## Figure S6

Explanation on how the topology scanning algorithm works in different situations. Figure S6a shows a tree that is congruent with the species tree despite the loss of two species. Figure S6b shows a tree that is not congruent with the species tree due to the rearrangement of two of its branches. Since no species overlap exists we do not consider this node as a duplication node as there is no evidence for such an assumption. Figure S6c represents a congruent tree with a duplication node as predicted by the species overlap algorithm.

