

## Use of sweet potato root residues as carbon source for the growth of xylanase-producing *Cellulosimicrobium sp.*

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### Abstract

Application of sweet potato root (SRP) residues as an alternative carbon source to formulate a culture medium for the growth of xylanase-producing microorganisms, is presented in this article. Six commercial varieties of SPR were tested for evaluating the growth of *Cellulosimicrobium sp. CO1A* strain in shaken flask cultures. Results showed that *Cellulosimicrobium sp. CO1A1* was able to grow in a medium formulated with SPR. Biomass estimated by optical density was the most appropriate method for the medium evaluated. Additionally, biomass did not show significant differences ( $p > 0.05$ ) between commercial varieties of SPR, being between 8.12 and 9.26 of OD. All the varieties of RPS tested in this work are equally promising source to be applied in a bioprocess to obtain xylanase by *Cellulosimicrobium sp. CO1A1*.

**Key words:** sweet potato root, *Cellulosimicrobium sp.*, biomass, xylanase.

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