

## Supplementary Material

### Microorganisms

# Codon Usage Bias Analysis in Macronuclear Genomes of Ciliated Protozoa

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## **Supplementary Tables**

**Table S1.** GenBank accession numbers of the 21 ciliate species.

**Table S2.** The correlation analysis of the 21 ciliate species.

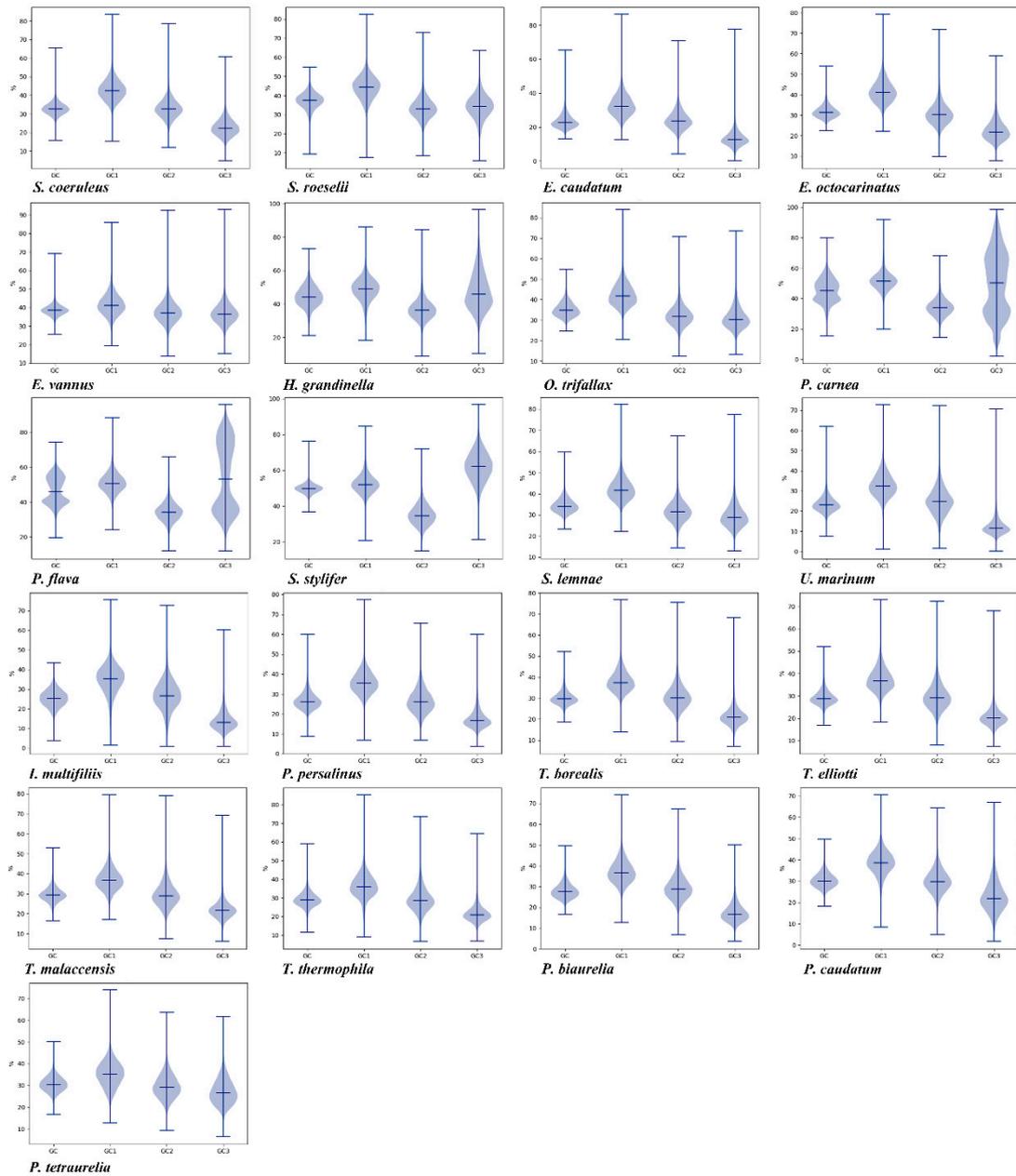
**Table S3.** The ENc ratio of the 21 ciliate species.

**Table S4.** The RSCU value of the 21 ciliate species.

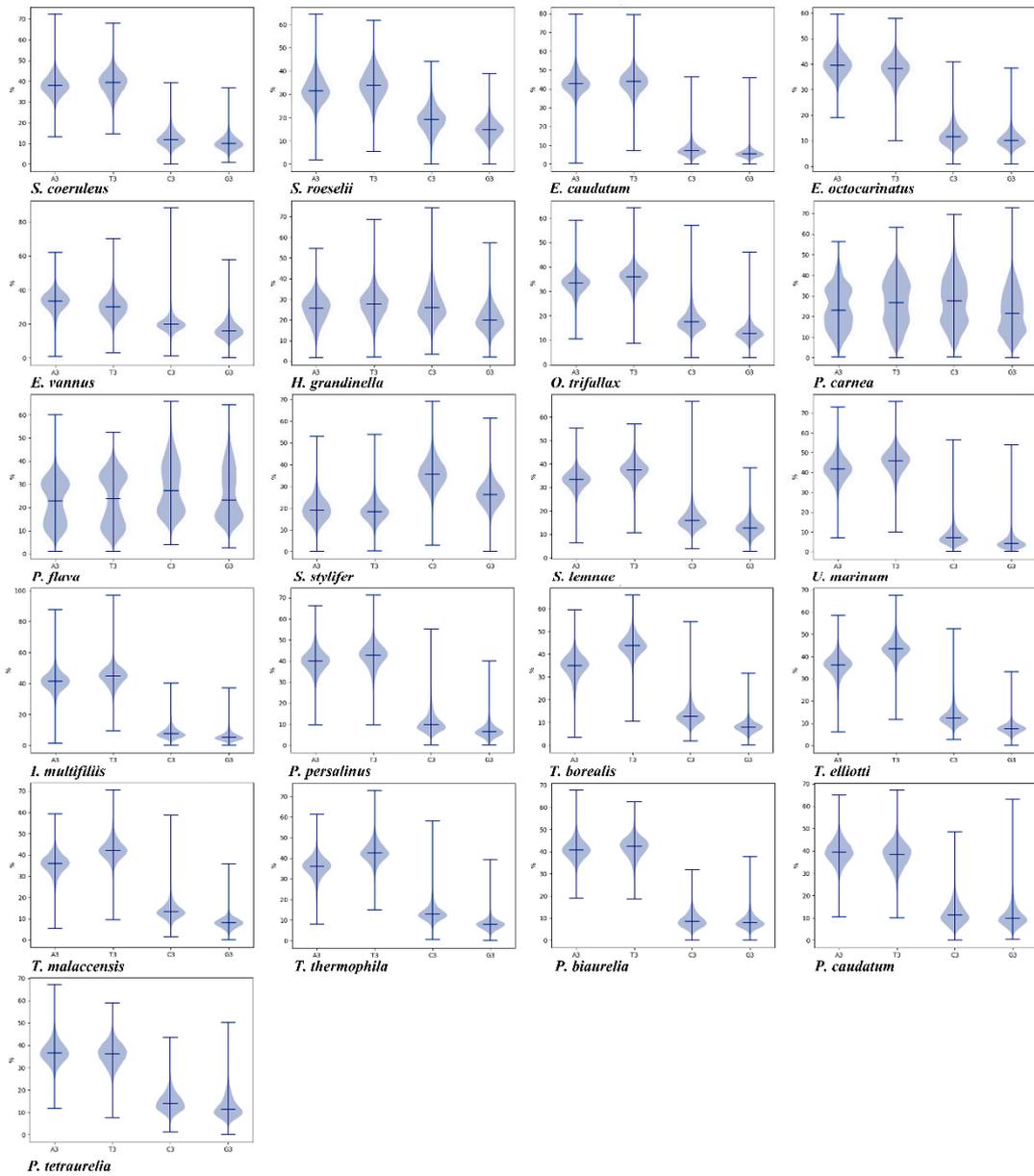
**Table S5.** The putative optimal codons of the 21 ciliate species.

**Table S6.** The third position codon bias of the 21 ciliate species.

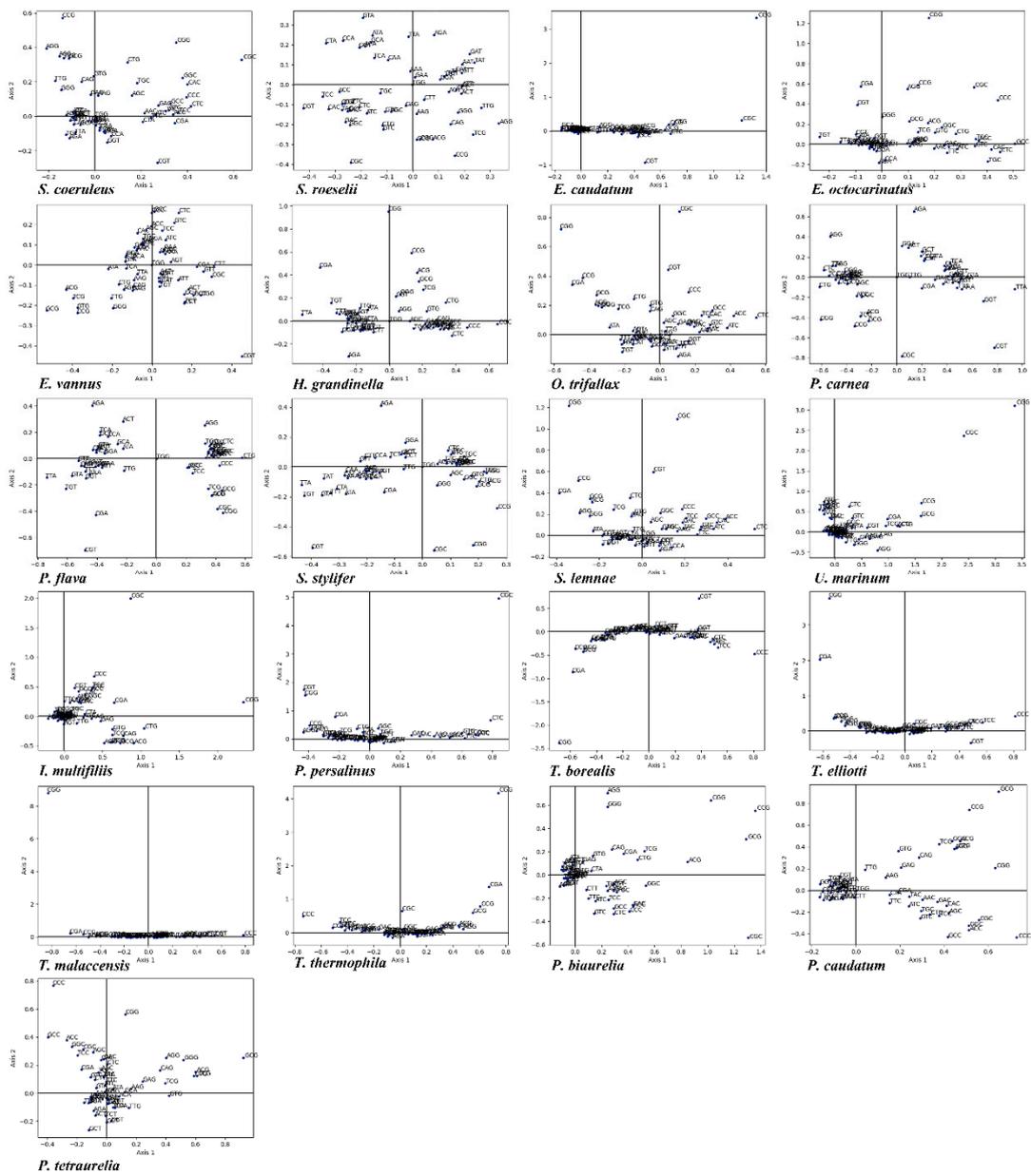
## Supplementary Figures



**Supplementary Figure S1.** Normal box plots for the range of GC, GC1, GC2, and GC3 content in the 21 ciliate species showing the probability density of data at different values.



**Supplementary Figure S2** Normal box plots for the range of A3, T3, C3 and, G3 content in the 21 ciliate species showing the probability density of data at different values.



**Supplementary Figure S3.** Codon correspondence analysis plot of each gene in the 21 ciliate species. Axis 1 and axis 2 represent the largest contributors to the CUB values of genes. The black dots represent the codons.