

Table 2: Delimitation of data partitions within Matrix 2 using arbitrary criteria (three top rows) and PartitionFinder (the remaining rows) in comparison with the resulted ML topology and its branch robustness (bootstrap support; BS) estimated with RAxML. Arbitrary 1: single partition; Arbitrary 2: 1st codon position across all loci, 2nd codon position across all loci, 3rd codon position across all loci, introns across all loci, ITS1+ITS2, 5.8S, and LSU; Arbitrary 3: as Arbitrary 2, except 1st + 2nd codon positions across all loci. The remaining rows include the best partitioning schemes returned by PartitionFinder, for each criterion tested. ALL: models implemented in MrBayes and RAxML; RAxML: models implemented in RAxML only; MrBayes; models implemented in MrBayes only; AIC: Akaike information criterion; AICc: AIC with a correction for finite sample size; and BIC: Bayesian information criterion. We compared the number of subsets retrieved, the score of the best partition (given by PartitionFinder), the likelihood of the ML tree, the average bootstrap support (the mean of the BS of all the branches), and the number of branches with BS above 50%, 70%, 90%, 95% and equal to 100, respectively. The best value for each criterion used is shown in bold. When two models or criterions returned the same partition scheme, they are presented in a single line.

Model and criterion	No. of subsets	Scheme score	ML score = $-\ln L$	Mean BS	No. of nodes ≥ 50	No. of nodes ≥ 90	No. of nodes ≥ 95	No. of nodes =100
Arbitrary 1	1		-11,352	74.34	95	55	47	24
Arbitrary 2	7		-11,013	75.24	93	58	48	26
Arbitrary 3	6		-11,013	75.34	93	58	48	26
ALL, AIC	12	-10,190	-10,97	74.50	96	57	49	25
ALL, AICc	11		-10,978	75.66	97	57	49	29
ALL, BIC ; MrBayes, BIC	4	-10,282	-11,055	74.53	95	56	46	25
MrBayes, AIC, AICc	12	-10,199	-10,974	74.40	95	56	50	27
RAxML, AIC	7	-10,210	-11,008	75.11	93	57	49	26
RAxML, AICc	6	-10,221	-11,017	74.82	93	58	51	26
RAxML, BIC	2	-10,312	-11,106	74.79	96	55	50	24