

**Table S2.** Relative abundance of the viral families identified for each sample in the study, used for Figure 3.

Taxon	02.1A	02.1B	02.2A	02.2B	02.3A	02.3B	03.1A	03.1B	03.2A	03.2B	03.3A	03.3B	05.1A
	05.1B	05.2A	05.2B	05.3A	05.3B	06.1A	06.1B	06.2A	06.2B	06.3A	06.3B	07.1A	07.1B
	07.2A	07.2B	07.3A	07.3B	08.1A	08.1B	08.2A	08.2B	08.3A	08.3B	09.1A	09.1B	09.2A
	09.2B	09.3A	09.3B	13.1A	13.1B	13.2A	13.2B	13.3A	13.3B	20.1A	20.1B	20.2A	20.2B
	20.3A	20.3B	22.1A	22.1B	22.2A	22.2B	22.3A	22.3B					
"Artverviricota;Caulimoviridae"	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
	8.461538462	0	0	0	0	0	0	0.008289812	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
"Artverviricota*;Retroviridae"	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
	0.384615385	0	0	0	0	0	0	0	0	0	0	0	0
	2.906208719	0	0	0	0	0	0	0	0	0	0	0	0
	0	19.31540342	0	0	0	0	0	0	0	0	0	0	0
	0	0											
"Cossaviricota;Papillomaviridae"	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
	1.538461538	0	0	0	0	0	0	0.953328359	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
"Cossaviricota*;Parvoviridae"	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
	4.022988506	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
"Cressdnaviricota;Circoviridae"	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
	0.574712644	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
"Cressdnaviricota;Cressdnaviricota__na"	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0.534188034	0	0	0	0	0	0	0	0	0
	0	5.747126437	0.084317032	0	0	0	0	0	0	0	0.069348128		
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0										
"Cressdnaviricota;Genomoviridae"	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.086956522	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0.008289812	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0.930232558	0	0	0	0	0	0	0	0
	0												
"Duplornaviricota;Chrysoviridae"	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	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0.847457627	0	0	0	0	0
"Hofneiviricota;Inoviridae"	0	0	0	0.130378096	0.457456542	0	0	0	0	0	0	0	0
	0	0	0	0	0.174216028	0.165837479	0	0	0	0	0	0	0
	2.559726962	3.184713376	0	0	0	0.019928258	0	0	0	0.213675214	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0.069348128	0	0	0	0	0.199004975	0.99009901			
	3.092783505	2.325581395	0	0	0	0	0.762195122	0	0	0	0	0	0
"Kitrinoviricota;Virgaviridae"	0	0	0	5.747126437	38.52173913	96.02577873	0	0	0	0	0	0	0

	0	0	0	0	16.66666667	0	0.039856517	0.384615385	0	0
	2.272727273	1.19047619	0	0.033159247	0	0	0	0	0	0
	0	0	0	0	14.83979764	0.262123198	0	0	0	0
	23.47188264	0	0	0	0	0	0	0	0	1.694915254
	0	0								
"Kitrinoviricota;Alphaflexiviridae"	0	0	0	0	0	0	0	0	0	0
	0.086956522	0.161117078	0	0	7.326732673	1.333333333	13.67521368	51		
	0	0	0	0	0	0	1.19047619	0		
	0.033159247	0	0	0	0	0	0	0	0	
	18.04384486	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	4.516129032	0			
"Kitrinoviricota;Betaflexiviridae"	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	2.06185567	0.465116279	0	0	0	0	0	0	0
"Kitrinoviricota;Tymovirales__na"	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0.396039604	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
"Kitrinoviricota;Tymovirales__uc"	0	0	0	0	0	0	0	0	0	0
	0	0.026852846	0	0	0	7.081807082	31	0	0	0
	0	0	0	0	0	0	0.074608306	0	0	0
	0	0	0	0	0	0	5.564924115	0	0	0
	0	2.173913043	0	0	0	0	0	0	0	0
	0	1.935483871	0							
"Kitrinoviricota;Flaviviridae"	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0.384615385	0	0	0	0	0	0	0	0	
	0.616468516	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0									
"Lenarviricota;Mitoviridae"	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0.757575758	0	0	0	0	0	0
	0	0	0	0.223214286	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
"Negarnaviricota;Orthomyxoviridae"	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	0.008289812	0	0	0
	0.616468516	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0.64516129	0								
"Negarnaviricota;Pneumoviridae"	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	
	0.298507463	0	0	0	0	0	0	0	0	0
"Nucleocytoviricota;Phycodnaviridae"	0	0	0	0	0	0	0.032226877	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0.024869435	0	0	0
	0	0	4.022988506	0	0	0	0	0	0	0
	0	0	0	0	0	1.030927835	0	0		

0	0	0	0	0	0	0.098425197	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
"Nucleocytoviricota;Iridoviridae"	0	0	0	0	0	0	0.030759766	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	1.923076923	0	0	0	0	0	0	0	0	0	0	0
0	0.574712644	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												
"Nucleocytoviricota;Marseilleviridae"	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
3.448275862	0	0	0	0	0	0	0.02621232	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0												
"Nucleocytoviricota;Poxviridae"	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	0.008289812	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
"Phixviricota;Microviridae"	1.303780965	1.0978957	5.681396212	6.658184902	23.71577976							
0.515630035	1.048218029	0.273972603	5.785123967	3.448275862	2.434782609							
0.37593985	2.090592334	1.824212272	1.98019802	0	0.366300366	2	0					
0.318471338	0	0.139497808	0	0.668576886	0.427350427	3.03030303						
1.19047619	0	0.008289812	0.140449438	0.579374276	0.236183278	0.657894737						
0	5.172413793	0.084317032	0.455927052	0	0	1.517706577	0.471821756					
1.57480315	0.970873786	8.823529412	0	0	0	0.646766169	0.792079208					
6.18556701	7.906976744	8.333333333	0	1.910219675	1.219512195	20.83333333						
1.694915254	2.580645161	0										
"Pisuviricota*;Partitiviridae"	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	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0.847457627	0	0			
"Pisuviricota*;Picobirnaviridae"	0	0	47.34496844	44.99575912	2.799138727	0.032226877						
0	0	0	0	0	0	0	0	0	0	0	0	0
0	1.666666667	0	0	0	0	0	8.333333333	9.523809524	0			
0	0	0	0	0	0	0	0	17.41071429	20.75471698			
1.180438449	0	0	0	14.70588235	29.41176471	8.695652174	0	0				
0	0	0	0	0	0	2.580645161	0					
"Pisuviricota;Coronaviridae"	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	0.094473311	0			
0.528401585	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												
"Pisuviricota;Picornaviridae"	0	0	0	0.042408821	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	8.333333333		
14.28571429	0.039856517	0.384615385	0	0	0	0.757575758	7.142857143	0				
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2.941176471	5.882352941	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0						
"Pisuviricota;Solemoviridae"	0	0	0	0.042408821	0	0	0	0	0	0	0	0
8.26446281	11.49425287	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	0	0	0	0	0	0	0	0
0	0											
"Pisuviricota;Astroviridae"	0	0	0.074266617	0.042408821	0.030759766	0.032226877						
0	0	0.826446281	0	0	0	0	0	0	1.333333333			

[illegible]



"Uroviricota;Zobellviridae"	0	0	0	0	0	0	0	0	0	0	0	0
0	0.026852846	0	0	0	0	0	0	0	0	0	0	0
0.019928258	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	0.64516129	
0												
"Uroviricota;Crassvirales__na"	0.130378096	0.274473925	0.556999629	0.254452926	0.184558597							
0.708991299	2.51572327	4.657534247	3.305785124	4.597701149	2	0.080558539						
0	0.331674959	0	0	4.151404151	0	0.170648464	0.159235669	0				
0	0.019928258	0	0	0.213675214	0.757575758	0	0	0	0	0		
0.347624565	0.047236656	0	0	0	2.023608769	0.911854103	2.232142857					
0	0.168634064	0.262123198	0.098425197	0.138696255	0	0	4.347826087					
0	0	0	0	0	3.820439351	3.048780488	0	0				
0	0											
"Uroviricota;Crevaviridae"	0.260756193	0	0.482733012	0.212044105	0.030759766							
0.290041895	0.419287212	0.136986301	1.652892562	0	0	0.026852846	0					
0	0	0	0	0	0	0	0.095510984					
0.106837607	0.757575758	0	0	0	0	0.219298246	0					
0	13.32209106	6.534954407	9.151785714	0	0.337268128	0	0.098425197					
0.346740638	0	0	15.2173913	0	0	0	0	0	0			
0	0	0	0	0.64516129	0							
"Uroviricota;Intestiviridae"	0.130378096	0	0.222799851	0.084817642	0	0						
2.725366876	10.82191781	29.75206612	24.13793103	0.956521739	0	0.174216028						
2.819237148	21.18811881	16	6.105006105	0	0.341296928	0	0	0				
0.398565165	0	0	0.427350427	0	0	0.699300699	0	0	0			
0	0	0	32.8836425	13.82978723	37.05357143	7.547169811						
0.674536256	0.419397117	0.196850394	0	0	0	2.173913043	0	0				
0	0	0	1.111111111	13.18051576	13.64329268	0	0.847457627					
10.32258065	0											
"Uroviricota;Steigviridae"0	0	0.111399926	0.084817642	0.061519532	0.354495649	0						
0	0	0	0	0.99009901	0	0.366300366	0					
0	0	0	0	0.859598854	0.534188034	0	0					
0.699300699	0	0	0.75578649	0.877192982	0	0.574712644	0					
0	0	0	0.168634064	0	0	0	0	0	0			
0	0	0	0	0	0	0	0	0	0			
"Uroviricota;Suoliviridae"4.302477184	3.568161025	22.53991831	23.07039864	18.60965857								
43.08733484	0.209643606	0.273972603	7.438016529	4.597701149	0.956521739	0						
0	0	0	0	0.170648464	0.159235669	1.666666667	0					
0.318852132	0	1.146131805	3.739316239	12.12121212	2.380952381	2.797202797						
0.315012849	0	0.115874855	0.850259802	0	0	7.504215852						
3.951367781	10.71428571	1.886792453	3.541315346	0.262123198	0.295275591							
0.416088766	0	0	4.347826087	0	0.198019802	0	0	0				
0	1.432664756	0.914634146	4.166666667	0	10.32258065	0						
"Viruses__na;Baculoviridae"	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	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0.64516129	0				
"Viruses__na;Nimaviridae"	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
0.384615385	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
"Viruses__na;Anelloviridae"	0	0	0	0	0	0	0	0	0	0	0	0
0.086956522	0	0	0	0	0.244200244	1	0	0	0	0	0	0
1.666666667	0	0.079713033	5.769230769	0	0.106837607	0	0	0	0	0	0	0
0.18237586	0	0	1.133679735	8.114035088	64.55306033	0	0	0	0	0	0	0
0	0	0.168634064	0.05242464	0	0	0	0	0	0	0	0	0

