  

d.

c.

a.

b.

e.

Figure 1 a-e: Graphs showing the relationship between the four species. In each of these charts orange represents *Aplanochrytrim,* green represents *Cafeteria*, yellow signifies *Dinobryon,* and blue is for *Cylindrotheca*. a) The number of genes assembled from each transcriptome. b) The number of genes found in orthogroups only represented by that species. These are likely to indicate novel innovations within each species which may indicate adaptations to their lifestyle. c) The number of genes contained in all orthogroups. These are all the genes that were able to be assigned to any orthogroup and contains more than one representative of each species. d) The number of genes from that species that were unable to be assigned to any orthogroup. These genes may be small fragments or contain long repeats of the same or a few basepairs. e) The number of orthogroups that consists entirely of genes from that species. These orthogroups would be important for investigating evolutionary histories for that particular species.