**Supp. file 3.** Best Partitioning Scheme. <https://doi.org/10.5852/ejt.2023.890.2249.9637>

Scheme Name : step\_1

Scheme lnL : -13530.476318359375

Scheme AICc : 27819.9925442

Number of params : 345

Number of sites : 3804

Number of subsets : 4

Subset | Best Model | # sites | subset id | Partition names

1 | GTR+I | 1819 | aed98e0b246994860a9f3884bc835671 | 18s

2 | GTR+I+G | 660 | 0d7e08541bff4b8712d197d81a2da23d | COI\_1stpos

3 | GTR+G | 661 | 5b502bcbae4c1b4075bdf255a75e3bcb | COI\_2ndpos

4 | GTR+G | 661 | b2f392a5658b1aad87cf5baf1fbf0e7a | COI\_3rdpos

Scheme Description in PartitionFinder format

Scheme\_start\_scheme = (18s) (COI\_1stpos) (COI\_2ndpos) (COI\_3rdpos);

Nexus formatted character sets

begin sets;

 charset Subset1 = 1-1819;

 charset Subset2 = 1820-3441\3;

 charset Subset3 = 1821-3441\3;

 charset Subset4 = 1822-3441\3;

 charpartition PartitionFinder = Group1:Subset1, Group2:Subset2, Group3:Subset3, Group4:Subset4;

end;