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ABSTRACT

The purposes of this study were to find the optimum level of supplementing CO_2 for increasing the biomass and hydrocarbon production of *B. braunii* KMITL 2 (A race) and to determine the effects of CO_2 level on CO_2 fixation and biodiesel properties. The experimental results showed that the alga supplemented with 10% CO_2 produced the highest biomass (1.48±0.02 g L^{-1}) and CO_2 fixation rate (100.43±1.42 mg L^{-1} d^{-1}) that were 2.7 and 5.3 times higher than the control (0.04% CO_2). The gravimetric