



**Figure S11: Analysis of the updated Dunn et al. dataset.**

Alignments of Dunn et al. (2008) were manually corrected for undisputable errors (see Table S2) and completed with newly available sequences. There are 18,463 positions and only 35.6% of the cells are missing. The tree was inferred with the CAT+Γ model using PhyloBayes (100 bootstrap replicates). Nodes supported at 100% are indicated by black bullets. Within Bilateria, support below 70% is not indicated, while support between 70 and 99% is indicated by blue bullets.