

MBAA District Mid South
Innaugural Meeting, December 15, 2007
Hosted by Blackstone Brewery and Restaurant

Dr. Gary Spedding

“Critical Areas of Modern Brewing Research Overlooked by the Modern Craft Brewer”.

Q.: *Are Cinnamoyl esterases located only in the husk?*

A.: I remember reading about the location but cannot find that info at this time. However, I think the esterases are only located with the husk and immediate surrounding layers of the barley/barley malt. If you or others are interested please contact me on this and I'll dig out the key references and get you a more defined answer on this one. I think a new paper has just been published on this in the last couple weeks.

Q.: *Could you please detail: Citation Service?*

A.: The Sciences and medicine have services out there that locate the key information or provide Abstract services (present the Abstracts of papers) together with Journal, Title of Paper and authors and sometimes author contact info. That way readers get a brief glimpse of what is out there and where. I think both MBAA TQ and ASBC Journal (and Journal of the Institute of Brewing) have done something similar. Several articles are referred to in each issue. There is one group at a US University that puts out a very extensive newsletter dealing with all aspects of yeast. Basically a listing of key information on this topic. We need someone to do a more extensive review of the worldwide literature as it pertains to brewing so we don't get left behind in knowing key information.

Q.: *Haze issues – Did you find any issues between HAZE, malt and different times of the year the beer was brewed?*

A.: I note that haze issues appear cyclically (in other words if we see one beer with a haze from a brewery I can usually be sure two or three other brewers will also be seeing issues at the same time) but have not had time to note down or think about a full answer to this question. Usually we deal with the issue – identify the type of haze if possible and move on. It would be worth trying to find an answer though to this question. However, I think most issues are related to the very heavy use of hops (hop polyphenols) leading to protein-polyphenol or classical haze issues. Karl Siebert at Cornell is the expert in this area and I know is still active in looking at these types of problems for a few brewers.

Q.: *On your transfer of light energy question (Electro analysis); how can it be used in brewing?*

A.: I have no answers. All I know is that the lightstruck phenomenon is an electric energy transfer issue leading to MBT production. The full electrochemical mechanism seems to have been elucidated but I know of no ways to apply such procedures to brewing itself.