

Comparison between Bayesian inference tree and CO1 tree.

Major clade divisions are mostly maintained between the concatenated Bayesian tree and the CO1 BEAST tree, with some movement of groups (Figures 2 and 4). The basal taxa *M. beta* and *M. perfida* are maintained between trees, along with the relationships among *M. bimucronata*, *M. mitrata*, *M. cubana*, *M. similis*, *M. plana*, *M. sp.*, *M. duodecimspinoso* and *M. digitata*. Only the position of *M. miles* and *M. macfarlanei* differ within this clade, as sister to the *M. digitata*, *M. duodecimspinoso* and *M. sp.* group in the CO1 analysis instead of sister to the *cubana/ similis* group in the concatenated analysis (Figures 2 and 4). In addition, this clade appears sister to the *M. militaris/ M. sagittata/ M. banksi/ M. brevipes/ M. sexspinoso/ M. reimoseri* clade in the CO1 analysis; in the concatenated phylogeny this group is in a different position (Figures 2 and 4). However, intergroup relationships are conserved between phylogenies.

Although the group of *M. yanomami*, *M. annulata* and *M. swainsoni* is maintained between the trees the position of this group also differs between the two phylogenies. In the BEAST phylogeny, these species are sister to all other *Micrathena* species with the exception of *M. perfida* and *M. beta*. In our Bayesian analysis, these species are instead sister to *M. lucasi* and *M. swainsoni* (Figures 2-4). Additionally within the *M. annulata*, *M. yanomami* and *M. swainsoni* clade, *M. annulata* and *M. swainsoni* are sister to *M. yanomami* in the Bayesian analysis, but *M. swainsoni* and *M. yanomami* are sister to *M. annulata* in the CO1 tree.

The clade containing *M. forcipata*, *M. spinulata*, *M. cornuta*, *M. schreibersi*, *M. gracilis* and *M. horrida* is unique to the CO1 phylogeny, as these groups are scattered (and non-monophyletic) within the concatenated tree. *M. forcipata* is sister to *M. schreibersi* and *M. cornuta* (along with additional species) in our Bayesian analysis, while this taxon (and *M. spinulata*) is sister to a group containing *M. schreibersi*, *M. cornuta*, *M. gracilis* and *M. horrida* in the BEAST analysis.