

Supplementary Table 1. Total sample size, raw counts, and relative abundances provided. Relative abundances provided in three forms under raw counts. In order from top to bottom under: Total relative abundance, relative abundance within unisexuals, and relative abundance within ploidy level. Host species are not provided relative abundance within unisexuals or within ploidy level as they are not unisexuals. The LT genomotype is not provided relative abundance within ploidy level as they are the only diploid unisexual genomotype. When ploidy level is determined but genomotype is not, samples are labeled with '?'s based on ploidy level. As all unisexuals must maintain at least one L and one T on Pelee, unknown unisexual samples must be at least LT, therefore unknown contributions are labeled with '?'s. Sites arranged by dissimilarity and cluster order with the Island level (gamma-diversity) data on top. Island level data includes all samples, including from sites removed due to sample size (i.e. D6.2 and D2).

	Total Sample	Hosts		Unisexuals																	
	Hosts Unisexuals	A. lat	A. tex	2N	3N			4N				5N									
				LL TT 2N 3N 4N 5N	LL	TT	LT	LLT	LTT	LT?	LLT LTT LT?	LLLT	LLTT	LTTT	LT??	LLLT LLTT LTTT LT??	LLLLT	LLLTT	LLTTT	LTTTT	LT???
ISLAND																					
Pelee	2646 Hosts: 2 - 151 Unisexual: 1693 - 657 - 129 - 14	2 0.1% NA NA	151 5.7% NA NA	1693 64.0% 67.9% NA	61 2.3% 2.4% 9.3%	547 20.7% 21.9% 83.3%	49 1.9% 2.0% 7.5%	657 61 - 547 - 49	1 0.0% 0.0% 0.8%	14 0.5% 0.6% 10.9%	99 3.7% 4.0% 76.7%	15 0.6% 0.6% 11.6%	129 1 - 14 - 99 - 15	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	8 0.3% 0.3% 57.1%	4 0.2% 0.2% 28.6%	2 0.1% 0.1% 14.3%	14 0 - 0 - 8 - 4 - 2		
CLUSTER 1																					
B3	55 Hosts: 1 - 0 Unisexual: 29 - 22 - 2 - 1	1 1.8% NA NA	0 0.0% NA NA	29 52.7% 53.7% NA	18 32.7% 33.3% 81.8%	4 7.3% 7.4% 18.2%	0 0.0% 0.0% 0.0%	22 18 - 4 - 0	1 1.8% 1.9% 50.0%	1 1.8% 1.9% 50.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	2 1 - 1 - 0 - 0	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	1 1.8% 1.9% 100.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	1 0 - 0 - 1 - 0 - 0		
CLUSTER 2																					
C3	107 Hosts: 0 - 16 Unisexual: 42 - 21 - 28 - 0	0 0.0% NA NA	16 15.0% NA NA	42 39.3% 46.2% NA	0 0.0% 0.0% 0.0%	21 19.6% 23.1% 100.0%	0 0.0% 0.0% 0.0%	21 0 - 21 - 0	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	28 26.2% 30.8% 100.0%	0 0.0% 0.0% 0.0%	28 0 - 0 - 28 - 0	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0 - 0 - 0 - 0 - 0		
CLUSTER 3																					
D1.2	104 Hosts: 0 - 7 Unisexual: 59 - 30 - 7 - 1	0 0.0% NA NA	7 6.7% NA NA	59 56.7% 60.8% NA	1 1.0% 1.0% 3.3%	27 26.0% 27.8% 90.0%	2 1.9% 2.1% 6.7%	30 1 - 27 - 2	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	7 6.7% 7.2% 100.0%	0 0.0% 0.0% 0.0%	7 0 - 0 - 7 - 0	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	1 1.0% 1.0% 100.0%	0 0.0% 0.0% 0.0%	1 0 - 0 - 0 - 1 - 0		
D3.1	579 Hosts: 1 - 69 Unisexual: 299 - 179 - 24 - 7	1 0.2% NA NA	69 11.9% NA NA	299 51.6% 58.7% NA	6 1.0% 1.2% 3.4%	165 28.5% 32.4% 92.2%	8 1.4% 1.6% 4.5%	179 6 - 165 - 8	0 0.0% 0.0% 0.0%	2 0.3% 0.4% 8.3%	18 3.1% 3.5% 75.0%	4 0.7% 0.8% 16.7%	24 0 - 2 - 18 - 4	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	5 0.9% 1.0% 71.4%	2 0.3% 0.4% 28.6%	0 0.0% 0.0% 0.0%	7 0 - 0 - 5 - 2 - 0		
D6.1	59 Hosts: 0 - 6 Unisexual: 35 - 17 - 1 - 0	0 0.0% NA NA	6 10.2% NA NA	35 59.3% 66.0% NA	0 0.0% 0.0% 0.0%	17 28.8% 32.1% 100.0%	0 0.0% 0.0% 0.0%	17 0 - 17 - 0	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	1 1.7% 1.9% 100.0%	0 0.0% 0.0% 0.0%	1 0 - 0 - 1 - 0	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0 - 0 - 0 - 0 - 0		
D7	154 Hosts: 0 - 14 Unisexual: 86 - 47 - 6 - 1	0 0.0% NA NA	14 9.1% NA NA	86 55.8% 61.4% NA	1 0.6% 0.7% 2.1%	44 28.6% 31.4% 93.6%	2 1.3% 1.4% 4.3%	47 1 - 44 - 2	0 0.0% 0.0% 0.0%	1 0.6% 0.7% 16.7%	4 2.6% 2.9% 66.7%	1 0.6% 0.7% 16.7%	6 0 - 1 - 4 - 1	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	1 0.6% 0.7% 100.0%	0 0.0% 0.0% 0.0%	1 0 - 0 - 0 - 1 - 0		
CLUSTER 4																					
D1.1	91 Hosts: 0 - 3 Unisexual: 60 - 21 - 7 - 0	0 0.0% NA NA	3 3.3% NA NA	60 65.9% 68.2% NA	5 5.5% 5.7% 23.8%	13 14.3% 14.8% 61.9%	3 3.3% 3.4% 14.3%	21 5 - 13 - 3	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	7 7.7% 8.0% 100.0%	0 0.0% 0.0% 0.0%	7 0 - 0 - 7 - 0	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0 - 0 - 0 - 0 - 0		
B8	396 Hosts: 0 - 26 Unisexual: 295 - 62 - 13 - 0	0 0.0% NA NA	26 6.6% NA NA	295 74.5% 79.7% NA	5 1.3% 1.4% 8.1%	53 13.4% 14.3% 85.5%	4 1.0% 1.1% 6.5%	62 5 - 53 - 4	0 0.0% 0.0% 0.0%	2 0.5% 0.5% 15.4%	9 2.3% 2.4% 69.2%	2 0.5% 0.5% 15.4%	13 0 - 2 - 9 - 2	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0 - 0 - 0 - 0 - 0		
B6	744 Hosts: 0 - 3 Unisexual: 535 - 179 - 27 - 0	0 0.0% NA NA	3 0.4% NA NA	535 71.9% 72.2% NA	23 3.1% 3.1% 12.8%	135 18.1% 18.2% 75.4%	21 2.8% 2.8% 11.7%	179 23 - 135 - 21	0 0.0% 0.0% 0.0%	8 1.1% 1.1% 29.6%	14 1.9% 1.9% 51.9%	5 0.7% 0.7% 18.5%	27 0 - 8 - 14 - 5	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	0 0 - 0 - 0 - 0 - 0		
D3.2	340 Hosts: 0 - 6 Unisexual: 245 - 72 - 13 - 4	0 0.0% NA NA	6 1.8% NA NA	245 72.1% 73.4% NA	2 0.6% 0.6% 2.8%	61 17.9% 18.3% 84.7%	9 2.6% 2.7% 12.5%	72 2 - 61 - 9	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	11 3.2% 3.3% 84.6%	2 0.6% 0.6% 15.4%	13 0 - 0 - 11 - 2	0 0.0% 0.0% 0.0%	0 0.0% 0.0% 0.0%	2 0.6% 0.6% 50.0%	0 0.0% 0.0% 0.0%	2 0.6% 0.6% 50.0%	4 0 - 0 - 2 - 0 - 2		