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GUEST COLUMN



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Chairman
Bacteriology

When microbiology is mentioned, some may not think immediately of its relationship to agriculture or of the contributions of microbiologists to the state's principal industry and to the welfare of its people. A discussion of some past and present activities of those in the Department of Bacteriology will help to demonstrate this relationship.

As early as 1914 bacteriological research was conducted in the Agricultural Experiment Station. From that date until his retirement in 1954, the late Dr. Casper Nelson was chairman of the department. His research resulted in publications in several areas of microbiology, including wilt resistance in flax, serological ranking of wheat hybrids, home canning, poultry diseases and nitrogen fixation.

During the 1931 botulism outbreak at Grafton in which 13 people died, Dr. Nelson had an active role in determining that home canned peas used in a salad were responsible for the deaths. Later he made trips to various parts of the state lecturing on food preservation and proper methods for home canning through the Extension Service.

In 1967, Dr. Nelson received the honorary degree of Doctor of Science from North Dakota State University, and the Health Center was named in his honor.

From one faculty member in 1914 and four in 1954, the department has grown to the present eight faculty members. In 1914, Bacteriology occupied one room in the basement of what is now Minard Hall. In 1975, the department moved to the new Van Es Laboratories with seven research laboratories, two teaching laboratories, an animal room, a media room and eight faculty offices.

These additional faculty members and improved facilities have made it possible to offer a greater variety of courses for students in several curricula, and to expand research activities that presently range from determining the quality of the state's drinking and recreational waters to investigating the enzymes of photosynthetic bacteria in an effort to better understand plant photosynthesis.

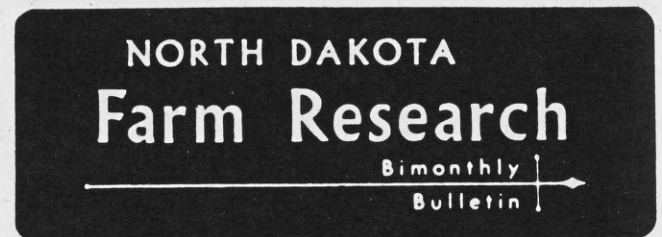
During the past seven years departmental faculty members have taught an average of more than 5,000 student credit hours per year, whereas less than 2,500 student credit hours were taught in 1967-68. In addition to those students enrolled in the curriculum in bacteriology, students majoring in many of the departments in the College of Agriculture, and those seeking careers in

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On the Cover: This electron microscope photograph shows leaf hairs and glands on the surface of the marijuana leaf, magnified 2,300 times. (Photo by NDSU Botany Department)



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