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Thermostable and organic solvent tolerant lipase producing Fungi in solid state bioconversion of palm kernel cake (Article)

Riyadi, F.A., Alam, M.Z., Salleh, M.N., Salleh, H.M. 

Bioenvironmental Engineering Research Centre (BERC), Dept. of Biotechnology Engineering, Faculty of Engineering, International Islamic University Malaysia, Kuala Lumpur, Malaysia


Abstract

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Lipase possessing thermal stability and organic solvent tolerant are believed to distinctively enhance lipase - catalyzed reactions of industrial importance. This study sought to explore the potential of palm kernel cake (PKC) to act as an oil and lipid rich environment for fungal growth, as well as a substrate to produce thermostable and organic solvent tolerant lipase through solid - state bioconversion . Four thermal and solvent tolerant fungi have successfully isolated with lipase producing capabilities. The isolates were screened based on the clearing zone methods on phenol red as well as on tween 80 agar media and quantified using solid - state bioconversion . Among the four isolates, PKC12B2 displayed highest clearance zone on the plate and lipase activities with 5.83 U/gram dry PKC. Morphological identification of PKC12B2 showed the characteristic of genus *Rhizopus* sp. © 2017, University of Malaya. All rights reserved.

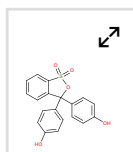
SciVal Topic Prominence

Topic: Lipase | Lipases | Purified lipase

Prominence percentile: 94.435 

Chemistry database information

Substances



Author keywords

[Filamentous fungi](#) [Palm kernel cake](#) [Solid - state fermentation](#)[Thermostable - organic solvent tolerant lipase](#)

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