

Comments on Nicotine

A meeting was held on June 30 to discuss past research on nicotine. Those in attendance were:

Sir Charles Ellis, Drs. Green, Felton, Wood, Ayers, Ayers, Backhurst, Cinkotai, Evelyn, Kilburn and Johnson and Messrs. Nicholl and Dymond.

The purpose of the meeting was to discuss the results from Projects MAD HATTER and HIPPO, and to stimulate further discussion on the importance of nicotine to the industry. Sir Charles started the meeting by saying that he had first brought out the concept that we are in a nicotine rather than a tobacco industry, and then set up the above projects to sell this concept to management. He first had to sell Fritz Bader (Sp. ?) to get authorization for the project.

Project MAD HATTER was originally arranged to maximize the desirable constituents of smoke and minimize the undesirable ones. The first part of the study was a complete literature search on the pharmacology, sociology and psychology of smoking. The second part was designed to find out what the body does with nicotine. The results of this project were presented by Dr. Cinkotai.

Dr. Evelyn presented the results from Project HIPPO which was designed to delineate the somewhat paradoxical effects of nicotine as both a stimulant and a tranquilizer. The tranquilizing effects were found to be considerably different from those of reserpine. Nicotine appears to serve a very useful function in helping the organism handle stress. Although nicotine in the bloodstream is rapidly metabolized, some is apparently stored for a much longer time in places where it can become involved in the stress biochemistry.

After the presentation, the group had a discussion on the organoleptic effects of nicotine. Dr. Griffith's low nicotine VICEROY blend and the smoking results from it were discussed, and they may want a batch of it for further testing. Another easy test of free nicotine odor and irritation involves smelling some as it is eluted from a gas chromatograph - a small amount will almost knock one over and the aroma is apparent.

It appears to this author that the Southampton group is going to be doing a large amount of work on nicotine, and for some good reasons. To summarize:

Project ARIEL - This is dormant for the moment. The first samples tried gave a tremendous kick, even though the nicotine delivery was quite small. It would appear that the project will be reinitiated within a few months.

Dr. S. R. Evelyn is presently investigating the absorption of extractable and non-extractable nicotine in the mouth, albeit with a mechanical mouth.

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Dr. J. D. Backhurst is setting up an analysis for pH of whole smoke on a puff-by-puff basis. This correlates with his previous interest in extractable nicotine

Mr. H. G. Horsewell continues to work with alkaline filter additives which selectively increase nicotine delivery.

Dr. R. E. Thornton will be synthesizing ring-labelled nicotine as his first project in the new radiochemical facilities. This will initially be to determine the percentage of nicotine which is destroyed during smoking.

Dr. D. J. Wood will be assigning the new physiologist to a study into the organoleptic effects of nicotine.

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