Table 1: Hepe Data - RNA viruses (Gatherer): E-values for each group

| group | median | Q1 | Q3 | mean | sd | max | min |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Flaviviridae | 179.385102784 | 55.288192771 | 179.385102784 | 130.041952337 | 76.88987250 | -0.643452676 | 179.385102784 |
| Pneumoviridae | 179.385102784 | 179.385102784 | 179.385102784 | 179.385102784 | NA | 179.385102784 | 179.385102784 |
| Sedoreoviridae | 179.385102784 | 179.385102784 | 179.385102784 | 179.385102784 | NA | 179.385102784 | 179.385102784 |
| Narnaviridae | 92.632264426 | 49.255845248 | 136.008683605 | 92.632264426 | 122.68704058 | 5.879426069 | 179.385102784 |
| Coronaviridae | 89.257935532 | 44.194351906 | 134.321519158 | 89.257935532 | 127.45906227 | -0.869231720 | 179.385102784 |
| Paramyxoviridae | 72.213593231 | 56.076687027 | 112.755147347 | 83.335929711 | 61.93136674 | -0.763427994 | 179.385102784 |
| Rhabdoviridae | 52.230816202 | 27.185658582 | 78.707375640 | 65.316603631 | 54.82306147 | 0.602059991 | 179.385102784 |
| Virgaviridae | 41.614846519 | 23.583236655 | 74.411162968 | 64.010566926 | 57.54792372 | 15.112382700 | 179.385102784 |
| Iflaviridae | 40.962573502 | 13.078838944 | 84.341041423 | 60.217408004 | 62.23491094 | 6.334419009 | 179.385102784 |
| Astroviridae | 39.853871964 | 12.273555024 | 103.054895715 | 67.424019463 | 64.63110436 | -0.995635195 | 179.385102784 |
| Hepeviridae | 38.962573502 | 6.197758992 | 103.581142666 | 64.169430584 | 64.90991352 | 0.920818754 | 179.385102784 |
| Lispiviridae | 36.844663963 | 18.334286352 | 71.453573035 | 47.577018270 | 53.92630332 | -0.176091259 | 106.062482108 |
| unclassified Pisuviricota | 36.289882635 | 17.982966661 | 55.108462542 | 58.912262018 | 59.59442026 | 1.508638306 | 179.385102784 |
| Mymonaviridae | 36.063486258 | 36.063486258 | 36.063486258 | 36.063486258 | NA | 36.063486258 | 36.063486258 |
| Picornaviridae | 34.939930290 | 3.901450867 | 91.141183756 | 56.333847435 | 59.88975957 | 0.920818754 | 179.385102784 |
| Marnaviridae | 33.232102384 | 21.154476945 | 48.169197761 | 44.276495589 | 39.36370393 | 2.522878745 | 179.385102784 |
| Discoviridae | 30.837809380 | 26.992359925 | 34.683258834 | 30.837809380 | 10.87657354 | 23.146910470 | 38.528708289 |
| Picobirnaviridae | 30.828207090 | 21.075872024 | 53.000503082 | 51.281845714 | 48.89525131 | 6.197226275 | 179.385102784 |
| Betaflexiviridae | 28.995678626 | 17.945937453 | 31.673171884 | 23.414180016 | 14.55341232 | 6.896196279 | 34.350665141 |
| Atkinsviridae | 27.850780887 | 13.610707336 | 41.881152746 | 39.672282384 | 40.58243146 | 2.698970004 | 179.385102784 |
| unclassified Lenarviricota | 26.176430817 | 16.298578630 | 37.337236339 | 36.668939229 | 35.61148230 | 11.153044675 | 130.474955193 |
| Phenuiviridae | 25.462180905 | 18.749073428 | 33.903354199 | 25.993439433 | 9.09099386 | 14.554395797 | 36.632644079 |
| Duinviridae | 23.742321425 | 16.026594623 | 36.772653775 | 29.283703801 | 22.23066167 | 3.882728704 | 102.190440285 |
| Fiersviridae | 22.444887019 | 13.954911785 | 43.683927260 | 37.168614972 | 40.18900769 | 0.823908741 | 179.385102784 |
| Totiviridae | 21.910094889 | 18.938892061 | 27.494109085 | 22.858270816 | 7.56979223 | 9.202732459 | 36.319664487 |
| Nodaviridae | 21.643974143 | 13.273677516 | 31.630934892 | 22.185408989 | 14.33241300 | 3.000000000 | 40.844663963 |
| unclassified | 19.832682665 | 8.850780887 | 42.354577731 | 36.957264309 | 45.14000926 | -0.863322860 | 179.385102784 |
| Tombusviridae | 19.808649359 | 12.448570719 | 37.870702451 | 35.902799606 | 40.45351598 | 0.494850022 | 179.385102784 |
| Solspiviridae | 18.218069685 | 15.920145228 | 23.725394260 | 21.545129266 | 9.29663997 | 12.958607315 | 44.790484985 |
| Tobaniviridae | 17.811447091 | 8.610191242 | 27.012702941 | 17.811447091 | 26.02508163 | -0.591064607 | 36.213958790 |
| Benyviridae | 17.588380294 | 13.815308569 | 37.829738285 | 24.177551099 | 14.86651882 | 9.373659633 | 42.280668713 |
| Blumeviridae | 17.422508200 | 11.883311548 | 29.630024055 | 23.028777634 | 17.11900881 | 3.107905397 | 83.787812396 |
| Steitzviridae | 17.321002102 | 12.525020749 | 26.447226167 | 22.415625621 | 18.98884422 | 5.457174573 | 138.209011525 |
| Dicistroviridae | 15.397940009 | 8.164436730 | 31.720927829 | 27.064158696 | 36.85147639 | 1.568636236 | 179.385102784 |
| Endornaviridae | 12.518200519 | 6.931326112 | 21.982001667 | 16.395127260 | 14.33388850 | 4.270835210 | 36.273272791 |
| Schizomimiviridae | 10.941276516 | 10.084110912 | 11.798442121 | 10.941276516 | 2.42443045 | 9.226945307 | 12.655607726 |
| Iridoviridae | 10.765140525 | 3.633146776 | 40.623295165 | 20.792449869 | 21.81020144 | 0.318758763 | 60.436518915 |
| Botourmiaviridae | 10.602059991 | 4.958607315 | 22.785156152 | 13.858868355 | 11.00748992 | 0.481486060 | 39.943095149 |
| Solemoviridae | 10.572413118 | 6.484636880 | 16.420198409 | 15.142479185 | 16.63137190 | -0.255272505 | 72.388276692 |
| Barnaviridae | 9.803054530 | 8.814810196 | 10.325088341 | 9.336844006 | 1.81156849 | 6.774690718 | 10.966576245 |
| Polycipiviridae | 9.352617030 | 9.352617030 | 9.352617030 | 9.352617030 | NA | 9.352617030 | 9.352617030 |
| Hypoviridae | 9.235077015 | 8.265034528 | 41.602846619 | 30.166895093 | 37.94753577 | 7.294992041 | 73.970616222 |
| Mitoviridae | 9.195179321 | 6.090603429 | 13.949807834 | 9.925456727 | 6.43309817 | 0.000000000 | 20.581698709 |
| Tospoviridae | 9.195179321 | 9.195179321 | 9.195179321 | 9.195179321 | NA | 9.195179321 | 9.195179321 |
| Secoviridae | 8.094204120 | 4.087777943 | 9.141462802 | 25.396449184 | 57.83603272 | 0.657577319 | 179.385102784 |
| Spinareoviridae | 7.621602099 | 7.621602099 | 7.621602099 | 7.621602099 | NA | 7.621602099 | 7.621602099 |
| Birnaviridae | 5.732828272 | 5.732828272 | 5.732828272 | 5.732828272 | NA | 5.732828272 | 5.732828272 |
| Partitiviridae | 5.720118484 | 4.006562635 | 10.224004300 | 11.831918289 | 19.39537334 | -0.477121255 | 102.276544328 |
| Potyviridae | 5.061980903 | 2.522878745 | 9.257274869 | 16.782515750 | 38.88725080 | -0.397940009 | 179.385102784 |
| Amalgaviridae | 3.886056648 | 3.522878745 | 4.728158393 | 5.687663678 | 4.25156508 | 3.085128182 | 13.216096421 |
| Steigviridae | 2.468089472 | 1.177073060 | 3.759105884 | 2.468089472 | 3.65154584 | -0.113943352 | 5.050122296 |
| Gammaflexiviridae | 2.301029996 | 2.301029996 | 2.301029996 | 2.301029996 | NA | 2.301029996 | 2.301029996 |
| Bromoviridae | 2.000000000 | 1.594212497 | 26.664125321 | 34.167054951 | 65.13071577 | 1.267606240 | 179.385102784 |
| Mimiviridae | 1.740743030 | -0.249749340 | 6.603075261 | 3.110449798 | 4.04993784 | -0.591064607 | 9.123205024 |
| Closteroviridae | 1.660399652 | 0.892669194 | 2.428130110 | 1.660399652 | 2.17146965 | 0.124938737 | 3.195860568 |
| Tymoviridae | 1.508638306 | 1.331770133 | 10.661973438 | 7.492949612 | 10.67294149 | 1.154901960 | 19.815308569 |
| Sinhaliviridae | 1.439713034 | 0.826905055 | 7.756315905 | 7.143507926 | 12.09525439 | 0.431798276 | 25.262807357 |
| Polyomaviridae | 1.148784732 | 0.946756113 | 1.350813350 | 1.148784732 | 0.57142322 | 0.744727495 | 1.552841969 |
| Caliciviridae | 0.718734616 | 0.266565836 | 3.444863577 | 6.431470339 | 12.86107203 | 0.187086643 | 32.494850022 |
| Straboviridae | 0.517399149 | -0.286337410 | 0.940469648 | 0.462076856 | 0.94678462 | -0.643452676 | 1.853871964 |
| Arteriviridae | 0.486937742 | 0.115832618 | 0.858042865 | 0.486937742 | 1.04964380 | -0.255272505 | 1.229147988 |
| unclassified Uroviricota | 0.481486060 | -0.113943352 | 74.718966633 | 31.511635551 | 45.23674121 | -0.892094603 | 111.739928612 |
| Herelleviridae | 0.438728238 | -0.134420969 | 1.011877445 | 0.438728238 | 1.62111076 | -0.707570176 | 1.585026652 |
| Fimoviridae | 0.381228131 | 0.261947817 | 0.500508445 | 0.381228131 | 0.33737567 | 0.142667504 | 0.619788758 |
| Olifoviridae | 0.275724130 | 0.275724130 | 0.275724130 | 0.275724130 | NA | 0.275724130 | 0.275724130 |
| Mesyanzhinovviridae | 0.255724642 | 0.107165978 | 0.404283305 | 0.255724642 | 0.42018735 | -0.041392685 | 0.552841969 |
| unclassified Duplornaviricota | 0.244125144 | 0.244125144 | 0.244125144 | 0.244125144 | NA | 0.244125144 | 0.244125144 |
| Baculoviridae | 0.145365020 | -0.320825307 | 0.659015723 | 0.172187194 | 0.69049374 | -0.806179974 | 1.214670165 |
| Peribunyaviridae | 0.119186408 | 0.119186408 | 0.119186408 | 0.119186408 | NA | 0.119186408 | 0.119186408 |
| Casjensviridae | 0.065501549 | -0.347248970 | 0.272230689 | -0.016805196 | 0.34581739 | -0.518513940 | 0.356547324 |
| Phycodnaviridae | 0.065501549 | -0.128358873 | 0.405114522 | 0.162669916 | 0.54006956 | -0.322219295 | 0.744727495 |
| Phasmaviridae | 0.004364805 | 0.004364805 | 0.004364805 | 0.004364805 | NA | 0.004364805 | 0.004364805 |
| Peduoviridae | -0.079181246 | -0.079181246 | -0.079181246 | -0.079181246 | NA | -0.079181246 | -0.079181246 |
| Geminiviridae | -0.146128036 | -0.146128036 | -0.146128036 | -0.146128036 | NA | -0.146128036 | -0.146128036 |
| Fredfastierviridae | -0.230448921 | -0.230448921 | -0.230448921 | -0.230448921 | NA | -0.230448921 | -0.230448921 |
| Kyanoviridae | -0.301029996 | -0.763427994 | 0.000000000 | -0.196707216 | 0.76234462 | -0.919078092 | 1.000000000 |
| Orthoherpesviridae | -0.505149978 | -0.678204164 | -0.491135617 | -0.611176527 | 0.20838873 | -0.851258349 | -0.477121255 |
| Molycolviridae | -0.579783597 | -0.579783597 | -0.579783597 | -0.579783597 | NA | -0.579783597 | -0.579783597 |
| Poxviridae | -0.591064607 | -0.662757832 | -0.255272505 | -0.202085624 | 0.85366368 | -0.785329835 | 1.283996656 |
| Autographiviridae | -0.633468456 | -0.633468456 | -0.633468456 | -0.633468456 | NA | -0.633468456 | -0.633468456 |
| Asfarviridae | -0.681241237 | -0.681241237 | -0.681241237 | -0.681241237 | NA | -0.681241237 | -0.681241237 |
| Stanwilliamsviridae | -0.792391689 | -0.792391689 | -0.792391689 | -0.792391689 | NA | -0.792391689 | -0.792391689 |
| Schitoviridae | -0.832508913 | -0.832508913 | -0.832508913 | -0.832508913 | NA | -0.832508913 | -0.832508913 |
| Arenaviridae | -0.834286135 | -0.851758927 | -0.816813342 | -0.834286135 | 0.04942052 | -0.869231720 | -0.799340549 |
| Allomimiviridae | -0.845098040 | -0.845098040 | -0.845098040 | -0.845098040 | NA | -0.845098040 | -0.845098040 |
| Alloherpesviridae | -0.903089987 | -0.903089987 | -0.903089987 | -0.903089987 | NA | -0.903089987 | -0.903089987 |