profile ...

Hercules vice president has played key role in developing company's position in agricultural chemicals

T was 31 years ago that an Indiana University chemistry professor received a telegram from the Hercules Powder Co. asking if he would recommend a chemist for employment. Paul Mayfield, about to graduate from Indiana University at that time, had already decided to enter the University of Wisconsin to take graduate work in electrochemistry. But this telegram changed his plans—and was the start of a career for him. Instead of going to Wisconsin he went to Hercules. He has been there ever since.

From the position he took in 1925 as a chemist at the Hercules Experiment Station, then located in Kenvil, N. J., Mayfield's career with the company has been one marked by steady advancement. His most recent promotion came in midsummer this year when he was made a vice president and named to the executive committee.

Hercules agricultural chemicals are handled through the naval stores department. Mayfield has been associated with it since 1934 when he became manager of naval stores sales in the Chicago office. Two years later he was transferred to Wilmington as assistant director of naval stores sales. Later Mayfield served as assistant general manager of the department under the present Hercules president, A. E. Forster.

During World War II he was a member of two Industry Advisory Committees of the War Production Board: the Household and Industrial Insecticide and Disinfectant Manufacturers Committee; and the DDT Producers Committee. Hercules produced DDT during the war, but discontinued it shortly after in favor of agricultural chemicals for which the company was in a more basic position.

Active in Toxaphene Development

Aside from his DDT contacts during the war, Mayfield's first real association with agricultural chemicals came during the development of toxaphene. This is a story in itself, providing a typical example of the American team approach to commercialization of new chemical products.

Experience in the naval stores industry had led Hercules to the development of a terpene thiocyanoacetate product which the company marketed as Thanite, a toxicant used as the base for paralytic or contact insecticides.

It was not until after World War II that Hercules turned to chlorination of terpenes. Preliminary research indicated that camphene, chlorinated to 67 to 69% chlorine, had a high degree of insecticidal activity—and toxaphene was born.

After considerably more intensive checking and testing by Hercules and outside testing laboratories, quantities of toxaphene were submitted to the USDA, experiment stations, and universities, to obtain further evaluation.

After receiving approval from these independent agencies, Hercules launched commercial sales of toxaphene in 1948. Paul Mayfield was right in the middle as assistant general manager of the Naval Stores Department. He and his associates insisted that the emphasis be more on development than on promotion of the sales potential of toxaphene. Advertising campaigns were held back in each state until the state's official recommendations were issued.

As a result of this cautious, constructive sales policy, says Mayfield, state and federal entomologists are the company's best friends. Illustrating the company's philosophy, Mayfield cites this early experience: investigations (some sponsored by Hercules) had indicated that toxaphene might have a slight effect on the smoking flavor of certain types of tobacco. The company immediately sent a letter to its principal customers and others, advising them of the situation, and ceased to promote toxaphene insecticides for bright leaf tobacco crop pending further company research in cooperation with others.

Nearly all of the promotion Hercules does on toxaphene is educational in nature, says Mayfield. Over 3 million copies of a handbook (some in Portuguese and Spanish), showing principal cotton insect pests in full color, have been distributed to farmers. Information on the proper application of insecticides, on recent infestations, and on potential outbreaks is relayed to farmers by advertisements.



Paul Mayfield

Born, Little York, Indiana, 1902. Indiana University, 1921–25; Hercules Powder Co., 1925 to present; chemist, 1925–27; sales staff, 1927–36; assistant director of sales, Naval Stores Dept., 1936–39; director of sales, Naval Stores Dept., 1939–43; assistant general manager, Naval Stores Dept., 1943–51; general manager, Naval Stores Dept., 1951–56; member, Board of Directors, 1952–; vice president, and member of executive committee, 1956– . Member, board of directors, NAC, 1949–; president NAC, 1953–54.

Another phase of the educational program has been the production of seven noncommercial films, covering such subjects as low-volume spraying, pollination of alfalfa, and cotton insects and their control. These films have been used extensively by county agricultural agents and others.

Today more than 80 manufacturers make and sell toxaphene insecticides, making it obvious that Paul Mayfield has been a successful salesman.

Outside Interests

Beyond the call of immediate Hercules duties, Mayfield has made important contributions to the agricultural chemicals industry. As he became involved in the toxaphene program he developed a keen interest in the National Agricultural Chemicals Association.

While serving as NAC president, Mayfield spoke to many groups of producers—and users—of agricultural chemicals. One of his main points on nearly every occasion was the legal and (just as important) the moral responsibility that ag chemical producers must shoulder for complete safety in application of their products. He was instrumental in getting the NAC to go on record in favor of federal legislation controlling pesticidal residues. The NAC position was an important factor in the congressional studies that resulted in passage of the Miller Bill.