

# profile...

## After early leadership in production of DDT insecticides, Geigy's ag chemicals operation, headed by G. R. Ferguson, is blossoming into new fields



**George R. Ferguson**

President, Geigy Agricultural Chemicals, a division of Geigy Chemical Co. Born Bolivar, La., 1915; B.S. (1936) and M.S. (1939), Oregon State College; Ph.D., Ohio State University, 1941; assistant entomologist, Oregon State College, 1941-43; research associate, University of New Hampshire, 1943-45; chief entomologist, Geigy, 1945-47; technical director, Geigy, 1948-53.

AT LEAST 25% of the time, you won't find George R. Ferguson in his air-conditioned office in downtown Manhattan. As a business executive who's opposed to the idea of becoming a desk cowboy ("You lose your perspective"), Ferguson spends much of his time out in the field—meeting farmers, dealers, research workers, sales people. As president of Geigy Agricultural Chemicals, a division of Geigy Chemical Co., Ferguson is keenly aware of the need for keeping in the forefront of new developments. "After all," he says, "we don't want to get caught flatfooted by the competition."

The son of a Kansas wheat grower who later moved to Wisconsin to take up dairy farming, Ferguson as a young boy became intimately acquainted with farm life.

Later at Oregon State College, Ferguson majored in entomology, partly because of the fascination of a course he had once taken in beekeeping. While studying for his M.S., he did research at the Oregon Agricultural Experiment Station on the control of insects plaguing Oregon's new fiber flax industry. The result was a special technique of crop rotation. Not until DDT insecticides were introduced about 10 years later, however, was there a really effective method.

### Doctorate at Ohio State

In 1939, Ferguson took over a graduate assistantship at Ohio State in the department of zoology and entomology, and began work toward his Ph.D. His thesis topic: the effects of basic copper arsenate on the growth and reproduction of the southern armyworm. In 1941, Ferguson accepted an appointment as assistant entomologist at Oregon State, where his attention was focused on chemical control methods effective against the corn earworm and other vegetable insects.

In 1943, Ferguson became a research associate with the Crop Protection Institute at the University of New Hampshire. While there, he was in charge of the Geigy Chemical project on DDT insecticides. Initially, DDT was a highly classified material known to Ferguson only under a code name. A chemical of enormous wartime importance, it was kept carefully under wraps.

### Exploring DDT's Potential

Only a few years before, Paul Mueller, working in the J. R. Geigy laboratories in Basle, Switzerland, had discovered the phenomenal insect-killing power of DDT, which for almost 70 years had been little more than an abstruse chemical formula. Thus, Ferguson became the first nongovernment researcher in the U. S. to explore the agricultural possibilities of the potent new material.

In 1945, when Geigy set up its own insecticide laboratory in Bayonne, N. J., Ferguson was named chief entomologist. Three years later, he became technical director of the insecticide program. Then in 1953, when Geigy organized Geigy Agricultural Chemicals as a separate division, Ferguson became president.

### Range of Products

Today, the agricultural chemicals branch is one of four selling divisions of Geigy Chemical which also has divisions devoted to pharmaceuticals, dyestuffs, and industrial chemicals. The products sold by the ag chemicals group are manufactured in two plants—one at McIntosh, Ala., and the other at Cranston near Providence, R. I. (formerly the plant of Alrose Chemical Co.) At McIntosh, the company has facilities for the production of DDT, methoxychlor, Diazinon, Chlorobenzilate, and other farm chemicals. For the agricultural field, the plant at Cranston produces iron, manganese, and zinc salts of ethylenediamine

tetraacetic acid and related compounds. These metal chelating agents, used in correcting deficiencies of trace metals in soils and plants, are sold under the brand name of Sequetrene.

### Variety of New Products

Under Ferguson's leadership, Geigy Agricultural Chemicals has branched out into a variety of new materials. Diazinon, a new phosphate insecticide with long residual activity, is proving its worth in dairy barns for use against flies resistant to DDT. Chlorobenzilate, introduced several years ago, is proving especially effective against mites and red spiders that infest ornamentals and crops, such as citrus fruit and pears along the West Coast. One of the company's promising new chelating agents is the iron salt of diethylenetriamine pentaacetic acid, especially useful in alkaline soils.

Optimistic about Geigy's growth potential for the future, Ferguson expects a substantial increase in sales this year. He points to expanding markets for insecticides, miticides, chelating agents, and other ag chemicals as helping to accelerate this advance.