pair 4	
SK-39	59°49'55.7"N 23°15'17.6"E	Asexual	Experiment 1, Pair 5	Experiment 1 Experiment 2
SK-42	59°49'55.8"N 23°15'18.4"E	Asexual		Experiment 2
SK-44	59°49'55.9"N 23°15'18.8"E	Asexual	Experiment 1, Pair 6	
SK-45	59°49'55.9"N 23°15'18.9"E	Asexual	Experiment 1, Pair 7	Experiment 2
SYN-3	59°52'23.2"N 23°14'45.6"E	Asexual	Experiment 1, Pair 8	Experiment 2
SYN-4	59°52'23.1"N 23°14'45.7"E	Asexual	Experiment 1, Pair 9	
SYN-5	59°52'23.8"N 23°14'45.0"E	Asexual		Experiment 2
SYN-6	59°52'24.0"N 23°14'44.0"E	Asexual	Experiment 1, Pair 10	

The * indicates that *G. vavrai* was cultured on *D. pulex* from this pond prior to the experiment, but the spores were originally obtained from the pond SK-39.

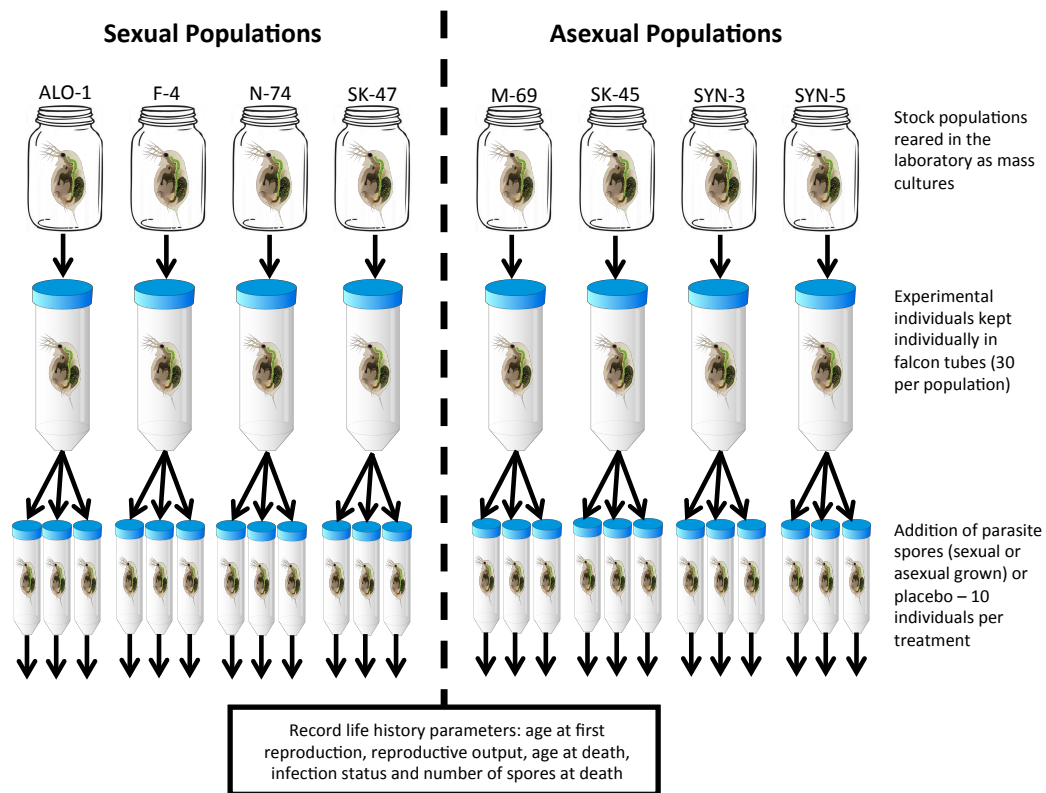


Figure S1. Experimental design of the laboratory experiment. Four sexual and four asexual clones were each established from an independent pond within the Finnish archipelago.