

Cellulolytic and xylanolytic activities of common indoor fungi - DTU Orbit (08/11/2017)

Cellulolytic and xylanolytic activities of common indoor fungi

Moldy building materials, such as chip wood and gypsum, should be a good source for fungal strains with high production of lignocellulolytic enzymes. Screening of 21 common indoor fungal strains showed, contrary to the expected, that the *Chaetomium* and *Stachybotrys* strains had little or no cellulolytic and xylanolytic activities using AZCL-assays. On the other hand, both *Cladosporium sphaerospermum* and *Penicillium chrysogenum* showed the highest cellulase, β -glucosidase, mannanase, β -galactanase and arabinanase activities and would be good candidates for over-producers of enzymes needed to supplement industrial enzyme blends or boost the bioconversion of lignocellulose-rich biomass

General information

State: Published

Organisations: Department of Systems Biology, Technical University of Denmark

Authors: Andersen, B. (Intern), Poulsen, R. (Ekstern), Hansen, G. H. (Intern)

Number of pages: 6

Pages: 111-116

Publication date: 2016

Main Research Area: Technical/natural sciences

Publication information

Journal: International Biodeterioration & Biodegradation

Volume: 107

ISSN (Print): 0964-8305

Ratings:

BFI (2017): BFI-level 1

Web of Science (2017): Indexed Yes

BFI (2016): BFI-level 1

Scopus rating (2016): SJR 1.033 SNIP 1.555 CiteScore 3.38

Web of Science (2016): Indexed yes

BFI (2015): BFI-level 1

Scopus rating (2015): SJR 0.899 SNIP 1.326 CiteScore 2.71

Web of Science (2015): Indexed yes

BFI (2014): BFI-level 1

Scopus rating (2014): SJR 0.881 SNIP 1.389 CiteScore 2.53

Web of Science (2014): Indexed yes

BFI (2013): BFI-level 1

Scopus rating (2013): SJR 0.873 SNIP 1.449 CiteScore 2.51

ISI indexed (2013): ISI indexed yes

Web of Science (2013): Indexed yes

BFI (2012): BFI-level 1

Scopus rating (2012): SJR 1.056 SNIP 1.289 CiteScore 2.31

ISI indexed (2012): ISI indexed yes

BFI (2011): BFI-level 1

Scopus rating (2011): SJR 0.919 SNIP 1.38 CiteScore 2.34

ISI indexed (2011): ISI indexed yes

Web of Science (2011): Indexed yes

BFI (2010): BFI-level 1

Scopus rating (2010): SJR 1.004 SNIP 1.27

BFI (2009): BFI-level 1

Scopus rating (2009): SJR 1.114 SNIP 1.382

Web of Science (2009): Indexed yes

BFI (2008): BFI-level 1

Scopus rating (2008): SJR 0.652 SNIP 1.118

Scopus rating (2007): SJR 0.657 SNIP 1.033

Web of Science (2007): Indexed yes

Scopus rating (2006): SJR 1.021 SNIP 1.431

Scopus rating (2005): SJR 0.56 SNIP 1.15

Scopus rating (2004): SJR 0.353 SNIP 0.752

Web of Science (2004): Indexed yes

Scopus rating (2003): SJR 0.408 SNIP 0.804

Web of Science (2003): Indexed yes

Scopus rating (2002): SJR 0.57 SNIP 0.661

Scopus rating (2001): SJR 0.557 SNIP 1.018

Scopus rating (2000): SJR 0.396 SNIP 0.917

Web of Science (2000): Indexed yes

Scopus rating (1999): SJR 0.43 SNIP 0.634

Original language: English

AZCL enzyme assay, Endo-enzymes, Wheat bran/sphagnum peat medium

DOIs:

10.1016/j.ibiod.2015.11.012

Source: PublicationPreSubmission

Source-ID: 118752826

Publication: Research - peer-review › Journal article – Annual report year: 2015