



Aggie Brew

The Newsletter of the campus brewing program at UC Davis

Issue 6
August 2002

The Anheuser-Busch Brewing and Food Laboratory

We are thrilled to advise that The Anheuser-Busch Foundation has pledged \$5 million in matching funds to support construction of a new 16,000-square-foot building to house the pilot facilities of the Food Science & Technology Department. The building will be named the **Anheuser-Busch Brewing and Food Science Laboratory**. We have exciting plans for the Malting and Brewing Center within this Laboratory. It will house both the campus and Extension activities.

The new building, slated for completion in 2006, will be one of three to be constructed as part of the new Mondavi Institute. It will be located on Old Davis Road near the Interstate 80 entrance to UC Davis.

The Robert Mondavi Institute also will include an academic building with 75,000 square feet of teaching and research laboratories, offices and meeting rooms.

Gone into the industry

Evan Miracle will be leaving us shortly to join the staff of Sierra Nevada. Craig Heisner and Alberto Sun have spent the summer months working with Anheuser-Busch, respectively at their Los Angeles and Fairfield breweries. Chris Dennis-Strathmeyer has been working with Shiner in Texas, Joe Hayes with Sudwerk.

Supporters' Meeting

Friends and supporters met in Davis on June 5, 2002. Visitors came from Australia, Japan and the U.K as well as from across the U.S. A full day of presentations covered topics as diverse as the architecture of the endosperm cell wall of barley, esterases, sulfur volatiles, foam nucleation, foam interactions and the customer perception of stale and lightstruck. The visitors also had an opportunity to inspect the new 1.5 barrel brewery that we hope will shortly be commissioned.

AME Successes

Evan Miracle and Bill Stephenson passed the AME qualification of the Institute & Guild of Brewing – continuing the 100% success rate for the team! In addition, Rich Ellis passed the single module he sat.

Recent Publications

Since the last newsletter the following papers and articles have been published or will appear shortly.

Bamforth C. (2002) Great Brewing Debates Part 1: Does “Solubilase” exist? *Brewers Guardian*, July

Lynch, D.M & Bamforth, C.W. (2002) Measurement and Characterization of Bubble Nucleation in Beer. *Journal of Food Science*, in press

Kapp, G.R. & Bamforth, C.W. (2002) The foaming properties of proteins isolated from barley. *Journal of the Science of Food and Agriculture*, in press

Smythe, J.E & Bamforth, C.W. (2002, 2003?) The path analysis method of eliminating preferred stimuli (PAMEPS) as a means to determine foam preferences for lagers in European judges based upon image assessment. *Food Quality and Preference*, in press

Bamforth, C.W. (2003) Beers – History and Types. In *Encyclopedia of Food Sciences & Nutrition* (eds B Caballero, L Trugo and P Finglas), London: Academic Press, in press

Bamforth, C.W. (2003) Beers – Chemistry of Brewing. In *Encyclopedia of Food Sciences & Nutrition* (eds B Caballero, L Trugo and P Finglas), London: Academic Press, in press

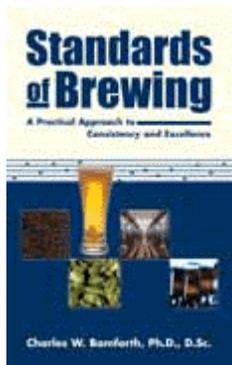
Smythe, J.E. & Bamforth, C.W. (2002) The effect of perceived beer history on reported preferences by sensory panels with different levels of training. *Journal of the Institute of Brewing*, 108, 34-36

Smythe, J.E., O'Mahony, M. & Bamforth, C.W. (2002) The Impact of the Appearance of Beer on its Perception. *Journal of the Institute of Brewing*, 108, 37-42

Ward, R.E. & Bamforth, C.W. (2002) Esterases in barley and malt. *Cereal Chemistry*, in press

Bamforth, C. (2002) Great Brewing Debates Part 2: How important is wort clarity? *Brewers Guardian*, in press

Bamforth, C. (2002) Great Brewing Debates Part 3: The Grand Modification Mystery. *Brewers Guardian*, in press



The New Book

I am pleased to say that a new book is out! Go to <http://beertown.org/BP/bamforth.htm> to order! This is what you will read there:

Standards of Brewing covers an essential topic for today's brewers: consistent production of quality product. With distribution expanding and competition intense, no brewery can afford to release product for distribution unless it is confident the beer will meet consumer expectations—even months after production. Bamforth covers the principles and practices of brewery quality so that brewers can establish or audit their own programs and procedures for producing consistent, high quality beer.

Contributions

I am extremely indebted to Anheuser-Busch, Sierra Nevada, Coors, Kirin, Asahi, ISP, John I Haas, Heineken, Miller, Cargill, Fosters, Scottish Courage, Rahr Malting and Moonlight Brewing Company for gifts in financial support of the program. We are also thrilled with the gift of a micro-maltings from Conagra. Additionally several employees of Anheuser-Busch, all alumni from UC Davis, graciously donated to the program through a Matching Grant Program

CAN YOU HELP? Do you want to be associated with the furtherance of our exciting mission?

Keep in touch

Please keep in touch, whether you are an alumnus or somebody keen to take advantage of the teaching and research programs at UCD. I can be reached at

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From the photo album



Three teachers of brewing at Davis (l to r) Charlie Bamforth, Michael Lewis, "Tommy" Nakayama. The new brewery vessels are in the rear



Describing the new facilities to the Press, not disco dancing, although I was quite excited