

# Abstracts and Links to Papers of Interest from Other Journals

This section contains titles and links to recent papers published in a number of Journals considered of interest to our readers. Rather than full abstracts there are internet links to Journals that have abstracts available on-line at no charge.

## ABSTRACT COMMITTEE 2004

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### Abstract briefs from *Monatsschrift für Brauwissenschaft*

Feb 2004, ex Gerlinde Stang

**Differential spectroscopy and beer ageing.** J. Savel. *Monatsschrift für Brauwissenschaft*, Vol. 57, no. 1/2, 2004, pp. 1–7.

The role of quinines in beer oxidation was studied by adding juglone, p-benzoquinone and ubiquinone to beer that was pasteurised in the presence and absence of oxygen, using both differential spectroscopy and photo-bleached methylene blue re-oxidation.

**Starch granule size distribution in caryopses of selected malting varieties of spring barley.** V. Psota, I. Bohacenko, J. Chmelik and J. Hartmann. *Monatsschrift für Brauwissenschaft*, Vol. 57, no. 1/2, 2004, pp. 8–12.

Starch granule size distribution was followed for 10 barley varieties, of Czech, Slovak and German origin, over a 3 year period, using low angle laser light scattering (LALLS). The distribution was mostly dependent on variety. The relation between starch granule size distribution and the barley, malt and wort parameters studied for each variety showed only a low statistical dependence.

**The effect of steeping conditions on Arapiles malting.** X.B. Huang, Y.H. Han and Sh.J. Yu. *Monatsschrift für Brauwissenschaft*, Vol. 57, no. 1/2, 2004, pp. 13–16.

The effect of varying steeping conditions on the ultimate quality of the finished malt was studied for the variety Arapiles. Aeration during steeping enhanced extract and the free amino nitrogen of the malt. Malt quality was directly related to the steep out moisture of the grain.

### Microbiology

Links to the full abstracts of these papers can be found at <http://mic.sgmjournals.org>

**Aggregation of yeast cells: direct measurement of discrete lectin-carbohydrate interactions.** A. Touhamu, B.

Hoffmann, A. Vasella, F.A. Denis and Y.F. Dufrene. *Microbiology*, 2003, Vol. 149, pp. 2873–2878.

A flocculant and a non-flocculant strain of *Saccharomyces* were studied using atomic force microscopy to measure the lectin-carbohydrate interaction on immobilised yeast cells. Strong adhesion forces were shown by the flocculant strain.

**Chitin scar breaks in aged *Saccharomyces cerevisiae*.** C.D. Powell, D.E. Quain and K.A. Smart. *Microbiology*, Vol. 149, 2003, pp. 3129–3137.

Old yeast cells, with numerous chitin bud scars, were collected by differential centrifugation. Cell diameter and surface area were much greater in old cells than in virgin cells. Cracks develop in the scars of older cells, with symmetrical patterns suggesting cracking allows cell expansion without damage to its structure.

### Applied and Environmental Microbiology

A link to the full abstract of this paper can be found at <http://journals.asm.org/>

**Cell size and water permeability as determining factors for cell viability after freezing at different cooling rates.** F. Dumont, P.-A. Marechal and P. Gervais. *Applied and Environmental Microbiology*, Vol. 70, no. 1, 2004, pp. 268–272.

This paper examines the viabilities of a number of cells including *Saccharomyces cerevisiae* CBS 1171 and a *Candida* sp. to investigate how cooling rates during freezing affect viability.

### Master Brewers Association of the Americas Technical Quarterly

Links to the full abstracts of these papers can be found at <http://www.mbaa.com/TechQuarterly/>

**Chemical engineering for quality brewing.** N.J. Huige. *MBAA TQ*, Vol. 41, no. 1, 2004, pp. 9–17.

**Wort clarity: effects on fermentation.** G.G. Stewart and S.A. Martin. *MBAA TQ*, Vol. 41, no. 1, 2004, pp. 18–26.

**The effect of wheat malting on the colloidal haze of white beers.** F. Delvaux, F. J. Combes and F.R. Delvaux. *MBAA TQ*, Vol. 41, no. 1, 2004, pp. 27–32.

**Package quality/pasteurizer conditions: avoiding staining, spotting, and rusting.** T. Soukup and J. Bland. *MBAA TQ*, Vol. 41, no. 1, 2004, pp. 33–41.

**Benefits of using chlorine dioxide as an alternative to hot-water sanitation.** G. Agius, S. Burkeen and J. Mynatt. *MBAA TQ*, Vol. 41, no. 1, 2004, pp. 42–44.

**A review of progress in mash separation technology.** J. Andrews. *MBAA TQ*, Vol. 41, no. 1, 2004, pp. 45–49.

**Control of hydrogen sulfide in beer with a copper electrolysis system.** E. Pfisterer, I. Richardson and A. Soti. *MBAA TQ*, Vol. 41, no. 1, 2004, pp. 50–52.

### *Journal of the American Society of Brewing Chemists*

Links to the full abstracts of these papers can be found at <http://www.asbcnet.org/Journal/>

**Identification and differentiation of hop varieties using simple sequence repeat markers.** A. Čerenak, J. Jakšič and B. Javornik. *JASBC*, Vol. 62, no. 1, 2004, pp. 1–7.

**The impact of sedimentation on cone yeast heterogeneity.** C.D. Powell, D.E. Quain, and K.A. Smart. *JASBC*, Vol. 62, no. 1, 2004, pp. 8–17.

**Evaluating the malting quality of hulless CDC Dawn, acid-dehusked Harrington, and Harrington barley.** M.J. Edney and D.E. Langrell. *JASBC*, Vol. 62, no. 1, 2004, pp. 18–22.

**Laboratory-scale production of high-gravity wort suitable for a broad variety of research applications.** D.I. Reilly, C. O’Cleirigh and P.K. Walsh. *JASBC*, Vol. 62, no. 1, 2004, pp. 23–28.

**Continuous primary fermentation of beer with yeast immobilized on spent grains – the effect of operational conditions.** T. Brányik, A.A. Vicente, J.M.M. Cruz and J.A. Teixeira. *JASBC*, Vol. 62, no. 1, 2004 pp. 29–34.

**A parallel analysis of H<sub>2</sub>S and SO<sub>2</sub> formation by brewing yeast in response to sulfur-containing amino acids and ammonium ions.** W. Duan, F.A. Roddick, V.J. Higgins and P.J. Rogers. *JASBC*, Vol. 62, no. 1, 2004, pp. 35–41.

**Evaluation of can packaging methods.** Subcommittee Reports. *JASBC*, Vol. 62, no. 1, 2004, pp. 42–48.

**Sprout damage in barley.** Subcommittee Reports. *JASBC*, Vol. 62, no. 1, 2004, pp. 49–53.