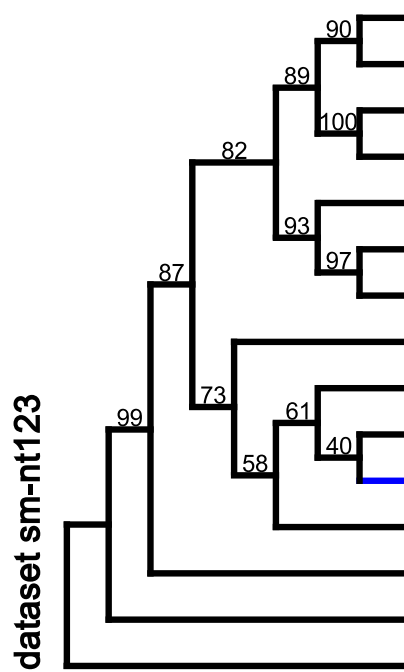


C1: Best ML tree



Anthophila
 Ammoplanidae
 Psenidae
 E. concinnus
 Pemphredonini partim.
 Eremiasphecium
 Philanthidae
 Bembicidae
 Crabronidae
 Sphecidae
 Mellinidae
 Astatidae
 Heterogynaidae
 Ampulicidae
 outgroups

C2: Alternative ML tree

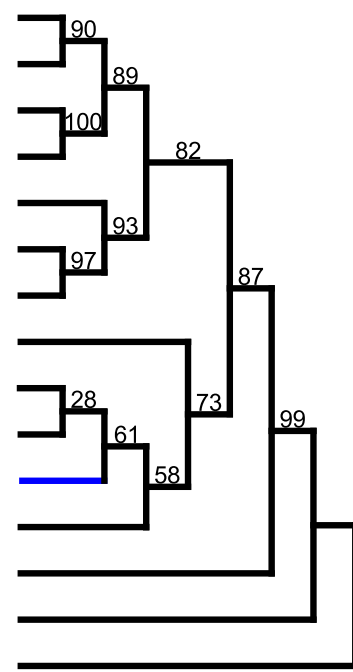


Figure S7: Maximum likelihood (ML) phylogenetic trees inferred from analysing dataset sm-nt123 with all codon positions included. From the 50 ML tree searches 37 similar topologies, including the best ML, tree were obtained when analysing dataset sm-nt123 (C1). The remaining 13 of the 50 ML trees represent the alternative tree topology (C2). Of the latter, four topologies have been rejected by AU tests (Table S12). Differences between the best (C1) and the alternative (C2) ML tree are indicated by blue lines. Numbers along branches represent ML bootstrap support. Taxa of the polyphyletic group Pemphredoninae are coloured in green.