

Table 1. Nucleic acid contents, observed and predicted burst sizes for a range of algae and viruses*. dsDNA viruses unless otherwise noted.

Host organism	Habitat	Cell volume (μm^3)	Host genome (nucleotides/haploid cell)	Virus	Virus type	Viral genome (nucleotides per virus)	Burst—reported	Burst—predicted**
<i>Synechococcus</i> WH7803	Marine	1.8	4.74×10^6	S-PM2	Cyanomyovirus	392560	41	24
<i>Synechococcus</i> WH7803	Marine	1.8	4.74×10^6	P60	Cyanopodovirus	95744	81	99
<i>Microcystis aeruginosa</i> NIES-298	Freshwater	35	9.60×10^6	Ma-LMM01	Cyanomyovirus	320000	85	60
<i>Micromonas pusilla</i>	Marine	1.8	4.93×10^7	MpV	Phycodnavirus	400000	85	123
<i>Micromonas pusilla</i>	Marine	1.8	4.93×10^7	MpRNAV-01B	Reovirus (dsRNA)	51000	490	966
<i>Chlorella</i> NC64A	<i>P. bursaria</i> endo-symbiont	53	7.76×10^7	PBCV-1	Phycodnavirus	661488	138	117
<i>Chaetoceros salsgineum</i>	Marine	115	2.39×10^8	CsNIV	Circovirus? (ssDNA)	7002	325	34147
<i>Phaeocystis globosa</i> Pg-I	Marine	65	3.83×10^8	PgV Group I	Phycodnavirus	932000	248	411
<i>Phaeocystis globosa</i> Pg-I	Marine	65	3.83×10^8	PgV Group II	Phycodnavirus	354000	369	1083
<i>Phaeocystis pouchetii</i> AJ01, AJ10	Marine	65	4.02×10^8	PpV	Phycodnavirus	970000	475	414
<i>Emiliania huxleyi</i>	Marine	115	4.40×10^8	EhV	Phycodnavirus	824000	620	534
<i>Heterosigma akashiwo</i>	Marine	1766	3.89×10^9	HaV-01	Phycodnavirus	588000	770	6612
<i>Heterosigma akashiwo</i>	Marine	1766	3.89×10^9	HaRNAV	Marnavirus (ssRNA)	8587	21000	452728
<i>Heterocapsa circularisquama</i>	Marine	4187	1.66×10^{10}	HcV-01	Phycodnavirus	712000	2120	23327
<i>Heterocapsa circularisquama</i>	Marine	4187	1.66×10^{10}	HcRNAV	Unassigned (ssRNA)	4400	12200	3774745

*, see Materials and Methods for data sources and treatments; **, host genomic nucleotides/viral nucleotides.