## Noorlander challenges dairymen

## **BY ROBIN PHILLIPS** Staff Correspondent

SCHAEFFERŠTOWN Dairymen had the opportunity on Feb. 22, to hear a nationally known author, teacher, inventory, and researcher in the milking equipment field. Dan O. Noorlander, of California, spoke on "Producing Quality Milk," to almost 200 dairymen at an I.B.A. sponsored farmers meeting at the Schaefferstown Fire Hall.

Noorlander's influence is seen on almost every dairy farm today. He invented the California Mastitis test with Oscar W. Schalm, and was extensively involved in the development of techniques to test dairy equipment.

He encouraged the use of balance tanks, low lines, and larger lines nationwide.

He was also a leading researcher on narrow bore liners, silicone liners, and one of the first advocates of dry cow treating. Through his many years of trial and error research, Noorlander developed many patents for teat cup inflations. He has paved the way for a better understanding of how bacteria can invade the udder and believes that the dairy industry needs impartial researchers to develop new and better concepts. concepts.

Noorlander has worked for several different companies and universities researching milking machines. He developed the pulsation recording machine used widely today and also the square silicone inflation extensively marketed by I.B.A.

"Milking machines can be designed to function properly," Noorlander said, "but the best milking machine hasn't been designed yet." The type of

researcher who cannot be bought, rubber and a stretching ability Noorlander stated that "competition forces people to shape up."

Disheartened by many professors and "degreed" company scientists who refuse to accept his findings, Noorlander stated that his research comes from years and years of observing milking practices and machines and a trial and error approach to A graduate of

California Polytechnic Institute, Noorlander's experiences include managing a 500-cow dairy for several years, in addition to his research experience.

"The inflations are the most critical part of the milking machine. Does the rubber of your inflation permit the teat to collapse," he asked.

He stated that the rubber compound that is used for the inflation is just as important as the design. Neoprene rubber was considered the superior rubber in the early years of milking machines. But, since the government has disallowed the use of this rubber in milking, a substitute had to be found that was soft enough to do the job.

Experimenting with several kinds of rubber, Noorlander found that natural gum rubber and silicone work the best. Because rubber becomes porous, with many cracks after prolonged use, it can harbor a great deal of bacteria in its pores. The rubber inflations can be a major source of bacterial contamination even after sanitizing.

Although it does not last as long as a silicone inflation, natural gum rubber inflations do work beautifully, according to Noorlander. They have a smoother surface than the other kinds of

essential in a proper milking machine. Dairymen can tell if they are using natural gum rubber inflations because natural gum rubber floats and others do not. Noorlander also added that chlorine is hard on rubber and cautioned against soaking inflations in it. After cleaning, they should be thoroughly rinsed.

Although many companies do vant to work with silicone occause it punctures easily, Noorlander is an advocate of silicone inflations. They last long and their surface stays smooth, prohibiting any bacteria from living in cracks. Although they are much more expensive, silicone inflations need only be changed every four to six months depending on the number of milkings used. Shells have been developed for use with silicone inflations to prevent them from being punctured.

Noorlander stated that all I.B.A. salesmen are advised by him in the selling of the silicone inflations. 'Don't ever put silicone inflations into a high risk dairy," he stated. They can be utilized with great



Older-type bucket milker is demonstrated by Dan Noorlander, of California, noted author, investor and researcher on milking equipment.



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