

Research Pigs Housed In Fancy Facilities

BY EVERETT NEWSWANGER
Managing Editor

GREENFIELD, Ind. — Pigs housed in better climatic conditions than humans. That's how it is in the Eli Lilly and Company swine research facility here in the heartland of the U.S.A. As you know, Eli Lilly is a major pharmaceutical company with worldwide distribution of pharmacy products, medical devices, agricultural products and cosmetics.

The Greenfield lab is the testing ground for Elanco products, Lilly's ag division, as well as other compounds with potential in all of the world markets. Actually the Greenfield lab has an illustrious history prior to its involvement with agricultural products. Starting in 1914 the research center produced vaccines that conquered small pox, diphtheria, polio and tetanus.

Later during World War II, 1100 horses were housed at the research center to produce antitoxins for treatment of disease. While these horses are long gone, the horse barns, built according to Spanish architecture, have been refurbished into modern offices, and the buildings greet the visitor with a unique historic architecture that is on the National Registrar.

From its beginning when Eli Lilly purchased 156 acres of farm land at Greenfield 15 miles east of the pharmaceutical company's headquarters in Indianapolis, the research facility has grown to 1500 acres with 95 research buildings and 1,000 employees. All the products and compounds that Lilly and Company produce have been studied by scientists at the Greenfield laboratory.

It was in 1953 when Lilly started the research for byproducts from the company's human pharmaceutical business to be used in agriculture. Now research trials for new disease control and better farm commodity production cover all major areas of agriculture. The tour arranged for the National Farm Press on Monday in conjunction with the National Pork Congress concentrated on the swine laboratory facilities.

These new, modern barns have about 250 to 300 sows that produce litters to be used in the research

trials from farrow to finish. Obviously, the buildings are much more elaborate than in regular commercial production facilities. The research facility looks for new approaches for increased weight gain and attempts to improve feed utilization to develop lean, well-muscled pork for greater quality.

The animals are housed in a totally controlled environment. Air is controlled by computer for heating and ventilation. Temperatures are monitored 24 hours a day. The fans in the building have the capacity for 60 room changes per hour. That's more than two times the normal capacity in commercial operations. The houses are better insulated than many homes. In fact, there is two to three times more insulation than most commercial hog barns. The cold air is brought into the attic of the buildings and mixed with the warmer inside air before getting it down into the room below. This eliminates the variances in temperatures. For hot weather, evaporating coolers are used and self-starting gas generators back up the operation in case of an electrical power failure.

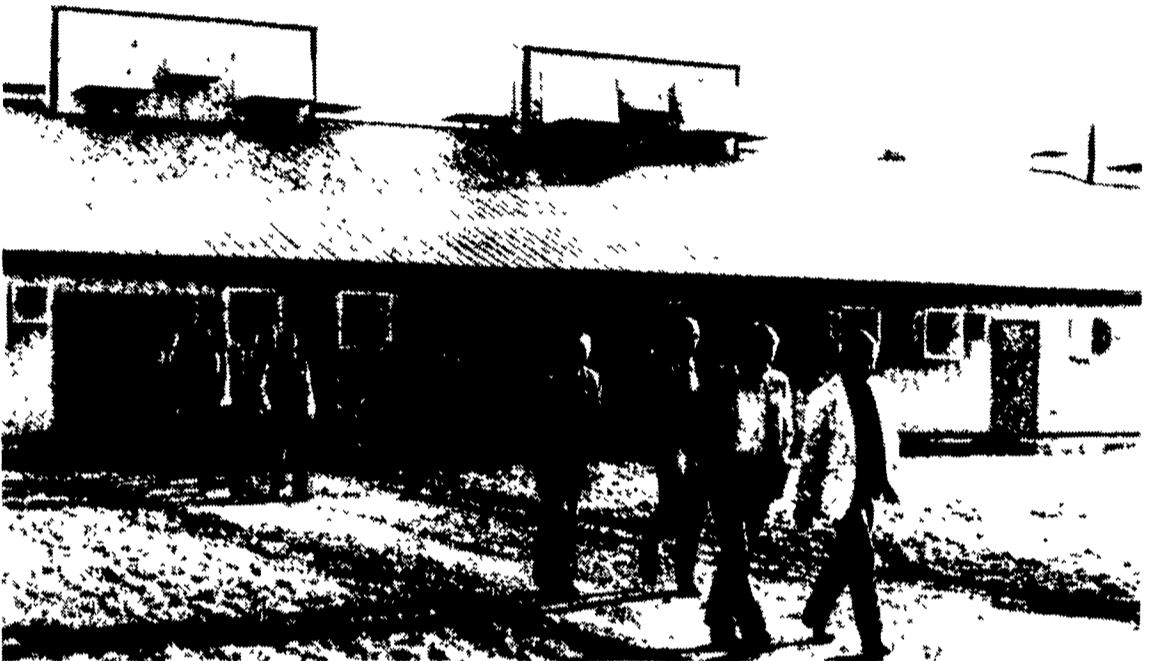
The pigs enjoy a more uniform environment than most humans do in homes or offices. Feeds are produced in the on-farm mill. Each bag of feed is bar coded according to the needs of individual trial pens of hogs. The walls are fiberglass for easy cleaning, and the manure system uses a combination of aerobic and flush systems that use less water.

Artificial insemination is used to reduce the number of boars needed and to keep the genetic differences in the trial litters to a minimum for the research projects. This keeps litters uniform and reduces the differences from hereditary factors to insure more accuracy in the research projects.

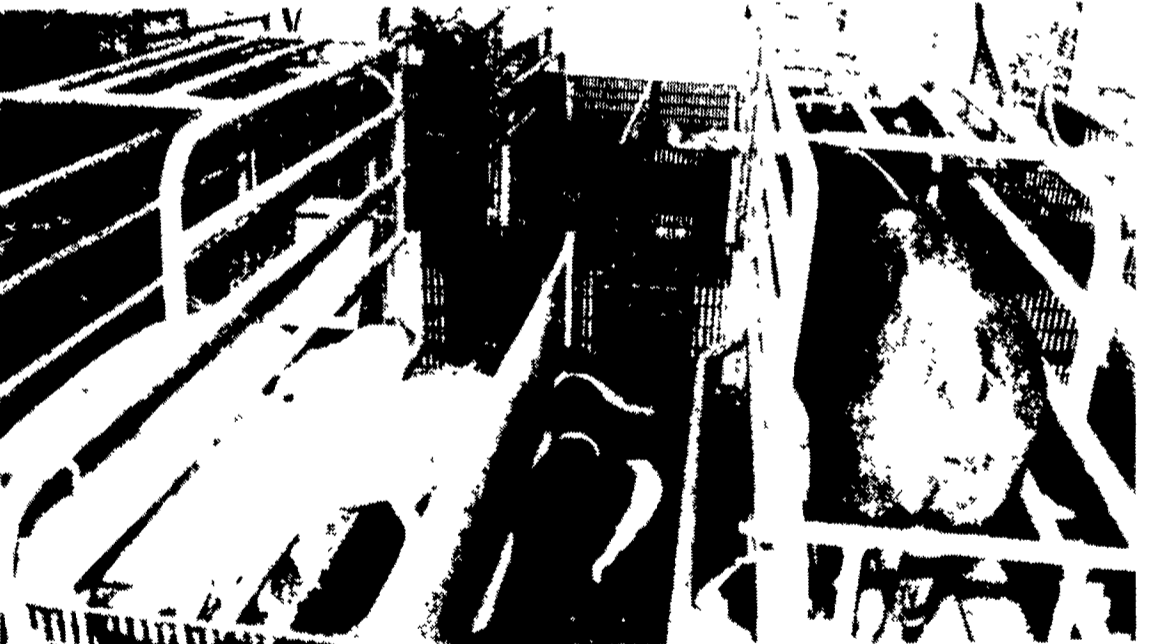
All in all, the research is a laborious undertaking. About 30,000 compounds may be studied each year, but only 10 will get to the advanced stages of research. And only about one new product will emerge on the market every two years. Whether it be the worldwide products of Eli Lilly or the agricultural products of Elanco research continues at Greenfield to help insure a more profitable and healthy world in which to live.



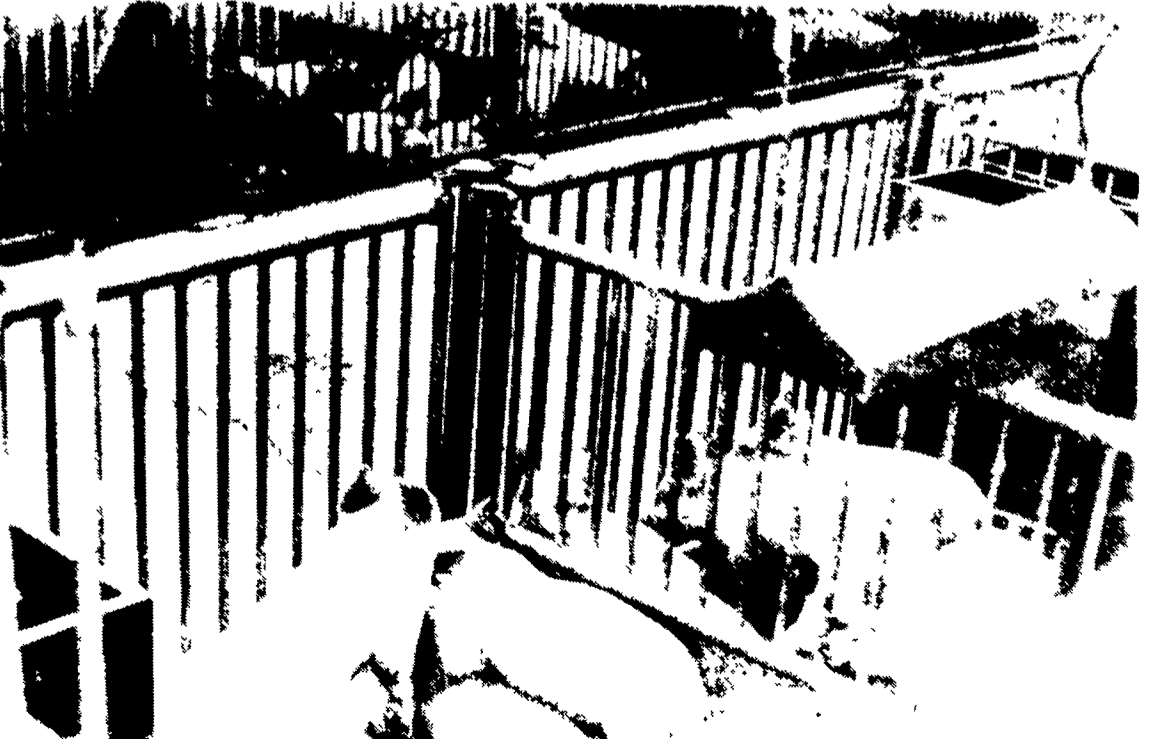
These specialists were on hand to help provide information about the swine research facilities (left to right): Walt Waitt, animal nutritionist; Dr. Al Melliere, head of animal service application; Dr. Jay Jones, research specialist and Dr. Art Raun, director.



Part of the media tour group in front of one of the modern swine research buildings.



Farrowing house on the Greenfield research laboratories.



Pens of finishing pigs in research projects.

30 YEARS AGO THIS WEEK

— June 17 to 20 is Extension Homemakers Week on the campus of the Pennsylvania State University, University Park, announces Miss Ruth Kimble, extension home economist, Lancaster County.

A varied program of interest groups, special activities, and speakers is planned for the three days. With special emphasis this year on music, women interested in music will be encouraged to participate in a chorus.

— Plans for a new 333,000 kilowatt steampower plant to be built on Brunners Island, 15 miles below Harrisburg, were announced Wednesday by Charles E. Oakes, president of the Pennsylvania Power and Light Co.

He said that the company expects to spend nearly \$24 million this year in new construction and expansion of existing facilities.

The new unit will be twice as large as the largest present unit in the PP&L system. It will occupy a 766 acre site, which was purchased last spring. It has a potential capacity of two million kilowatts.

— The wet growing season last year made a sharp difference in

crop yield figures from 1955 according to a release for the state department of agriculture.

Last year's rainfall totaled 29.69 inches between April and October, 6.17 inches above normal, while practically no rain fell between mid-June and mid-August of the preceding year.

— The Lancaster Stockyards and the Christ Kunzler Packing Co. in Lancaster were visited Tuesday by an eight man livestock marketing and meat processing study team from Japan.

The tour was arranged by the International Cooperation Administration in cooperation with the Department of Agriculture and the Pennsylvania State University.

— Four tobacco seed cleaning and treating demonstrations were held this week on county farms by Dr. O. D. Burke and Harry S. Sloat.

The treatment they demonstrated consisted of cleaning the seed by sieving and blowing. A sieve with holes of about 1/32 inch diameter was used. To blow the light seeds and chaff out of the seed, they used a light separator powered by an electric fan.