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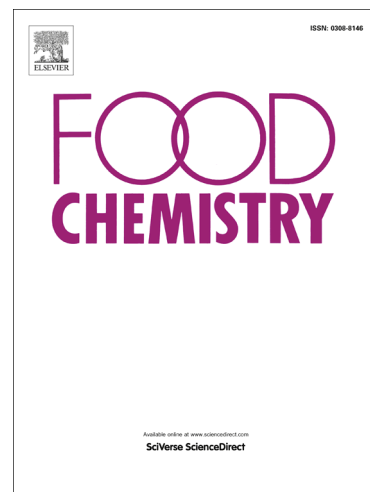
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Sugarcane bagasse hydrolysate as a potential feedstock for red pigment production**by *Monascus ruber***Ruly Terán Hilares ^{a,*}, Rebeca Andrade de Souza ^a, Paulo Franco Marcelino ^a, SilvioSilvério da Silva ^a, Giuliano Dragone ^b, Solange I. Mussatto ^c, Júlio César Santos ^a^a *Department of Biotechnology, Engineering School of Lorena, University of São Paulo,
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Abstract

Sugarcane bagasse (SCB) hydrolysate could be an interesting source for red pigment production by *Monascus ruber* Tieghem IOC 2225. The influence of different wavelength of light-emitting diode (LED) at 250 $\mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$ of photon flux density on red pigment production by *M. ruber* in glucose-based medium was evaluated. Then, SCB hydrolysate was used as carbon source under the previously selected light incidence conditions. In glucose-based medium, the highest pigment production was achieved in fermentation assisted with orange LED light (8.28 UA_{490nm}), white light (8.26 UA_{490nm}) and under dark condition (7.45 UA_{490nm}). By using SCB hydrolysate-based medium, the highest red pigment production (18.71 AU_{490nm}) was achieved under dark condition and the glucose and cellobiose present in the hydrolysate were metabolized. SCB enzymatic hydrolysate was demonstrated to be a promising carbon

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