

Growth of the green alga *rhizoclonium hieroglyphicum* under different forms of nitrogenous compounds

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ABSTRACT : The present study focuses on the effects of potassium nitrate (inorganic form of nitrogen) and urea (organic form of nitrogen) on growth of green filamentous alga *Rhizoclonium hieroglyphicum*. As the concentrations of nitrogenous compounds increased from 0.1, 1, 10, 100 and 1000 ppm, the total chlorophyll content of the alga (mg/ml) increased as 0.000671, 0.001218, 0.000822, 0.001218, -0.000627 in potassium nitrate and 0.00101, 0.00104, 0.00116, 0.00089, 0.00093 in urea. Higher concentrations of potassium nitrate (1000 ppm) inhibited the growth by reducing the total chlorophyll content of algal filaments (-0.000627 mg/ml) and urea enhanced the growth of green alga *R. hieroglyphicum* more than potassium nitrate by increasing the total chlorophyll content of the algal filaments.

Key Words : Growth, potassium nitrate, total chlorophyll content, urea.