0LFURDOJDH FXOWLYDWLRQ LQ FRQWLQXRXV UHDFWRU XVLQJ rate on biomass productivity and tertiary treatment

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Microalgae are continuously attracting main attention from biomass researchers, especially due to their capacity of fast growth, CO_2 abatement and land-free cultivation as compared with conventional crops. Additionally, municipal wastewater has been long recognized as a suitable media for the cultivation of microalgae biomass. Culturing microalga with wastewater e uents also promotes a process of tertiary treatment, characterized by removal of main nutrients (N, P) from wastewater and simultaneously achieving high biomass productivities. However, few studies report data concerning biomass productivity in continuous mode using unsterilized mixotrophic wastewater e uent and we found no reports of E. coli population decay rates in these continuous reactors. is study focuses on the selection of native microalgae strains that are applicable for biomass production and tertiary wastewater treatment in continuous mode. Five strains were isolated and cultivated in unsterilized anaerobic e uent in batch growth mode, to identify the e cient microalgae isolates for biomass conversion. e isolate L06 (Chlorella sp.) was selected and evaluated based on ve dilution rates from 0.1 to 0.5 1/day on

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