



**\*\*Fig. XXsensitive.\*\*** Sensitive analyses with representative data matrices analyzed by different number of substitutional categories (nCAT) in PhyloBayes. Statistical support values (posterior probabilities) were obtained from three data matrices using the site-heterogeneous Poisson-CAT model with different categories" (A) Philippe2009\_Choanozoa; (B) Philippe2009\_Holozoa; (C) Whelan2017\_full\_Choanozoa; (D) Whelan2017\_strict. Statistical support for Ctenophora-sister and Porifera-sister is indicated in orange and green, respectively. Support values are from the sensitive analyses are shown in Supplementary table XX.