**Table S2. The Size of PCGs, tRNAs, rrnL, rrnS, and CR, respectively, among sequenced true bug mt genomes**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Species** | **PCGs** | **tRNAs** | **rrnL** | **rrnS** | **CR** |
| *Aeschyntelus notatus*  | 11061.00  | 1454.00  | 1256.00  | 784.00  | - |
| *Aphelocheirus ellipsoideus* | 11013.00  | 1453.00  | 1269.00  | 782.00  | - |
| *Coptosoma bifaria* | 11019.00  | 1458.00  | 1280.00  | 803.00  | 1585.00  |
| *Diplonychus rusticus* | 10992.00  | 1461.00  | 1268.00  | 797.00  | 1617.00  |
| *Dysdercus cingulatus* | 11079.00  | 1440.00  | 1259.00  | 792.00  | - |
| *Enithares tibialis* | 11091.00  | 1483.00  | 1258.00  | 784.00  | 646.00  |
| *Geocoris pallidipennis* | 11034.00  | 1391.00  | 1241.00  | 800.00  | 781.00  |
| *Gerris* sp. | 10941.00  | 1442.00  | 1255.00  | 795.00  | - |
| *Halyomorpha halys* | 11013.00  | 1492.00  | 1291.00  | 813.00  | 1810.00  |
| *Hydaropsis longirostris*  | 11022.00  | 1455.00  | 1251.00  | 779.00  | 1991.00  |
| *Hydrometra* sp. | 10983.00  | 1431.00  | 1258.00  | 786.00  | 694.00  |
| *Ilyocoris cimicoides* | 11085.00  | 1381.00  | 1256.00  | 783.00  | 609.00  |
| *Laccotrephes robustus* | 11028.00  | 1443.00  | 1254.00  | 773.00  | - |
| *Leptopus* sp. | 11139.00  | 1246.00  | 1248.00  | - | - |
| *Lygus lineolaris* | 11073.00  | 1436.00  | 1256.00  | 788.00  | - |
| *Macroscytus subaeneus*  | 10917.00  | 1342.00  | 1256.00  | 781.00  | 1180.00  |
| *Malcus inconspicuus* | 11058.00  | 1397.00  | 1309.00  | 779.00  | - |
| *Nerthra* sp. | 11094.00  | 1481.00  | 1239.00  | 786.00  | 1450.00  |
| *Neuroctenus parus* | 10917.00  | 1441.00  | 1514.00  | 785.00  | 649.00  |
| *Nezara viridula* | 11022.00  | 1486.00  | 1283.00  | 814.00  | 2190.00  |
| *Ochterus marginatus* | 11082.00  | 1456.00  | 1254.00  | 778.00  | - |
| *Orius niger* | 10986.00  | 1458.00  | 1256.00  | 787.00  | - |
| *Paraplea frontalis* | 11043.00  | 1439.00  | 1238.00  | 790.00  | 608.00  |
| *Phaenacantha marcida* | 10929.00  | 1451.00  | 1262.00  | 779.00  | 224.00  |
| *Physopelta gutta* | 10905.00  | 1404.00  | 1270.00  | 826.00  | - |
| *Riptortus pedestris* | 11028.00  | 1446.00  | 1260.00  | 785.00  | 2400.00  |
| *Saldula arsenjevi* | 11091.00  | 1367.00  | 1255.00  | 764.00  | 687.00  |
| *Sigara septemlineata* | 11019.00  | 1442.00  | 1247.00  | 772.00  | 1207.00  |
| *Stenopirates jeanneli* | 11056.00  | 1425.00  | 1245.00  | 829.00  | 765.00  |
| *Stictopleurus subviridis* | 11037.00  | 1453.00  | 1263.00  | 776.00  | 685.00  |
| *Triatoma dimidiata* | 11064.00  | 1454.00  | 1270.00  | 781.00  | 2160.00  |
| *Valentia hoffmanni* | 11058.00  | 1450.00  | 1256.00  | 777.00  | 724.00  |
| *Yemmalysus parallelus* | 11004.00  | 1378.00  | 1257.00  | 796.00  | 1181.00  |
| Avg. | 11026.76  | 1431.39  | 1267.70  | 788.88  | 1174.68  |

“-”: Data are currently not available.