

LIST OF LATEST PEER-REVIEWED SCIENTIFIC PUBLICATIONS

Meyer, V., Andersen, M.R., Brakhage, A.A., Braus, G.H., Caddick, M.X., Cairns, T.C., de Vries, R.P., Haarmann, T., Hansen, K., Hertz-Fowler, C., Krappmann, S., Mortensen, U.H., Peñalva, M.A., Ram, A.F.J. and Head, R.M. (2016) Current challenges of research on filamentous fungi in relation to human welfare and a sustainable bio-economy: a white paper. *Fungal Biology and Biotechnology* **3:6**

Ploss, T.N., Reilman, E., Monteferrante, C.G., Denham, E.L., Piersma, S., Lingner, A., Vehmaanperä, J., Lorenz, P. and van Dijk, J.M. (2016) Homogeneity and heterogeneity in amylase production by *Bacillus subtilis* under different growth conditions. *Microbial Cell Factories* **15**, 57-72.

Paloheimo, M., Haarmann, T., Mäkinen, S. and Vehmaanperä, J. (2016) Production of industrial enzymes in *Trichoderma reesei*. Gene Expression Systems in Fungi: Advancements and Applications. Eds. Monika Schmoll and Christoph Dattenböck. Springer, Cham. pp. 23-58.

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Linke, R., Thallinger, G.G., Haarmann, T., Eidner, J., Schreiter, M., Lorenz, P., Seiboth, B. and Kubicek, C.P. (2015) Restoration of female fertility in *Trichoderma reesei* QM6a provides the basis for inbreeding in this industrial cellulase producing fungus. *Biotechnology for Biofuels* **8**, 155-164.

Juntunen, K., Mäkinen, S., Isoniemi, S., Valtakari, L., Pelzer, A., Jänis, J. and Paloheimo, M. (2015) A new subtilase-like protease deriving from *Fusarium equiseti* with high potential for industrial applications. *Applied Biochemistry and Biotechnology* **177**, 407-430.

Rytioja, J.T., Hildén, S. K., Mäkinen, S., Vehmaanperä, J., Hatakka, A.I. and Mäkelä, M.R. (2015) Saccharification of lignocelluloses by carbohydrate active enzymes of the white rot fungus *Dichomitus squalens*. *PLoS ONE* **10**, e0145166 (1-13).

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Puranen, T., Alapuranen, M. and Vehmaanperä, J. (2014) *Trichoderma* enzymes for textile industries. In *Biotechnology and Biology of Trichoderma*. Eds. Gupta, V.J., Schmoll, M., Herrera-Estrella, A., Upadhyay, R.S., Druzhinina, I. and Tuohy, M.G. Elsevier, B.V., Amsterdam, NL. pp. 351-362

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Kemppainen, K., Ranta, L., Sipilä, E., Östman, A., Vehmaanperä, J., Puranen, T., Langfelder, K., Hannula, J., Kallioinen, A., Siika-aho, M., Sipilä, K. and von Weymarn, N. (2012) Ethanol and biogas production from waste fibre and fibre sludge – The FibreEtOH concept. *Biomass and Bioenergy* **46**, 60-69.

Viikari, L., Vehmaanperä, J. and Koivula, A. (2012) Lignocellulosic ethanol: from science to industry. *Biomass and Bioenergy* **46**, 13-24.

Vehmaanperä, J. and Löbel, D. (2012) What next – potential improvements in phytases? Proceedings of the International Phytase Summit 11-13 December 2012, Rome (www.ips2-2012.com). Edited: AB Vista. pp. 137-143.

Nyüssölä, A., Heshof, R., Haarmann, T., Eidner, J., Westerholm-Parvinen, A., Langfelder, K., Kruus, K., de Graaff, L. and Buchert, J. (2012) Methods for identifying lipoxygenase producing microorganisms on agar plates. *AMB Express* **2**, 17-

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Zhang J, Siika-aho, M., Puranen, T., Tang, M., Tenkanen, M. and Viikari L. (2011) Thermostable recombinant xylanases from *Nonomuraea flexuosa* and *Thermoascus aurantiacus* show distinct properties in the hydrolysis of xylans and pretreated wheat straw. *Biotechnology for Biofuels* **4**, 12-

Szjártó, N., Horan, E., Zhang, J., Puranen T., Siika-aho, M. and Viikari, L. (2011) Thermostable endoglucanases in the liquefaction of hydrothermally pretreated wheat straw. *Biotechnology for Biofuels* **4**, 2-

Metz, B., Seidl-Seiboth, V., Haarmann, T., Kopchinskiy, A., Lorenz, P., Seiboth, B. and Kubicek, C.P. (2011) Expression of biomass-degrading enzymes is a major event during conidium development in *Trichoderma reesei*. *Eukaryotic Cell* **10**, 1527-1535.

Vepsäläinen, L., Palmunen, K., Uotila, S., Visuri, K., Rouvinen, J., and Kallio, J.M. (2011) Polysaccharides as precipitants in protein crystallization for X-ray diffraction studies. *Crystal Growth & Design* **11**, 1152-1158.

Paloheimo, M., Piironen, J. and Vehmaanperä, J. (2011) Xylanases and cellulases as feed additives. In *Enzymes in Farm Animal Nutrition*, 2nd Edition. Eds. Michael Bedford and Gary Partridge. CABI, Oxfordshire, UK. pp. 12-53.

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Anbarasan, S., Jänis, J., Paloheimo, M., Laitaoja, M., Vuolanto, M., Karimäki, J., Vainiotalo, P., Leisola, M. and Turunen, O. (2010) Effect of glycosylation and additional domains on the thermostability of a family 10 xylanase produced by *Thermopolyspora flexuosa*. *Applied and Environmental Microbiology* **76**, 356-360.

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Nakari-Setälä, T., Paloheimo, M., Kallio, J., Vehmaanperä, J., Penttilä, M. and Saloheimo, M. (2009) Genetic modification of carbon catabolite repression in *Trichoderma reesei* for improved protein production. *Applied and Environmental Microbiology* **75**, 4853-4860.

Voutilainen, S., Boer, H., Alapuranen, M., Jänis, J., Vehmaanperä, J. and Koivula, A. (2009) Improving the thermostability and activity of *Melanocarpus albomyces* cellobiohydrolase Cel7B. *Applied Microbiology and Biotechnology* **83**, 261-272

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Parkkinen, T., Koivula A., Vehmaanperä, J. and Rouvinen, J. (2007) Crystal structures of *Melanocarpus albomyces* cellobiohydrolase Cel7B in complex with cello-oligomers show high flexibility in the substrate binding. *Protein science* **17**, 1383-1394.

Szjártó, N., Siika-aho, M., Tenkanen, M., Alapuranen, M., Vehmaanperä, J., Réczey, R. and Viikari, L. (2008) Hydrolysis of amorphous and crystalline cellulose by heterologously produced cellulases of *Melanocarpus albomyces*. *Journal of Biotechnology* **136**, 140-147.

Voutilainen, S., Puranen, T., Siika-aho, M., Kallio, J., Hooman, S., Viikari, L., Vehmaanperä, J. and Koivula, A. (2008) Cloning, expression and characterization of novel thermostable family 7 cellobiohydrolases. *Biotechnology and Bioengineering* **101**, 515-528.

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Benko, Z., Drahos, E., Szengyel, Z., Puranen, T., Vehmaanperä, J. and Reczey, K. (2007) *Thermoascus aurantiacus* CBHI/Cel7A production in *Trichoderma reesei* on alternative carbon sources. *Applied Biochemistry and Biotechnology*, **136-140**, 195-204.

Gamauf, C., Marchetti, M., Kallio, J., Puranen, T., Vehmaanperä, J., Allmaier, G., Kubicek, C.P. and Seiboth, B. (2007) Characterization of the *bgal*-encoded glycoside hydrolase family 35 beta-galactosidase of *Hypocrea jecorina* with galacto-beta-D-galactanase activity. *FEBS Journal* **274**, 1691-1700.

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Parkkinen, T., Koivula A., Vehmaanperä, J. and Rouvinen, J. (2007) Preliminary X-ray analysis of cellobiohydrolase Cel7B from *Melanocarpus albomyces*. *Acta Crystallographica Section F: Structural Biology and Crystallization Communications* **63**, 754-757.

Viikari, L., Alapuranen, M., Puranen, T., Vehmaanperä, J. and Siika-aho, M. (2007) Thermostable enzymes in lignocellulose hydrolysis. *Advances in Biochemical Engineering/Biotechnology* **108**, 121-145.

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Paloheimo, M., Mäntylä, A., Kallio, J., Puranen, T. and Suominen, P. (2003) High-yield production of a bacterial xylanase in the filamentous fungus *Trichoderma reesei* requires a carrier polypeptide with an intact domain structure. *Applied and Environmental Microbiology* **69**, 7073-7082.

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