





Research paper

High-Energy Ball Milling as a novel method to mecanolyze raw material for bio-H₂ production by dark fermentations of *Escherichia coli*

A. Martinez-Garcia^{a, b}, R.M. Velazquez-Vargas^a, E.A. Juarez-Arellano^a, C.G. Garay-Reyes^b, L. Perez-Picaso^a, O. Viñas-Bravo^a, A.K. Navarro-Mtz^c  

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Highlights

- High-energy ball-milling increases the reducing sugar content of raw materials.
- Fresh Taro reaches 59.44 % Bio-H₂ production efficiency.
- Higher Bio-H₂ production yield is observed when fresh raw material is used.
- The production of Bio-H₂ and metabolites depends on pH and ORP.

Abstract

This study analyzed the use of high-energy ball milling as a new raw material treatment for biohydrogen (Bio-H₂) production by dark fermentation of Escherichia coli. Potato (Solanum