

ABSTRACT

Filamentous green algae *Rhizoclonium hieroglyphicum* and *Spirogyra daedaleoides* were used for the optimization of monoculture on three different media (Bold Basal medium, CHU#10 medium and COMBO medium). Various techniques (streaking, single filament isolation and dilution methods) were used to find out the growth rate of given specimens. *Spirogyra daedaleoides* shown 0.168g total biomass BB medium by using streaking technique after 22 days with 0.028 g/ day total growth rate. CHU#10 medium was observed with 0.20g total biomass by streaking technique after 22 days with 0.024g/day growth rate. COMBO medium shown 0.11g total biomass by streaking technique with 0.021g/day biomass. *Rhizoclonium hieroglyphicum* shown 0.095g total biomass BB medium by using streaking technique after 22 days with 0.0043 g/day total growth rate. CHU#10 medium was observed with 0.08g total biomass by streaking method after 22 days with 0.032g/day growth rate. COMBO medium shown 0.05g total biomass by streaking technique with 0.03 g/day biomass. *Spirogyra daedaleoides* showing 21.55mm total length BB medium by using single filament isolation technique after 22 days with 0.319mm/day total growth rate. CHU#10 medium was observed with 23.78mm total length by single filament isolation technique after 22 days with 0.014/day growth rate. COMBO medium shown 14.5mm total biomass length by single filament isolation technique with 0.0298mm/day length. *Rhizoclonium hieroglyphicum* showing 21.06mm total length BB medium by using single filament isolation technique after 22 days with 0.03mm/day total growth rate. CHU#10 medium was observed with 20.08mm total length by single filament isolation technique after 22 days with 0.009/day growth rate. COMBO medium shown 15.01mm total biomass length by single filament isolation technique with 0.03mm/day length. *Spirogyra daedaleoides* shown 0.98g total biomass BB medium by using dilution technique after 22 days with 0.058 g/ day total growth rate. CHU#10 medium was observed with 0.19g total biomass by dilution technique after 22 days with 0.0020g/day growth rate. COMBO medium shown 0.11g total biomass by dilution technique with 0.028g/day biomass. *Rhizoclonium hieroglyphicum* shown 0.045g total biomass BB medium by using dilution technique after 22 days with 0.019g/ day total growth rate. CHU#10 medium was observed with