

Abstracts and Links to Papers of Interest from Other Journals

This section contains links to recent papers, published in a number of Journals considered of interest to our readers.

Journal of the American Society of Brewing Chemists

Volume 65(4), 2007

Links to the full abstracts of these papers can be found at

<http://www.asbcnet.org/Journal/>

Low-Temperature Processing of Wheat for Bioethanol Production: Part I. Studies on the Use of Commercial Enzymes. M. Miedl, S. Cornfine, K. A. Leiper, M. Shepherd, and G. G. Stewart. *JASBC*, Vol. 65(4), 2007, pp. 183–191.

Isolation and Characteristics of Lactic Acid Bacteria in Japanese Spirit Awamori Mash. S. Watanabe, M. Kanauchi, T. Kakuta, and T. Koizumi. *JASBC*, Vol. 65(4), 2007, pp. 197–201.

Yeast Vitality—A Holistic Approach Toward an Integrated Solution to Predict Yeast Performance. E. J. Lodolo and I. C. Cantrell. *JASBC*, Vol. 65(4), 2007, pp. 202–207.

Impact of CO₂ Induced Anaerobiosis on the Assessment of Brewing Yeast Flocculation. S. J. Lawrence and K. A. Smart. *JASBC*, Vol. 65(4), 2007, pp. 208–213.

Trace Analysis of Hop Essential Oils in Spent Hop. M. Anioł, E. Huszcza, A. Bartmańska, A. Żolnierczyk, W. Mączka, and C. Wawrzęńczyk. *JASBC*, Vol. 65(4), 2007, pp. 214–218.

Effect of Operational Parameters on the Determination of Laboratory Extract and Associated Wort Quality Factors. P. B. Schwarz, Y. Li, J. Barr, and R. D. Horsley. *JASBC*, Vol. 65(4), 2007, pp. 219–228.

Comparison of Methods for Degassing Beer for Analysis. K. J. Siebert and P. Y. Lynn. *JASBC*, Vol. 65(4), 2007, pp. 229–231.

Master Brewers Association of the Americas Technical Quarterly

Volume 44(4), 2007

Links to the full abstracts of these papers can be found at

<http://www.mbaa.com/TechQuarterly/>

Influence of Variety and Malting Period on alpha- and beta-Amylases in Different Nigerian Maize Cultivars. O. A. Awoyinka and O. O. Adebawo. *MBAA TQ* Vol. 44(4), 2007, pp. 252–255.

Influence of Mashing Conditions on Fermentation Characteristics of All-Malt Wort Used to Produce Beer or Whisky. Graham G. Stewart, Takeshi Yonesawa, and Stephan A. Martin. *MBAA TQ* Vol. 44(4), 2007, pp. 256–263.

Beginnings of Microbiology and Biochemistry: The Contribution of Yeast Research. James A. Barnett. *MBAA TQ* Vol. 44(4), 2007, pp. 264–272.

Use of Fluorogenic Proteinase Assays to Examine Protein Mobilization in Barley Varieties and Across Populations. Mark R. Schmitt and Allen D. Budde. *MBAA TQ* Vol. 44(4), 2007, pp. 273–277.

Quality Control of Barrier-Enhanced Plastic Bottles. Roland Folz and Roland Pahl. *MBAA TQ* Vol. 44(4), 2007, pp. 278–280.

Investigation of Process and Design Changes in Horizontal Tank Outlet Pipes During Main Fermentation. Kristina Boee and Dr.-Ing. Christoph Tenge. *MBAA TQ* Vol. 44(4), 2007, pp. 281–285.

Assessment of the Physiological Status of Yeast During High- and Low-Gravity Wort Fermentations Determined by Flow Cytometry. Paul H. Chlup, Tao Wang, Eung Gwan Lee, and Graham G. Stewart. *MBAA TQ* Vol. 44(4), 2007, pp. 286–295.

***Brewing Science – Monatsschrift
für Brauwissenschaft***

Fachverlag Hans Carl, Nürnberg, Germany

Vol. 60(November/December), 2007

Role of ns-LTP1 in the Development of Primary Gushing. D. Hecht and S. Hippeli. *Brewing Science (Monatsschrift für Brauwissenschaft)* Vol. 60(November/December), 2007, pp. 1–9.

Our investigations were focussed on ns-LTP1 (non specific lipid transfer protein 1) as the main inductor of the primary gushing phenomenon. We asserted that gushing beer contains more ns-LTP1 than non-gushing beer and

this overbalance is responsible for over foaming. Surprisingly, less non ns-LTP1 was detectable in a set of gushing beers. We showed that loss of ns-LTP1 depends on fungal infestation and the heating procedure. ns-LTP1 degrading activity of heated culture filtrates of *Fusarium culmorum* and *Fusarium graminearum* support the assumption that heat stable extracellular proteinases secreted by the two *Fusaria* strains are responsible for protein degradation. The heating procedure also results in a destruction of naturally occurring proteinase inhibitors in wheat kernels. This is the condition precedent to an effective operation of the fungal proteases. Furthermore, our results support the concept that it is not ns-LTP1 itself, but rather glycosylated peptides generated during proteolytic fragmentation of modified ns-LTP1 species that initiate gushing activity.