

# profile...

## Eli Lilly's Agricultural & Industrial Products Division may be new but it's no babe in the woods. Initial successes make drug company a potent factor in agricultural chemicals

LESS THAN FOUR short years ago, the Agricultural & Industrial Products Division of Eli Lilly and Company in Indianapolis consisted of two people and one product—in fact, it didn't even carry the A&I name.

But today, the division totals 50 persons and handles 150 agricultural and industrial products. And it's backed by a research staff of about 100 people who have recently moved into a \$5-million research center at Greenfield, Ind. George L. Varnes, executive director of the division, insists this is only a beginning. He foresees tremendous potential for the division in the near future.

### No Idle Boast

The division's short but impressive history indicates that this is no idle boast. This history has its roots in Lilly's old industrial division which was responsible for selling empty gelatin capsules. During 1953, the division launched a market study to learn what changes were needed to get into production of agricultural products. Main interest was in antibiotics. At the same time, a committee was formed to study agricultural markets. This committee's report prompted the company to set up an agricultural research and development program by the end

of 1953. The main agricultural product then sold by the industrial division was procaine penicillin, for feeds.



The Executive Director . . .

**George L. Varnes**  
Tremendous Potential

In 1954, when Iowa State College scientists found that diethylstilbestrol was an efficient and economical weight promoter for cattle, Lilly obtained an exclusive license to make and market

the chemical as a feed additive. At that time, Lilly already was the largest manufacturer of diethylstilbestrol for pharmaceutical use.

The agreement with Iowa State called for Lilly to formulate a premix, which was placed on the market near the end of 1954 under the trademark Stilbosol. With the successful debut of its first major agricultural product, Lilly revised and expanded the industrial sales division and re-named it the Agricultural & Industrial Products Division. That was in early 1955.

### Stilbestrol Success Was Spark

Success of the cattle feed supplement prompted a still closer look at the entire agricultural field. Conclusion: a steady, year-to-year multi-million-dollar farm market potential. The problem: where to start. The answer: four primary fields—animal nutrition, veterinary medicine, plant pathology and physiology, and entomology and insecticides.

As a starting point, A&I turned to 35,000 chemicals and antibiotics that had been synthesized by Lilly research scientists in recent years. Of these compounds, several hundred were antibiotic cultures. Thus, a huge agricultural chemicals screening program began.

When their research in these areas first began, Lilly scientists worked in nutrition, veterinary medicine, and plant pathology and physiology; entomology and insecticides work was farmed out to a contract research organization. But now, with the new research farm (about 20 miles from Indianapolis) and a large staff of its own, the new division has taken over and most of this research, too, is being done by Lilly's own personnel.

First result of the stepped up research program became Lilly's second big agricultural product—hygromycin, an antibiotic marketed a year ago as a swine anthelmintic. Varnes estimates that today about 60% of the feeds fed to hogs up to 125 pounds include hygromycin.

### Research Emphasized

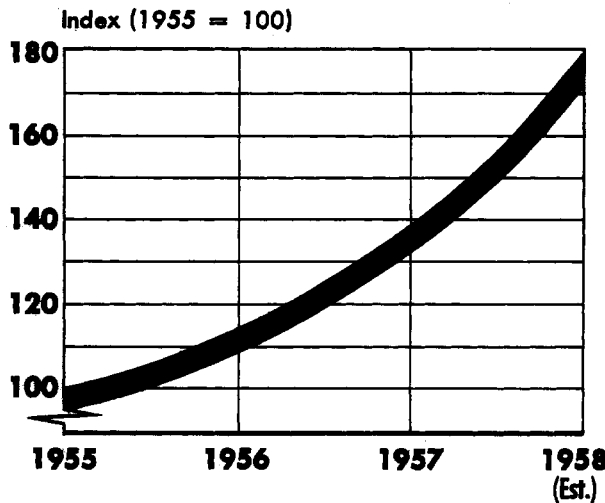
What's the next product? One that now is still at the research stage, along with many other possibilities. Research emphasis is broad and there is no telling what will come up, notes Varnes. It may be a herbicide, or maybe agents similar in utility to DES and Hygromix for poultry, sheep, and horses. Lilly hopes eventually to have products suitable for all kinds of domestic animals, says Varnes.

A&I does its own development work, and then cooperates with potential

# Eli Lilly & Co.

## Agricultural and Industrial Products Division

The division's first new product—stilbestrol—launched the upward sales trend in 1955. Hygromycin, introduced in 1957, is expected to push it even higher. The next new product, undoubtedly another result of Lilly research, may be a herbicide, perhaps an animal product, a specialty of some kind not made by others.



customers to put on the finishing touches. For instance, proper use of a feed additive like diethylstilbestrol calls for handling and mixing by experienced feed manufacturers. In adding new agricultural products, Lilly will probably continue to work

closely in this way with other companies and industries.

The agricultural and industrial division is purely a marketing organization, and includes its own marketing, sales merchandising, and service departments. Agricultural research at

Lilly is one of several divisions reporting to the vice president of research, development, and control. Although research chemists, physiologists, and other specialized groups in the division are working on problems directly concerned with agriculture, their results will be made available to the rest of the company, just as research findings in other parts of the company are funneled to the A&I division.

### Specialties for the Market

According to Varnes, agricultural applications will be guided solely by the market. Products that reach the marketing stage will be specialties that are not available today, or are better than those currently sold.

Lilly is enthusiastic about the future of its agricultural venture. Varnes feels that with the support of one of today's largest, best qualified research staffs, the A&I division should show a continuing healthy growth in agriculture. He feels that in view of the enormous losses suffered yearly in agriculture, the potential is great. And he is intent upon making Lilly a more potent force in the agricultural field. Directing the operation, Varnes says, is more fun than anything else he has known.

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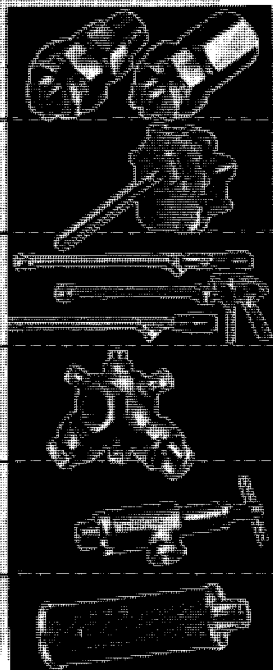
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