Table 1: Mono\_chu - Gatherer: E-values for each group

| group | median | Q1 | Q3 | mean | sd | min | max |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Flaviviridae | 172.28650946 | 172.28650946 | 172.28650946 | 161.24709887 | 33.118232 | 72.93181414 | 172.28650946 |
| Paramyxoviridae | 172.28650946 | 52.23254168 | 172.28650946 | 122.37951280 | 62.812852 | 12.39469495 | 172.28650946 |
| Phycodnaviridae | 172.28650946 | 27.02365002 | 172.28650946 | 108.61272689 | 87.742879 | -0.81954394 | 172.28650946 |
| Discoviridae | 160.73847487 | 154.96445758 | 166.51249216 | 160.73847487 | 16.331387 | 149.19044029 | 172.28650946 |
| Hantaviridae | 157.02608226 | 79.70774756 | 172.28650946 | 121.81154575 | 63.078967 | 14.07987667 | 172.28650946 |
| Betaflexiviridae | 140.05601112 | 140.05601112 | 140.05601112 | 140.05601112 | NA | 140.05601112 | 140.05601112 |
| Tobaniviridae | 110.70893251 | 79.92014404 | 141.49772098 | 110.70893251 | 87.083844 | 49.13135556 | 172.28650946 |
| Virgaviridae | 110.34385948 | 79.37253448 | 141.31518447 | 110.34385948 | 87.600136 | 48.40120949 | 172.28650946 |
| Lispiviridae | 106.06248211 | 106.06248211 | 106.06248211 | 106.06248211 | NA | 106.06248211 | 106.06248211 |
| Picobirnaviridae | 99.50338332 | 51.11326615 | 152.89901655 | 104.50889938 | 64.255559 | 46.74232143 | 172.28650946 |
| Picornaviridae | 93.95467702 | 93.95467702 | 93.95467702 | 93.95467702 | NA | 93.95467702 | 93.95467702 |
| Coronaviridae | 85.83163008 | 42.60419040 | 129.05906977 | 85.83163008 | 122.265663 | -0.62324929 | 172.28650946 |
| Iflaviridae | 84.60461120 | 80.72616143 | 88.48306097 | 84.60461120 | 10.969913 | 76.84771166 | 92.36151074 |
| Bromoviridae | 72.12436045 | 57.61063523 | 86.63808567 | 72.12436045 | 41.051014 | 43.09691001 | 101.15181088 |
| Chuviridae | 61.24304178 | 39.84763354 | 82.63845002 | 61.24304178 | 60.515353 | 18.45222529 | 104.03385827 |
| Bornaviridae | 57.79048499 | 57.21024825 | 60.05132943 | 57.69535973 | 22.788431 | 16.43297363 | 95.12090412 |
| Rhabdoviridae | 49.45956775 | 24.47472335 | 149.30604603 | 80.30276113 | 64.091327 | 11.44129143 | 172.28650946 |
| Blumeviridae | 47.57919514 | 44.04391673 | 51.11447356 | 47.57919514 | 9.999277 | 40.50863831 | 54.64975198 |
| Astroviridae | 45.07314329 | 40.56883292 | 54.23862730 | 50.68745030 | 15.440599 | 38.16941133 | 81.95467702 |
| Sedoreoviridae | 36.60906489 | 34.92963602 | 42.05087882 | 40.72955125 | 10.231871 | 32.64397414 | 61.89279003 |
| Orthoherpesviridae | 34.89228698 | 17.11476457 | 52.66980938 | 34.89228698 | 50.282427 | -0.66275783 | 70.44733178 |
| Fiersviridae | 34.05256628 | 32.87360745 | 103.16953787 | 79.34457479 | 80.498710 | 31.69464863 | 172.28650946 |
| Botourmiaviridae | 28.58862183 | 27.40164600 | 29.77559767 | 28.58862183 | 3.357275 | 26.21467016 | 30.96257350 |
| Nodaviridae | 28.20901152 | 28.20901152 | 28.20901152 | 28.20901152 | NA | 28.20901152 | 28.20901152 |
| Tombusviridae | 26.16432100 | 17.31325095 | 35.01539104 | 26.16432100 | 25.034607 | 8.46218090 | 43.86646109 |
| unclassified | 23.62525165 | 9.01999663 | 50.85387196 | 42.31553326 | 49.330004 | -0.53147892 | 172.28650946 |
| Baculoviridae | 18.43179828 | 9.08826289 | 18.82181495 | 12.46278580 | 11.021065 | -0.25527251 | 19.21183163 |
| Mitoviridae | 17.45475987 | 16.21257883 | 19.24310894 | 16.51322660 | 4.521004 | 7.95860731 | 20.57348874 |
| Totiviridae | 16.95163187 | 9.96306005 | 22.99803194 | 18.58631763 | 13.467729 | 3.12726117 | 45.27490548 |
| Chrysoviridae | 14.93554201 | 14.93554201 | 14.93554201 | 14.93554201 | NA | 14.93554201 | 14.93554201 |
| Partitiviridae | 14.18641440 | 12.18274502 | 26.85273669 | 25.66542178 | 40.161527 | -0.39794001 | 172.28650946 |
| unclassified Kitrinoviricota | 13.65757732 | 12.31819401 | 16.98816804 | 14.98504893 | 4.809396 | 10.97881070 | 20.31875876 |
| Amalgaviridae | 8.67366414 | 6.21655745 | 9.48996860 | 7.57979598 | 3.407731 | 3.75945075 | 10.30627305 |
| Iridoviridae | 7.68899148 | 3.79122309 | 21.43686215 | 18.16293739 | 21.649140 | -0.69019608 | 69.12726117 |
| Phenuiviridae | 4.91364017 | 0.05060999 | 22.02319166 | 39.71158959 | 74.678092 | -0.71600334 | 172.28650946 |
| Steitzviridae | 4.62981866 | 2.46542433 | 6.79421299 | 4.62981866 | 6.121832 | 0.30103000 | 8.95860731 |
| Schizomimiviridae | 3.95467702 | 3.95467702 | 3.95467702 | 3.95467702 | NA | 3.95467702 | 3.95467702 |
| Secoviridae | 3.06597182 | 1.20637965 | 4.92556399 | 3.06597182 | 5.259721 | -0.65321251 | 6.78515615 |
| Mimiviridae | 0.88605665 | 0.20446770 | 4.80710752 | 3.04569793 | 4.968132 | -0.47712125 | 8.72815839 |
| Cruliviridae | 0.50863831 | 0.50863831 | 0.50863831 | 0.50863831 | NA | 0.50863831 | 0.50863831 |
| Spinareoviridae | 0.12493874 | 0.12493874 | 0.12493874 | 0.12493874 | NA | 0.12493874 | 0.12493874 |
| Straboviridae | 0.09151498 | 0.09151498 | 0.09151498 | 0.09151498 | NA | 0.09151498 | 0.09151498 |
| unclassified Uroviricota | 0.01772877 | -0.11394335 | 1.42021640 | 24.35702930 | 48.120962 | -0.69019608 | 110.91009489 |
| Herelleviridae | -0.30103000 | -0.30103000 | -0.30103000 | -0.30103000 | NA | -0.30103000 | -0.30103000 |
| Papillomaviridae | -0.36172784 | -0.36172784 | -0.36172784 | -0.36172784 | NA | -0.36172784 | -0.36172784 |
| Potyviridae | -0.44715803 | -0.69082824 | 48.01068153 | 31.69562153 | 56.095506 | -0.93449845 | 96.46852108 |
| Vilmaviridae | -0.51851394 | -0.51851394 | -0.51851394 | -0.51851394 | NA | -0.51851394 | -0.51851394 |
| Schitoviridae | -0.76342799 | -0.76342799 | -0.76342799 | -0.76342799 | NA | -0.76342799 | -0.76342799 |