

**Table S3.** Odds ratio for members of the family *Closteroviridae*

Genus	ID	Name	Proportiones nucleótidos												Significance	Values							
			A	C	G	T	U	C	G	A	C	G	T	U									
Amegilovirus	KC05450.1	BVAV	1.0174	0.7944	1.125	1.1133	0.9127	1.096	1.0187	0.9745	0.9587	1.0748	0.9544	0.9909	0.9661	1.0615	0.9001	0.9233	0.8643	0.26	0.27	0.20	0.28
	JO23121.1	GLAV1	1.0944	0.9127	1.0073	0.9923	0.8639	1.149	1.0916	0.9161	0.9218	0.943	0.9999	1.2792	1.036	0.9699	1.0345	1.0024	0.8659	0.27	0.28	0.18	0.27
	AF07328.2	GLAV3	1.0537	0.8382	1.0027	1.0407	0.9405	1.1540	1.0052	0.8854	0.9702	0.9897	0.9234	1.0962	1.0209	1.0283	0.9583	1.0018	0.8659	0.26	0.28	0.20	0.27
	F86755.1	GLAV6	1.1156	0.9388	1.008	1.0502	0.8699	1.2161	1.12	1.0377	1.08	1.0588	0.9944	0.8698	1.154	0.9365	0.9507	0.9995	0.8659	0.29	0.28	0.19	0.24
	LC05212.1	GLAV13	1.0459	1.0095	0.9313	1.0024	0.8664	1.1343	1.1581	0.8793	1.0217	0.9337	0.8775	1.1807	1.0677	0.9565	1.031	0.971	0.8659	0.29	0.26	0.21	0.24
	AF15156.1	LCV2	1.136	0.769	1.1424	1.0152	0.7991	1.1304	1.1138	1.0314	1.0156	1.0446	0.961	0.9352	1.1288	1.0911	0.8659	0.9909	0.8659	0.29	0.20	0.18	0.23
	AF141125.3	PMWAV1	1.0703	0.8629	1.0284	1.047	0.7763	1.0594	1.0708	1.0344	1.0238	1.0332	0.986	0.9402	1.1439	0.9556	0.9959	0.9504	0.8659	0.29	0.27	0.18	0.24
	AF28110.2	PMWAV2	0.9719	0.9516	1.1189	0.9998	1.082	1.0279	0.8532	0.9846	0.888	0.9991	0.8791	1.2104	1.0198	1.0228	1.1203	0.8659	0.8659	0.28	0.29	0.18	0.25
	DF09929.2	PMWAV3	1.0615	0.8589	1.1277	0.9869	0.7891	1.1217	1.0438	1.0915	1.005	1.021	0.9917	0.9742	1.1605	1.0227	1.0922	0.9423	0.8659	0.29	0.27	0.19	0.25
	FF54464.1	PuBIRSVW	1.1541	0.8421	1.044	1.0003	0.8698	1.0751	1.0905	1.0984	1.0535	1.0524	0.868	1.1788	0.9651	0.7821	1.0462	0.8659	0.8659	0.27	0.32	0.19	0.23
Closterovirus	US393.1	BVSV	1.1474	0.7246	1.1247	1.0301	0.8146	1.1798	1.045	0.9766	0.8564	1.1138	0.8813	1.1443	1.1615	1.0338	0.9039	0.8643	0.8643	0.28	0.27	0.21	0.24
	K74746.1	BVY	0.8588	0.8689	1.1222	0.9542	0.8685	1.2622	1.1052	0.9162	0.9655	1.062	0.8148	1.1443	1.2271	1.0386	0.9168	0.8476	0.8643	0.25	0.29	0.21	0.24
	GU234166.1	CanEV	1.1144	0.75	1.1304	0.947	0.7495	1.2051	1.063	0.974	0.9201	0.9479	0.9798	1.3561	1.126	1.0813	0.9687	0.8654	0.8654	0.27	0.29	0.22	0.23
	F86882.1	CarV	1.1313	0.7968	0.9437	0.9425	0.8569	1.2215	1.176	0.8844	0.8531	0.9977	0.9458	1.2481	1.1825	0.9588	0.8961	0.9456	0.8649	0.27	0.28	0.24	0.21
	US393.1	CTV	1.1579	0.8094	1.1657	0.9251	0.8609	1.1045	1.09	0.9392	0.8291	0.9884	0.9017	1.0888	1.1207	1.071	0.8638	0.9683	0.8649	0.24	0.30	0.20	0.25
	AF51628.1	GLAV2	1.0408	0.9231	0.962	0.9954	0.7555	1.1739	1.0911	0.9702	0.8833	0.9981	0.9701	1.2883	1.1325	0.9816	1.095	0.8613	0.8649	0.25	0.29	0.21	0.24
	AF73420.1	MV1	1.1936	0.8466	1.0734	0.9102	0.7223	1.0888	1.2253	0.9713	0.8979	1.0001	0.781	1.2985	1.2397	1.0368	0.8567	0.8411	0.8649	0.25	0.29	0.23	0.23
	DC057128.1	RSV	1.2397	0.8076	0.9821	1.0576	0.7601	1.1037	1.1638	0.9793	0.8313	1.085	0.9496	1.1039	1.224	0.9659	0.9402	0.9683	0.8649	0.24	0.31	0.25	0.25
	K74800.1	RollAV	1.1574	0.8361	1.0711	0.9825	0.7468	1.1047	0.9838	1.1297	0.8669	1.069	1.0165	0.9205	1.15	0.9793	0.8395	0.9338	0.8649	0.24	0.29	0.21	0.26
	DG08089.1	SCAV	1.103	0.8223	1.0388	1.0828	0.8291	1.1141	1.0155	1.0422	1.0076	1.1479	0.9064	0.8663	1.0972	0.9499	1.0552	0.9456	0.8649	0.28	0.31	0.21	0.26
Chilivirus	KY03917.1	TYV	1.1423	0.7862	1.09	1.0	0.7663	1.1460	1.1094	1.0188	0.9519	1.0231	0.8748	1.1202	1.1728	1.0246	0.8677	0.8674	0.8659	0.28	0.29	0.21	0.23
	NC_018561.1 NC_018561.1	BVDV	1.0541	0.9508	0.9829	0.9172	0.717	1.0876	1.1061	1.2588	1.2429	0.9093	1.139	0.858	1.1411	0.9563	0.9599	1.0193	0.8659	0.34	0.30	0.16	0.20
	NC_005212.1 NC_005212.2	BVDV	1.0999	0.8669	1.0351	0.9864	0.8688	1.1624	1.2503	1.0886	1.0941	0.9074	0.8717	0.9242	1.0386	0.922	0.8488	0.9437	0.8659	0.30	0.29	0.19	0.21
	NC_009612.1 NC_009612.1	BVDV	1.0146	0.9063	0.961	1.11	0.7137	1.0751	1.1886	1.1445	1.149	1.003	1.0513	0.8688	1.0751	0.9395	0.7358	0.9448	0.8659	0.30	0.31	0.17	0.21
	NC_040953.1 NC_040953.1	CHSDV	1.0538	0.9749	0.9884	0.9619	0.7623	1.0888	1.0911	1.1611	1.1407	0.9396	1.1359	0.9604	1.1483	0.9621	0.7865	0.9834	0.8659	0.31	0.30	0.16	0.21
	NC_018761.1 NC_018761.1	DENV	1.0713	0.9602	0.9585	1.0002	0.7464	1.0861	1.1394	1.1339	1.0352	1.0494	1.1213	0.7505	1.0887	0.9302	0.9566	0.9605	0.8659	0.33	0.31	0.16	0.20
	NC_012061.1 NC_012061.1	LCV	1.0397	0.8803	0.9868	0.9705	0.7527	1.0486	1.1279	1.2234	1.1755	0.9327	1.1334	0.9059	1.1474	1.0173	0.7284	0.9581	0.8649	0.33	0.31	0.17	0.21
	NC_008171.1 NC_008171.1	DFVV	0.9968	0.9551	0.9914	1.0762	0.8382	1.1038	1.1046	1.0482	1.1042	0.9587	1.0649	0.9269	1.105	0.9715	0.860	0.9799	0.8659	0.30	0.30	0.15	0.20
	NC_006611.1 NC_006611.1 NC_006611.1	PCV	1.0428	0.9739	0.9368	0.9541	0.7293	1.0486	1.0469	1.1818	1.0996	1.0457	1.0613	0.8688	1.0371	0.9621	0.7383	0.8679	0.8659	0.34	0.30	0.17	0.20
	NC_005981.1 NC_005981.2	SPW	1.0888	0.972	0.8745	1.031	0.7079	1.1198	1.1701	1.1199	1.035	1.0117	1.1609	0.7947	1.2841	0.8496	0.7965	0.967	0.8649	0.31	0.31	0.17	0.21
Vetivirus	NC_018211.1 NC_018211.1	SFVSV	1.0091	0.9172	1.0439	1.0373	0.7817	1.0741	1.125	1.098	1.0439	0.8811	1.0219	0.8695	0.9382	1.0172	0.8686	0.8649	0.8649	0.30	0.32	0.16	0.23
	NC_007461.1 NC_007461.1	TCV	1.0249	0.9268	1.0611	0.9801	0.7979	1.0649	1.0881	1.1744	1.1091	0.9917	1.0613	0.9729	1.126	1.0427	0.9059	0.9588	0.8649	0.34	0.29	0.16	0.21
	NC_012041.1 NC_012041.1	TCV	1.0201	0.9244	1.0706	0.9677	0.7638	1.0943	1.0884	1.071	1.0738	0.988	1.0252	0.9091	1.2027	0.9856	0.9204	0.9589	0.8649	0.28	0.32	0.17	0.23
	NC_018211.1 NC_018211.1	SFVSV	1.0091	0.9172	1.0439	1.0373	0.7817	1.0741	1.125	1.098	1.0439	0.8811	1.0219	0.8695	0.9382	1.0172	0.8686	0.8649	0.8649	0.30	0.32	0.16	0.23
	NC_007461.1 NC_007461.1	TCV	1.0249	0.9268	1.0611	0.9801	0.7979	1.0649	1.0881	1.1744	1.1091	0.9917	1.0613	0.9729	1.126	1.0427	0.9059	0.9588	0.8649	0.34	0.29	0.16	0.21
	NC_012041.1 NC_012041.1	TCV	1.0201	0.9244	1.0706	0.9677	0.7638	1.0943	1.0884	1.071	1.0738	0.988	1.0252	0.9091	1.2027	0.9856	0.9204	0.9589	0.8649	0.28	0.32	0.17	0.23
	NC_018211.1 NC_018211.1	SFVSV	1.0091	0.9172	1.0439	1.0373	0.7817	1.0741	1.125	1.098	1.0439	0.8811	1.0219	0.8695	0.9382	1.0172	0.8686	0.8649	0.8649	0.30	0.32	0.16	0.23
	NC_007461.1 NC_007461.1	TCV	1.0249	0.9268	1.0611	0.9801	0.7979	1.0649	1.0881	1.1744	1.1091	0.9917	1.0613	0.9729	1.126	1.0427	0.9059	0.9588	0.8649	0.34	0.29	0.16	0.21
	NC_012041.1 NC_012041.1	TCV	1.0201	0.9244	1.0706	0.9677	0.7638	1.0943	1.0884	1.071	1.0738	0.988	1.0252	0.9091	1.2027	0.9856	0.9204	0.9589	0.8649	0.28	0.32	0.17	0.23
	NC_018211.1 NC_018211.1	SFVSV	1.0091	0.9172	1.0439	1.0373	0.7817	1.0741	1.125	1.098	1.0439	0.8811	1.0219	0.8695	0.9382	1.0172	0.8686	0.8649	0.8649	0.30	0.32	0.16	0.23
Unknown	NC_018211.1 NC_018211.1	CV1	1.0107	0.9002	1.0402	0.9269	0.7209	1.178	1.0762	1.0511	1.1139	0.9032	0.8955	0.8849	1.184	0.9431	0.8142	0.9062	0.8649	0.39	0.31	0.16	0.18
	NC_018211.1 NC_018211.1	CV2	1.1105	0.8919	1.0307	0.9209	0.7243	1.1915	1.0964	1.052	1.0868	0.9613	0.9427	0.954	1.1576	0.9069	0.8303	1.0086	0.8649	0.39	0.31	0.16	0.19
	NC_018211.1 NC_018211.1	CV3	1.1191	0.8859	0.9967	0.9811	0.741	1.2065	1.0819	1.0515	1.0407	0.9663	1.0813	0.9103	1.1985	0.8792	0.7992	1.0217	0.8649	0.34	0.32	0.16	0.19
	NC_018211.1 NC_018211.1	CV4	1.0506	0.974	0.9141	0.9203	0.7214	1.1301	1.1346														