

Table S5: Relationship between disorder and genome size within each family (like main Table 2, with interquartile ranges/minima/maxima indicating the spread of disorder within each family).

Family	N ^a	S ^b (Kbp)		D ^c (%)		Correlation ^d						R ² _B	R ² _{BS}	p ^e
		μ	σ	μ	σ	interquartile	Min	Max	ρ	P				
<i>Geminiviridae</i>	254	3.59	1.20	18.57	3.13	16.6	20.7	9.3	26.2	-0.38	5.0 x 10⁻¹⁰	0.10	0.22	2.51 x 10⁻⁹
<i>Virgaviridae</i>	38	8.11	2.17	4.93	2.45	3.2	6.0	1.9	11.5	0.78	9.9 x 10⁻⁹	0.13	0.64	3.70 x 10⁻⁸
<i>Alphaflexiviridae</i>	40	6.80	0.81	13.94	4.58	10.3	17.4	3.8	24.5	0.57	1.7 x 10⁻⁴	0.35	0.71	1.16 x 10⁻⁷
<i>Podoviridae</i>	91	42.59	14.18	12.47	2.93	10.6	13.7	6.0	20.9	0.29	5.9 x 10 ⁻³	0.24	0.35	2.29 x 10⁻⁴
<i>Bromoviridae</i>	29	8.43	0.27	8.52	2.01	7.2	9.6	5.6	12.7	0.57	1.5 x 10 ⁻³	0.30	0.59	2.73 x 10⁻⁴
<i>Bunyaviridae</i>	25	13.98	2.70	2.90	1.22	2.3	3.6	1.0	6.6	0.06	0.77	-0.02	0.40	7.01 x 10⁻⁴
<i>Myoviridae</i>	102	109.18	70.18	11.42	3.91	8.8	12.7	4.7	29.0	-0.29	3.1 x 10 ⁻³	0.57	0.61	1.17 x 10⁻³
<i>Microviridae</i>	15	5.12	0.65	13.51	4.76	11.8	13.6	8.1	29.9	0.05	0.87	0.75	0.87	6.90 x 10 ⁻³
<i>Poxviridae</i>	27	185.60	51.15	5.63	2.75	3.6	5.9	2.7	13.9	0.11	0.57	0.83	0.87	0.01
<i>Paramyxoviridae</i>	33	15.86	1.28	12.37	2.97	9.5	14.3	8.2	18.3	0.41	0.02	0.14	0.29	0.01
<i>Potyviridae</i>	79	9.83	0.41	5.51	1.54	4.4	6.4	2.7	10.4	0.06	0.59	0.22	0.27	0.01
<i>Secoviridae</i>	32	11.19	1.61	4.16	2.08	2.7	5.4	1.2	9.8	0.71	4.7 x 10⁻⁶	0.37	0.48	0.01
<i>Coronaviridae</i>	52	29.30	1.31	3.68	1.33	3.1	4.2	1.8	8.4	0.29	0.04	0.32	0.39	0.02
<i>Picornaviridae</i>	56	7.67	0.48	6.53	2.51	4.5	8.5	2.3	11.5	0.59	2.2 x 10⁻⁶	0.72	0.74	0.02
<i>Parvoviridae</i>	53	5.09	0.55	19.96	3.66	17.8	22.5	13.1	32.0	-0.42	1.7 x 10 ⁻³	0.30	0.35	0.03
<i>Tombusviridae</i>	43	4.27	0.46	10.29	3.12	8.2	12.7	4.4	17.1	-0.26	0.10	0.32	0.38	0.04
<i>Papillomaviridae</i>	96	7.67	0.33	21.17	4.02	18.7	23.3	10.8	30.1	-0.14	0.18	0.46	0.47	0.09
<i>Closteroviridae</i>	25	16.31	1.38	5.85	1.98	4.6	7.3	2.3	10.5	-0.22	0.29	0.17	0.24	0.10
<i>Luteoviridae</i>	22	5.74	0.15	23.08	2.36	20.9	24.9	19.8	29.0	0.43	0.04	0.34	0.41	0.11
<i>Nodaviridae</i>	12	4.49	0.08	18.51	2.33	17.0	18.8	15.4	22.9	0.11	0.74	0.74	0.80	0.11
<i>Polyomaviridae</i>	21	5.14	0.17	18.62	4.80	15.8	20.6	10.5	30.5	0.40	0.07	0.69	0.71	0.16
<i>Rhabdoviridae</i>	27	12.42	1.21	7.32	1.34	6.4	8.0	4.3	11.4	-0.08	0.69	-0.01	0.03	0.17

<i>Adenoviridae</i>	26	34.85	8.34	16.14	4.59	14.0	17.8	8.4	25.4	0.60	1.5×10^{-3}	0.74	0.75	0.17
<i>Partitiviridae</i>	25	4.25	0.68	9.88	3.74	7.9	11.2	3.0	11.7	0.20	0.35	0.32	0.34	0.23
<i>Siphoviridae</i>	244	47.79	15.91	12.75	3.91	9.7	15.2	6.7	28.2	0.55	2.2×10^{-16}	0.62	0.62	0.23
<i>Togaviridae</i>	17	11.52	0.49	8.78	3.13	7.4	9.2	4.4	17.4	0.36	0.15	0.78	0.79	0.26
<i>Flaviviridae</i>	52	10.96	1.76	5.23	1.84	4.1	6.1	2.2	10.0	-0.15	0.28	0.71	0.71	0.30
<i>Retroviridae</i>	57	8.45	2.39	17.94	7.01	13.1	20.6	2.5	38.9	-0.17	0.21	0.24	0.24	0.33
<i>Arenaviridae</i>	26	10.52	0.15	3.58	0.80	3.0	4.2	2.4	5.9	-0.09	0.67	0.12	0.12	0.35
<i>Reoviridae</i>	39	23.52	5.87	6.23	1.49	5.1	7.0	3.3	9.8	0.16	0.34	0.10	0.09	0.44
<i>Baculoviridae</i>	53	131.86	21.97	8.14	1.50	7.0	8.9	5.4	12.0	0.47	4.3×10^{-4}	0.57	0.56	0.48
<i>Herpesviridae</i>	42	163.97	43.17	17.87	5.40	13.7	22.1	7.6	29.7	0.48	1.4×10^{-3}	0.73	0.73	0.49
<i>Tymoviridae</i>	21	6.42	0.37	22.83	7.03	19.0	28.1	9.8	35.3	0.26	0.25	0.50	0.48	0.53
<i>Betaflexiviridae</i>	46	8.28	0.61	6.74	2.06	5.2	8.0	3.0	11.5	-0.17	0.26	0.11	0.09	0.63
<i>Caulimoviridae</i>	36	7.82	0.44	14.55	4.21	11.0	18.2	7.2	22.4	0.08	0.66	0.20	0.17	0.71
<i>Anelloviridae</i>	36	3.26	0.54	29.50	8.31	22.8	35.2	15.6	45.2	0.26	0.13	0.38	0.36	0.72
<i>Caliciviridae</i>	21	7.72	0.54	8.33	2.94	6.2	9.4	4.0	17.5	-0.17	0.45	0.15	0.10	0.73
<i>Dicistroviridae</i>	14	9.29	0.57	5.17	1.74	3.8	6.0	2.4	9.5	0.20	0.48	0.66	0.63	0.76
<i>Totiviridae</i>	29	5.67	1.72	8.64	4.31	5.8	10.8	2.6	17.5	0.23	0.22	0.39	0.36	0.89
<i>Circoviridae</i>	16	2.05	0.41	12.75	8.86	8.2	13.6	4.2	13.9	0.07	0.79	0.58	0.53	0.92
<i>Inoviridae</i>	26	7.29	1.08	10.43	4.19	7.2	12.7	3.7	18.3	-0.09	0.65	0.60	0.58	1.00