|  | **Term** | **Value** | **Z statistic** | **Chi-sq statistic** | **P-value** | **Effective Degrees of Freedom** | **Percent Dev. Explained** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Zoonoses Model** | | | | | | | |
|  | Intercept | -0.34 | -8.29 |  | **<0.001** |  |  |
|  | hDiseaseZACitesLn |  |  | 5.81 | **0.017** | 1.2 | 7.74% |
|  | hHuntedIUCN |  |  | 0.75 | 0.167 | 0.36 | 1.31% |
|  | hOrderCETARTIODACTYLA |  |  | 27.14 | **<0.001** | 0.88 | 36.25% |
|  | hOrderCHIROPTERA |  |  | 4.43 | **0.015** | 0.71 | 6.53% |
|  | hOrderDIPROTODONTIA |  |  | 0.72 | 0.194 | 0.43 | 1.72% |
|  | hOrderPERAMELEMORPHIA |  |  | 0.76 | 0.323 | 0.78 | 4.8% |
|  | hOrderPERISSODACTYLA |  |  | 3.28 | **0.039** | 0.76 | 6.35% |
|  | hOrderSCANDENTIA |  |  | 0.81 | 0.311 | 0.79 | 5.33% |
|  | PdHoSa.cbCst |  |  | 12.71 | **0.002** | 1.88 | 16.95% |
|  | UrbRurPopRatioLn |  |  | 10.01 | **0.002** | 1.25 | 13.01% |
| **Zoonoses Model (stringent)** | | | | | | | |
|  | Intercept | -1.35 | -22.68 |  | **<0.001** |  |  |
|  | hDiseaseZACitesLn |  |  | 4.93 | **0.015** | 1.2 | 3.76% |
|  | hMassGramsPVR |  |  | 0.16 | 0.287 | 0.14 | 1.12% |
|  | hOrderCETARTIODACTYLA |  |  | 22.98 | **<0.001** | 0.94 | 28.02% |
|  | hOrderDIPROTODONTIA |  |  | 2.39 | 0.066 | 0.71 | 2.75% |
|  | hOrderLAGOMORPHA |  |  | 0.71 | 0.195 | 0.42 | 0.88% |
|  | hOrderPERISSODACTYLA |  |  | 0.86 | 0.307 | 0.83 | 5% |
|  | hOrderPRIMATES |  |  | 0.6 | 0.099 | 0.28 | 0.1% |
|  | HumPopDensLnChg |  |  | 3.23 | 0.128 | 1.48 | 4.34% |
|  | PdHoSa.cbCst |  |  | 56 | **<0.001** | 2.36 | 34.48% |
|  | UrbRurPopRatioChg |  |  | 16.92 | **0.002** | 4.05 | 19.55% |
| **Viral Richness Model** | | | | | | | |
|  | Intercept | 0.52 | 7.43 |  | **<0.001** |  |  |
|  | hDiseaseZACitesLn |  |  | 1835.36 | **<0.001** | 5.55 | 64.81% |
|  | hMassGramsPVR |  |  | 214.55 | **0.009** | 3.82 | 1.91% |
|  | hOrderCETARTIODACTYLA |  |  | 24.56 | **<0.001** | 0.94 | 1.86% |
|  | hOrderCHIROPTERA |  |  | 154.88 | **<0.001** | 1 | 9.94% |
|  | hOrderEULIPOTYPHLA |  |  | 5.88 | **0.009** | 0.85 | 1.08% |
|  | hOrderPERISSODACTYLA |  |  | 9.89 | **0.001** | 1 | 1.41% |
|  | hOrderPRIMATES |  |  | 34.52 | **<0.001** | 0.94 | 2.52% |
|  | hOrderRODENTIA |  |  | 94.87 | **<0.001** | 0.99 | 4.79% |
|  | LnAreaHost |  |  | 18.87 | **0.025** | 3.55 | 1.58% |
|  | S20 |  |  | 301.12 | **<0.001** | 5.15 | 10.09% |
| **Viral Richness Model (stringent)** | | | | | | | |
|  | Intercept | -0.47 | -5.31 |  | **<0.001** |  |  |
|  | hDiseaseZACitesLn |  |  | 922.8 | **<0.001** | 4.98 | 53.63% |
|  | hMassGramsPVR |  |  | 9.62 | **0.036** | 3.51 | 2.76% |
|  | hOrderCHIROPTERA |  |  | 109.2 | **<0.001** | 1 | 12.23% |
|  | hOrderCINGULATA |  |  | 0.87 | 0.286 | 0.76 | 0.56% |
|  | hOrderEULIPOTYPHLA |  |  | 1.2 | 0.152 | 0.59 | 0.37% |
|  | hOrderPERAMELEMORPHIA |  |  | 0.74 | 0.307 | 0.7 | 0.36% |
|  | hOrderPRIMATES |  |  | 85.1 | **<0.001** | 1 | 11.78% |
|  | hOrderRODENTIA |  |  | 129.27 | **<0.001** | 0.98 | 12.58% |
|  | hOrderSCANDENTIA |  |  | 0.94 | 0.13 | 0.41 | 0.29% |
|  | LnAreaHost |  |  | 11.14 | 0.079 | 2.66 | 1.53% |
|  | S20 |  |  | 44.99 | **<0.001** | 4.69 | 3.91% |
| **Viral Traits Model** | | | | | | | |
|  | Intercept | -1.59 | -5.69 |  | **<0.001** |  |  |
|  | cb\_dist\_noHoSa\_maxLn |  |  | 44.91 | **<0.001** | 2.94 | 45.59% |
|  | Envelope |  |  | 0.88 | 0.166 | 0.46 | 2.32% |
|  | vCytoReplicTF |  |  | 10.96 | **<0.001** | 0.86 | 9.15% |
|  | Vector |  |  | 4.9 | **0.014** | 0.75 | 4.61% |
|  | vGenomeAveLengthLn |  |  | 0.12 | 0.266 | 0.09 | 0.95% |
|  | vWOKcitesLn |  |  | 35.83 | **<0.001** | 3.28 | 37.38% |
| **Viral Traits Model (stringent)** | | | | | | | |
|  | Intercept | -2.23 | -7.51 |  | **<0.001** |  |  |
|  | cb\_dist\_noHoSa\_max.stringentLn |  |  | 15.75 | **<0.001** | 2.53 | 25.5% |
|  | vCytoReplicTF |  |  | 10.33 | **0.001** | 0.88 | 17.54% |
|  | Vector |  |  | 1.87 | 0.085 | 0.6 | 3.88% |
|  | vWOKcitesLn |  |  | 29.51 | **<0.001** | 2.64 | 53.08% |