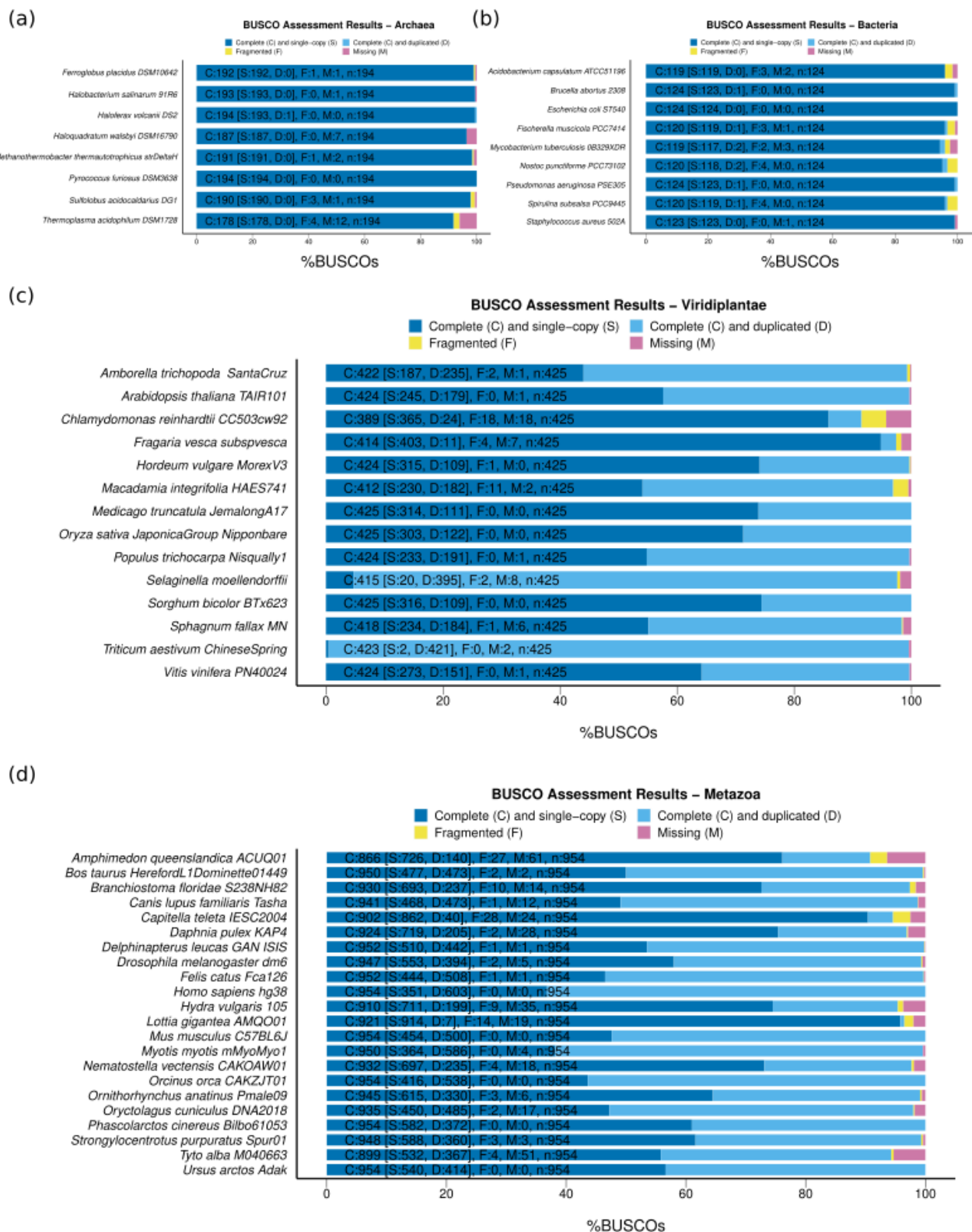
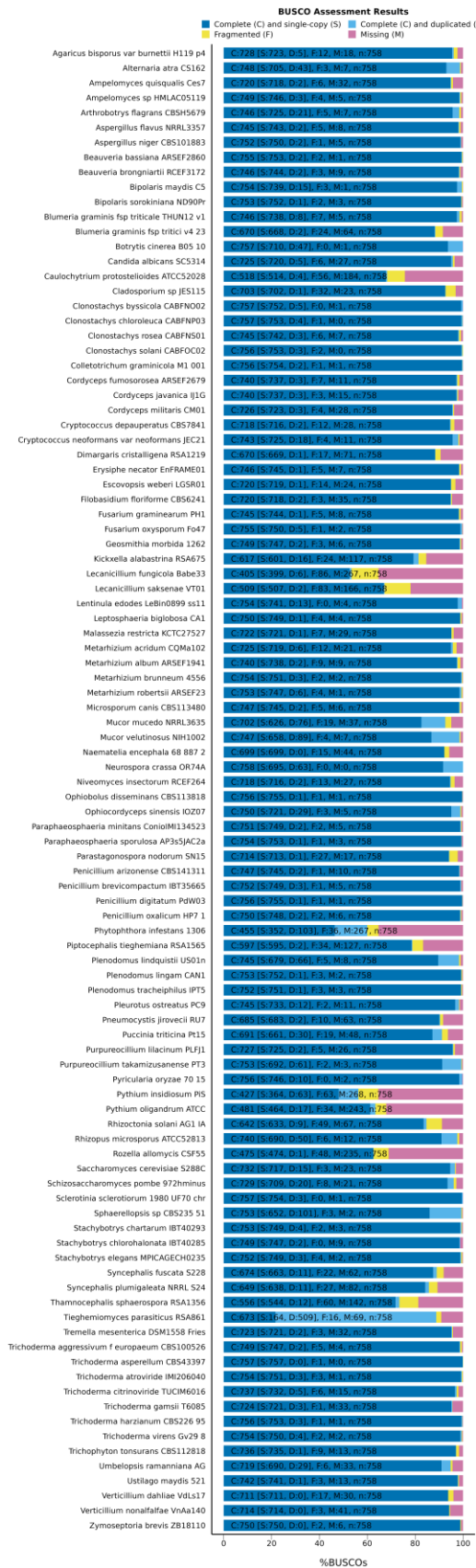


## Supplementary Figures

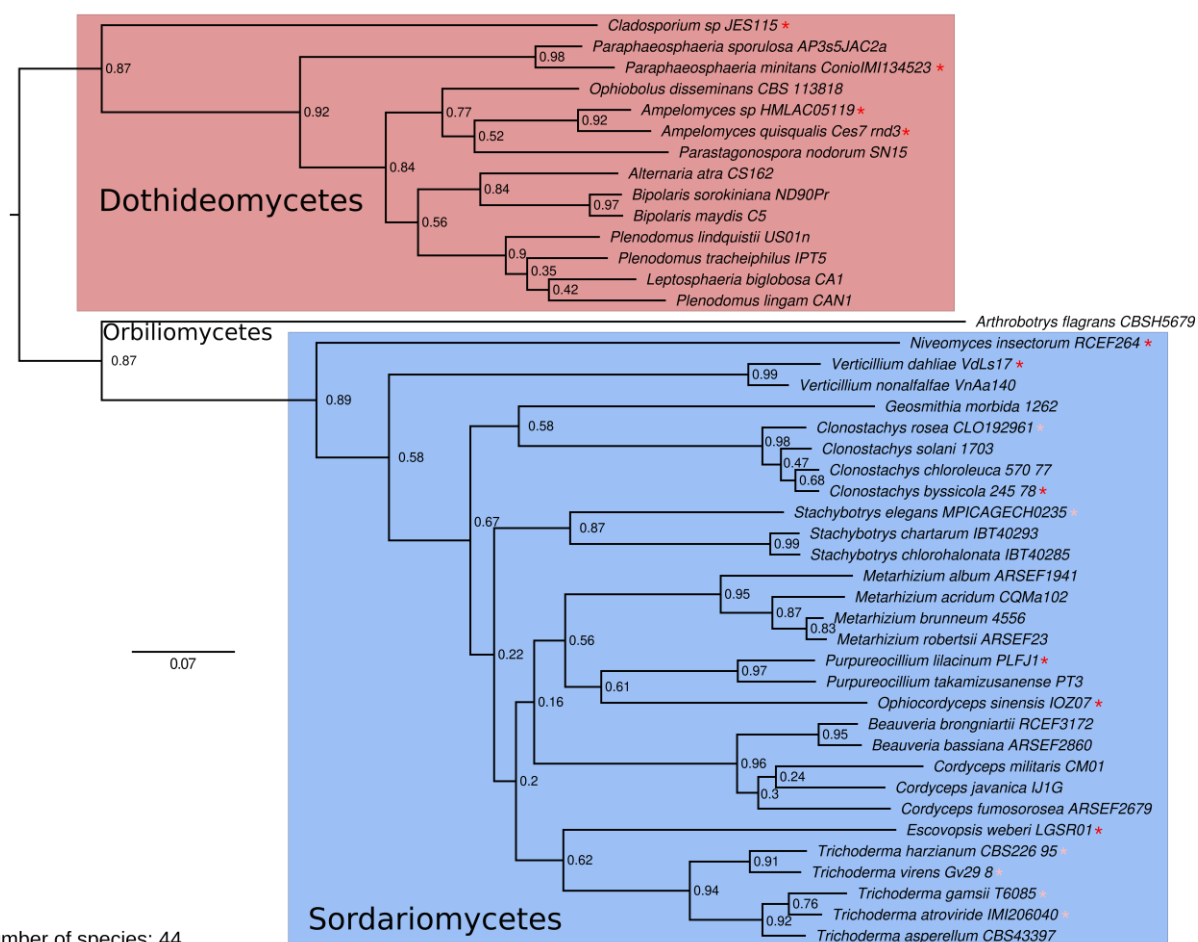


**Fig S1. BUSCO assessment results of completeness for gene annotations for various taxa.**

The taxa shown here are: (a) Archaea, (b) Bacteria, (c) Plants (Viridiplantae), and (d) Animals (Metazoa).



**Fig S2.** BUSCO assessment results of completeness for gene annotations for Fungi and Oomycetes.

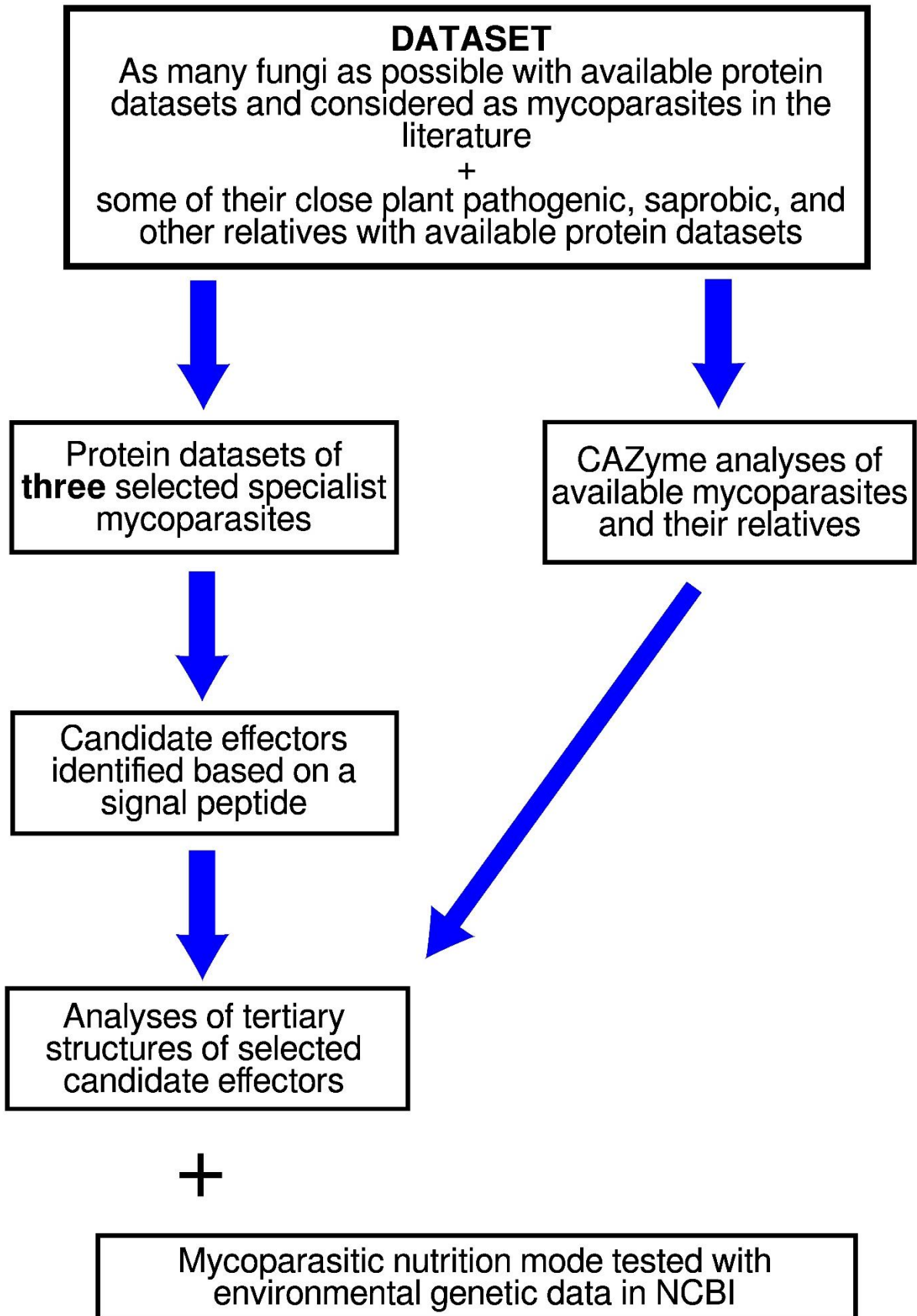


Number of species: 44

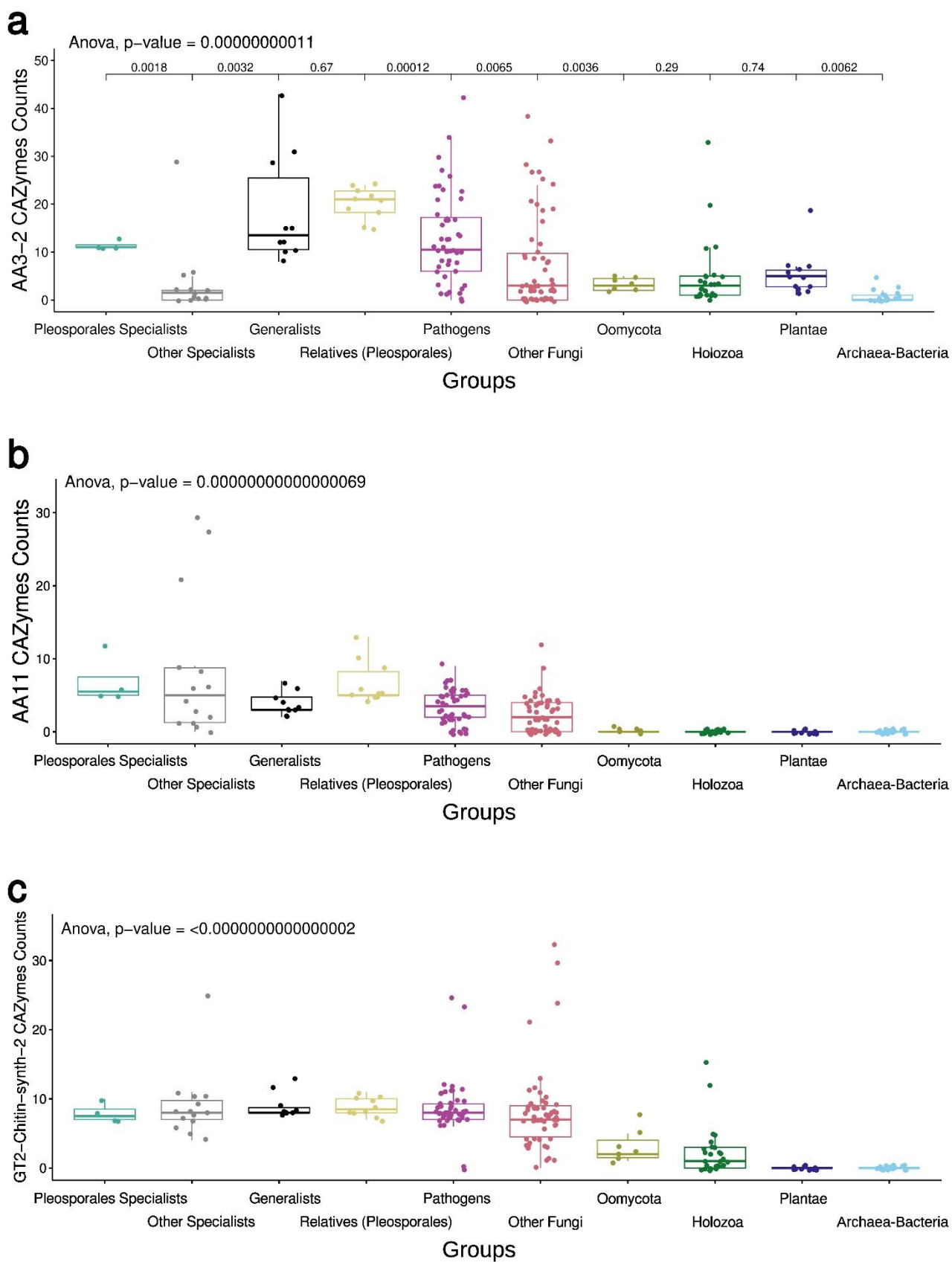
Number of orthogroups with all species present: 2589

Number of single-copy orthogroups: 993

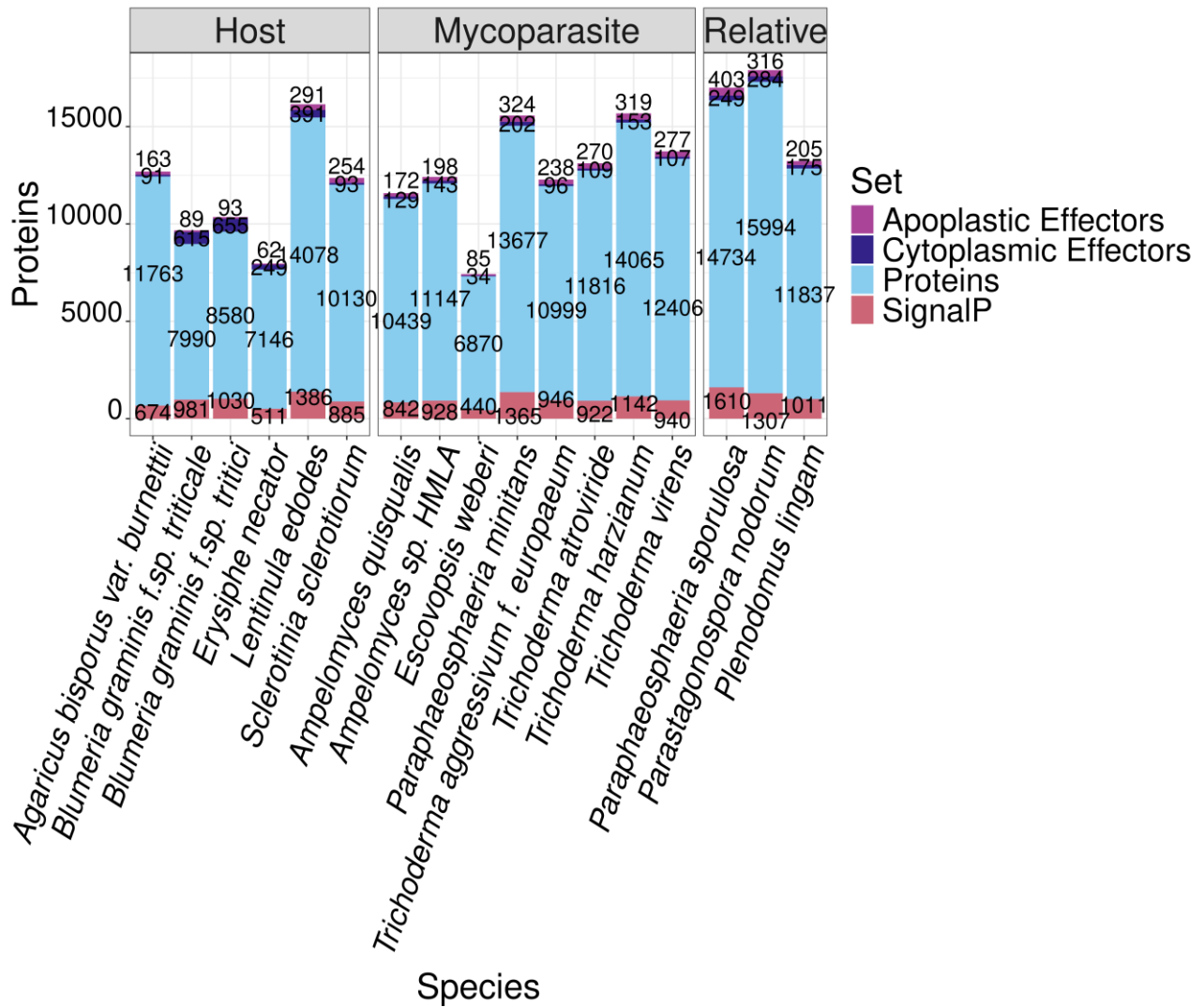
**Fig S3.** Cladogram using orthogroups with a subset of Ascomycete fungi.



**Fig S4.** Diagram of the workflow for the main analyses used in this study.



**Fig S5.** Counts of enzymes per species for three CAZyme families: (a) AA3-2, (b) AA11, and (c) GT2-Chitin.



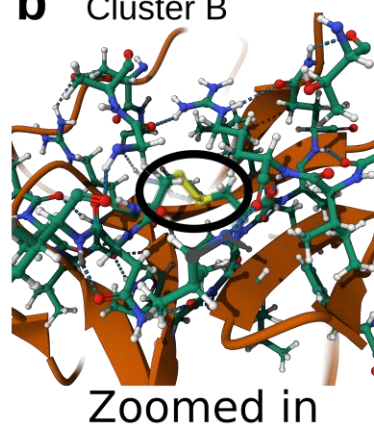
**Fig S6.** Number of proteins per genome annotation with different characteristics such as: proteins with signal peptide, and candidate effectors (apoplastic and cytoplasmic ones).



**a** Cluster B

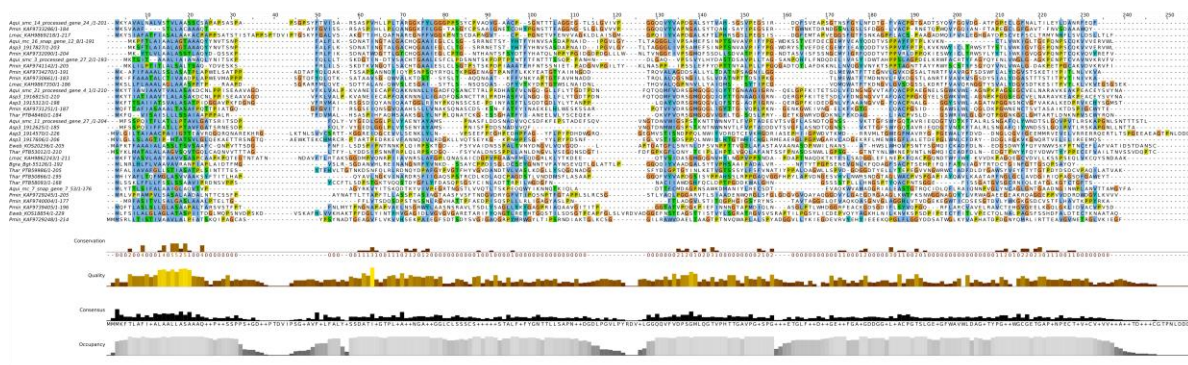


**b** Cluster B

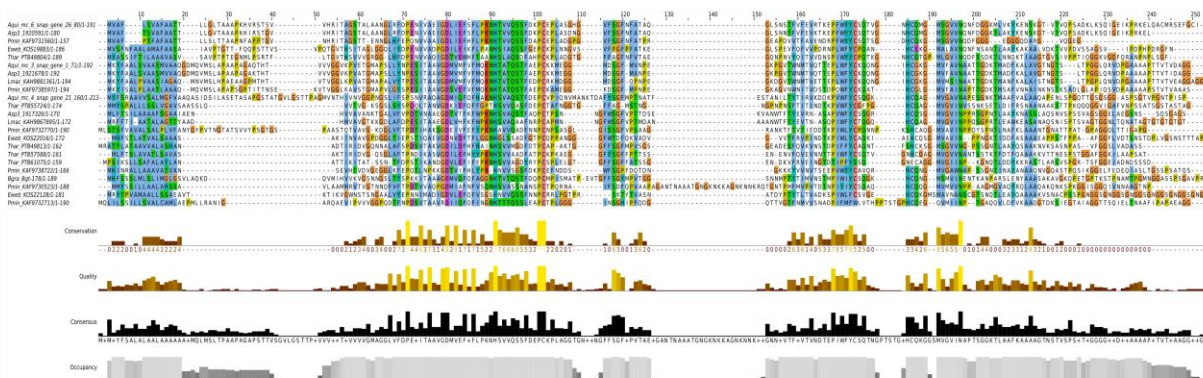


Zoomed in

**c** Cluster B



**d** Cluster C



**Fig S7. Alignments and structures of proteins of interest.** (a) Protein structure of a Cluster B protein (from Fig. 4), (b) Zoomed in version of the protein from (a) with a cysteine bridge circle in yellow, (c) A protein alignment with ClustalW of all the proteins of Cluster B (from Fig. 4), and (d) A protein alignment with ClustalW of all the proteins of Cluster C (from Fig. 4).