

profile...

Niagara Chemical, 55-year-old specialist in fighting insects, pests, and diseases which attack crops, is poised for one of the biggest growth periods in its history

FIVE YEARS AGO, Niagara Chemical Division, Food Machinery & Chemical Corp., overhauled its research program and began a concentrated effort to develop new agricultural chemicals. Two years ago, Niagara decentralized its management. These two moves are now paying off in higher profits and a better return on assets, and in a large way are responsible for division manager Stuart Bear's optimism about the future: "This year will be one of the most profitable in the company's history. We are entering what should be Niagara's biggest and best growth period."

Already, Niagara Chemical ranks among the two or three largest producers and formulators of pesticides. It has 12 plants in this country, two in Canada, and two in Mexico; each is located in a strategic market area. It handles a full line of insecticides, herbicides, and fungicides which runs from the old-line sulfur, copper, and arsenate compounds to work-horse DDT and BHC, and to the newer organics. In addition, Niagara makes a line of refined sulfurs for industrial use.

It all started around the turn of the century when Ernest Freeman of Middleport, N. Y., invented a machine to spray Bordeaux mixture, a combination of hydrated lime and copper sulfate used as a fungicide. The machine was unique at the time in that it used carbon dioxide as a carrier gas. But almost immediately the venture ran into trouble. Bordeaux mixture was replaced in treatment of fruit trees by calcium polysulfide, which was not compatible with carbon dioxide. As a result the original company was liquidated, and out of the reorganization came Niagara Sprayer Co., producers

of calcium polysulfide and a gasoline operated pressure pump.

The young company soon added to its line other insecticides such as sodium polysulfide, lead arsenate, and



The Division Manager . . .

Stuart Bear

All Set to Go Up

Paris green. In 1914 Niagara set up a technical department. In charge was Ernest Hart, a newly graduated horticulturist from Michigan State. This worked out well for both Niagara and Hart. Today Hart is president of FMC. Under his early influence Niagara progressed as one of the leaders in developing insecticide dusts and equipment for application.

Between 1919 and 1921 the company embarked on a major expansion

program. This centered on the USDA development of calcium arsenate for boll weevil control. Since calcium arsenate was a dry material, it fitted in well with Niagara's past experience. To handle the increased demand for arsenicals, Niagara enlarged its facilities at Middleport, and launched a nation-wide distribution program. By 1927 the company was making nearly all of the standard insecticides then in use, and "Chemical" was officially added to the company's name.

FMC came into the picture in 1943. After the death of the principal stockholder in Niagara, FMC purchased a controlling interest in the company; it later acquired the remaining stock. Niagara Sprayer & Chemical was dissolved on Jan. 31, 1946, and became a division of FMC. Later, Niagara's equipment business was taken over by the John Bean Division of FMC.

Competition from Within

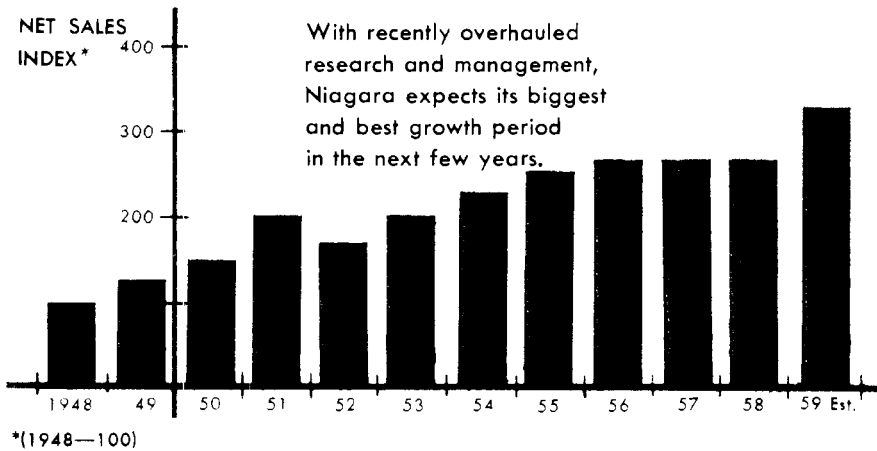
At present, Niagara's marketing activities are divided among three units: the agricultural department, the technical chemicals department, and the Fairfield Chemicals department. The ag department produces and markets finished pesticide formulations for commercial agriculture, while Fairfield produces Pyrenone spray concentrates for the manufacture of household sprays and aerosols. The technical chemicals department manufactures and markets new technical pesticide chemicals to the industry.

In its handling of new products, technical chemicals' goal is to obtain complete market penetration in the shortest possible time. Niagara feels that the best way to reach this goal is to have a number of companies handling the products. Thus, the technical chemicals department sells to the agricultural department of Niagara, and also to other selected companies. Division manager Bear says that when this practice was started a couple of years ago the industry reaction was one of shock. Since then shock has changed to surprise—surprise that the method works.

Stepped Up Research Program

Niagara's research and development activities are based at Middleport with branches at Jackson, Miss., and Richmond, Calif. Also, Niagara can draw on FMC's central research labs at Princeton, N. J. Niagara's research efforts fall into five product categories: fungicides, nematocides, herbicides, field crop insecticides, and household insecticides. Research within each group is carried on by several scientists.

Niagara Chemical Division
Food Machinery & Chemical Corp.



Until 1954, the company had no ordered plan for discovering and developing new pesticides. In that year the research group was expanded and took on the job of synthesis, screening, and evaluation of new compounds. Since 1954 Niagara has looked at 7000 compounds. Result: five commercial items added to the Niagara line—two insecticide-miticides, ethion and Phostex, and three herbicides which will be

introduced shortly. To speed the flow of new products, Niagara is considering plans for expanded research at Middleport.

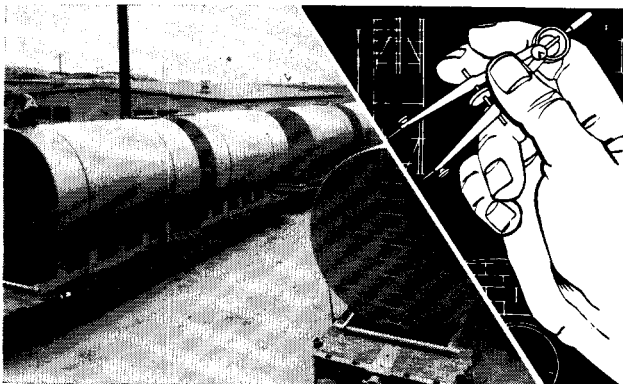
Niagara has also secured development rights in the United States for two products of European origin. These are the miticide Tedion, a discovery of N. V. Philips-Duphar, and the insecticide Thiodan, discovered by Farbwerke Hoechst.

The company's research program has its sights trained on some of the voids in pest control. For instance, it would like to find an insecticide for boll weevil control that could get around the resistance problems of present weevil insecticides; an effective insect repellent that could be used as a permanent treatment for clothing and packaging; a systemic fungicide; better post-emergence herbicides.

Niagara feels that it now has a mature research organization which provides a firm base for future growth. And on the business side, things are in equally good shape. Two years ago the structure of the company got a major overhaul. Responsibility for profits and return on assets, previously concentrated in the office of the division manager in Middleport, was turned over to the managers of multiple newly formed operating units. Each operating unit is centered at one of Niagara's plants, and is responsible for all of the firm's activities in the area served by the plant.

Bear reports that the decentralization plan has given excellent results. Inventory control, a major factor in profitable pesticide operations, has been greatly improved. And company morale is at a high point. As Bear says, "We're all set to go up."

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