



Bernhard C. Hertlein
1922-1985

Bernhard C. Hertlein, Senior Research Microbiologist at the Lee County Mosquito Control District, died December 21, 1985 after a short illness. For the past nine years, Ben, as he is remembered by all his friends and colleagues, was the coordinator of an applied research program on the use of pathogens as biological control agents of mosquitoes.

Ben's outstanding scientific career began after his separation from the U. S. Army Air Corps at the end of World War II. He enrolled in the University of Chicago and obtained his B. A. in General Education in 1953. After determining that his professional direction would be in a scientific discipline, he enrolled in the University of Illinois, where he obtained a B. S. in Bacteriology in 1955. Ben continued his education at the University of Illinois in this area and obtained his M. S. in Microbiology and Biochemistry in 1956.

Ben later enrolled in a Ph. D. program at the University of California at Davis in the Department of Microbiology. His doctorate program was interrupted in 1965 when he accepted the position of Vice-President and Chief Microbiologist for Poultry Health Laboratories. In 1968, he left this position to become Director of Biological Production for Diamond Laboratories where he was in charge of a large program on the research and development of bacterial and viral products applicable to human and veterinary medicine.

Ben made many significant contributions in this area. He was the developer of the first intranasal vaccine for pneumonic diseases such as Bovine Shipping Fever, as well as the developer of the original animal cell liquid nitrogen tissue culture techniques for preservation of specific genetic clones. His areas of expertise extended into batch and continuous culture microbial fermentation and the determination, purification and assay of cell-culture excretion products of bacterial, fungal and viral pathogens.

In 1976, Ben joined the Lee County Mosquito Control District where he applied his expertise in microbiology to the development of microbial pesticides for controlling immature mosquitoes. His contributions in this area were many. Ben was instrumental in the development of continuous fermentation technology for the production of *Bacillus thuringiensis* var. *israelensis* and *Bacillus sphaericus*. He demonstrated the recycling potential of *Bacillus sphaericus*, and developed many techniques for the practical use of these products for operational mosquito control. His research in this area was recognized by the World Health Organization where he served as a member of several research and advisory committees on the microbial control of mosquitoes.

Ben was very active in the scientific community. He was author or co-author of over 50 scientific publications and an active member of the American Society for Microbiology, American Tissue Culture Society, Illinois State Academy of Sciences, New York Academy of Sciences, Sigma XI, Society of Industrial Microbiology, American Association for the Advancement of Science, American Mosquito Control Association and the Florida Anti-Mosquito Association, where he served as chairman of the Research Advisory Committee.

Ben is survived by his wife, Doris, daughter, Beth and son, Mark. All who knew Ben will miss his scientific contributions and sense of humor.

Richard Levy, Lee County Mosquito Control District, P. O. Box 06005, Fort Myers, FL 33906.