

عنوان مقاله:

The investigation effect of light spectrum on protein and protein pigments on Spirulina Platensis

محل انتشار:

هفدهمین کنگره ملی مهندسی شیمی ایران (سال: 1400)

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خلاصه مقاله:

The national academy of medicine recommends that adults should get a minimum of 0.8 g of protein for every kilogram of body weight per day. Spirulina platensis is one of the photosynthetic cyanobacteria that has been used in various studies to investigate. Cyanobacteria are one of the promising cyanobacteria to produce high-value compounds such as proteins nucleic acids, lipids, vitamins and pigments which are extensively used in food, drug and cosmetics industries. So, cyanobacteria are an ideal food which contains ۴۶-۶۳ % proteins, ۸-۱۴% carbohydrates and ۴-۹% lipids based on its dry weight. In the present study, Spirulina platensis as blue-green cyanobacteria which was cultivated in Zarrouk medium for ۱۴ days under the white LED and its protein contents have been extracted by Lowry method. Spirulina platensis is commercial cyanobacteria. Spirulina cells are sensitive to spectrum of light. Because of high value- nutrient used to conduct various studies to investigate and understand the biochemical and biophysical properties of cyanobacterium cultivated under LED light. This study is carried out based on protein and protein (pigment (phycocyanin) in Spirulina platensis under various color LEDs (White, Blue and Yellow

کلمات کلیدی:

Spirulina platensis, Protein, Light spectrum, Phycocyanin, Cyanobacteria, Flat-plate photobioreactor

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