Supplementary Material

Optimization of heterotrophic culture conditions for the microalgae *Euglena gracilis* to produce proteins

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1 Supplementary Figures and Tables

1.1 Supplementary Figures

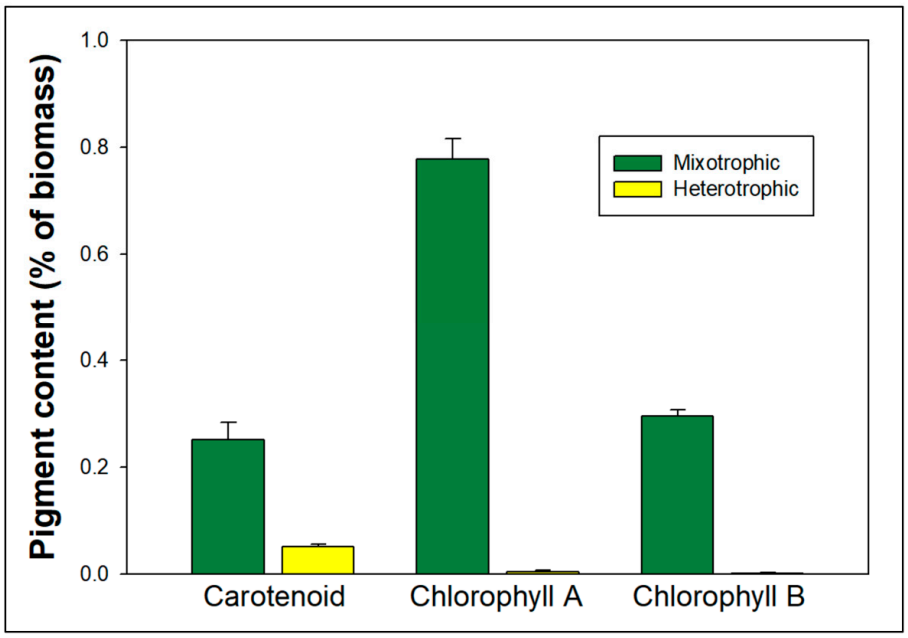

Figure S1. Carotenoid, chlorophyll a and b content of *E. gracilis* under mixotrophic and heterotrophic cultivation.

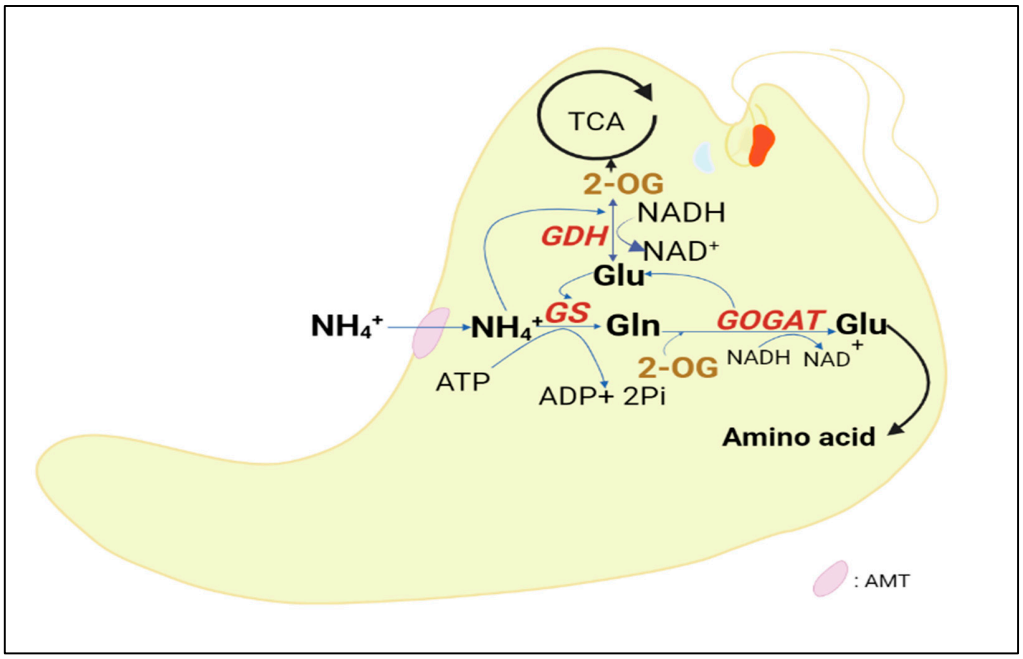

Figure S2. Nitrogen assimilation pathway (GS: glutamine synthase; GOGAT: glutamate synthase; GDH: glutamate dehydrogenase; Gln: Glutamine; Glu: glutamic acid; 2-OG: 2-oxoglutarate; MSG: monosodium glutamate; AMT: ammonium transporter).

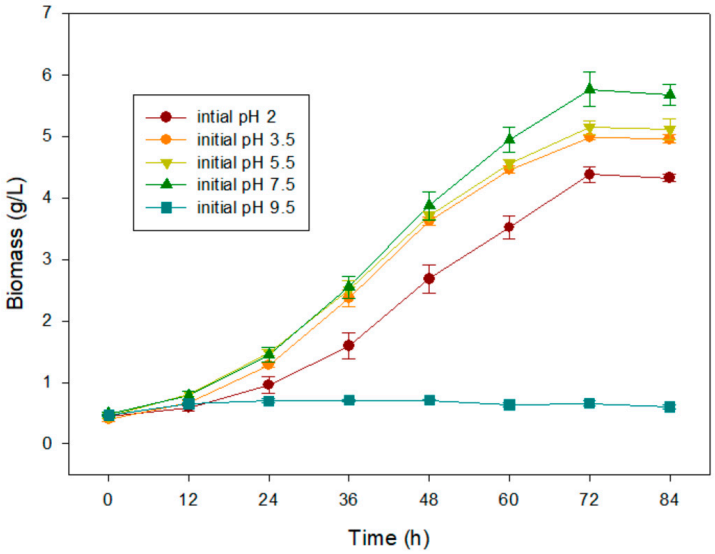

Figure S3. Growth curve of *E. gracilis* cultured under different initial pH.

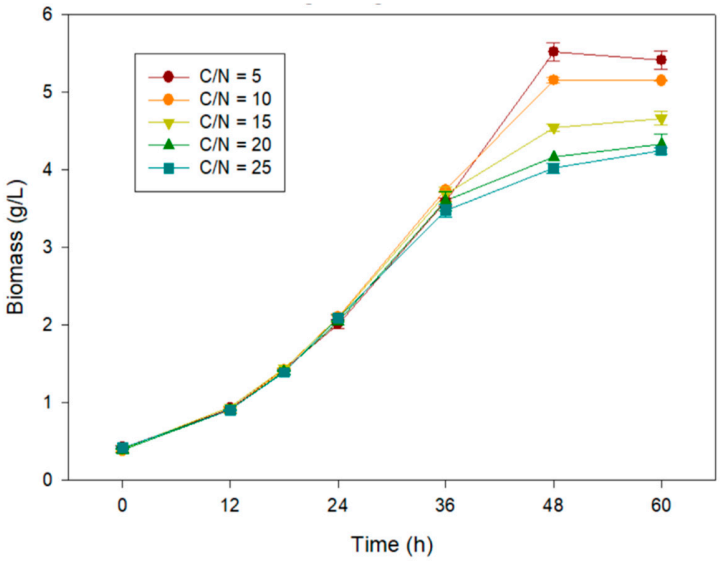

Figure S4. Growth curve of *E. gracilis* cultured under different C/N.

1.2 Supplementary Tables

Table S1. The maximum specific growth rate of heterotrophic *E. gracilis* under different temperature

Temperature (℃)	25	28	32	35
Maximum specific growth rate (/h)	0.049 ± 0.001^{a}	0.058 ± 0.001^{b}	0.069 ± 0.002^{c}	0.061 ± 0.003^{b}

Note: $^{a-b}$ Row values with same superscript letter displays not significantly different ($p < 0.05$).