

OBITUARY

ERNST GÄUMANN

(1893-1963)

ERNST GÄUMANN was born on October 6, 1893, in Lyss (Switzerland). He studied botany at the University of Berne with Professor EDUARD FISCHER. After having obtained his Ph. D. degree he traveled to Sweden and to the United States and worked for some years in Buitenzorg (Java) and at the Swiss Agricultural Experiment Station in Zurich-Oerlikon. In 1927 he was appointed head of the Department of Special Botany at the Swiss Federal Institute of Technology in Zurich. He held this position until his death (on December 5, 1963) from a disease which had menaced him for several years. He would have retired in spring 1964.

During these long years, Professor GÄUMANN's Department became an extremely active center of research in mycology, plant pathology and related fields. GÄUMANN's first papers dealt with the biological specialization and taxonomy of downy mildews. Later he became fascinated by the rusts; after a long series of papers on new species and their life cycles he published a comprehensive treatise on the rust fungi of Central Europe (1959). The author's faculty for a clear presentation of the facts and for the consequent application of a few simple criteria is typical for this book and even more for his textbooks on the morphology and development of fungi ("Comparative Morphology of Fungi" 1926, English edition 1928; "The Fungi" 1949, English edition 1952, second German edition to appear in 1964). The last named book in particular shows his very personal and stimulating concept of the morphological and biological peculiarities of these organisms.

A long series of phytopathological papers showed that many plant pathogenic fungi and bacteria produce toxic metabolites which interfere with the host cell metabolism (respiration, water balance, etc.) and induce disease. The close cooperation with chemists made it possible to identify the chemical structure of such compounds and to elucidate their mechanism of action. These studies have stimulated discussion and research in a broad field of fundamental plant patho-

Editor's note — A likeness of the late Professor GÄUMANN was published in the Gallery of Contemporary Noted Mycologists of this journal as no. 56, in vol. 11 (3), 1959. The list of his publications which fills 16 typewritten pages will be printed in the "Verhandlungen der Schweizerischen Naturforschenden Gesellschaft", 1963.

logy. Defense mechanisms of the host plants represented a second focus of research. Studies of the last years established the induced formation of antifungal compounds in orchid bulbs as a reaction to the attack of mycorrhizal fungi. Here again, original research led GÄUMANN to the broad synthesis which culminated in the "Principles of Plant Infection" (1946, English edition 1950, second edition 1951). The strict delimitation of problems and terms made this book a fundamental treatise of general plant pathology.

These are a few aspects only of a tremendous scientific work which was achieved by a rare combination of talents, by overwhelming energy and hard, disciplined work. To his collaborators he delegated all kinds of duties. He expected hard work but gave them freedom and credit for what they accomplished. He was strict, critical and on occasions hard but generous and helpful in many respects. To the young students of science, agriculture, forestry and pharmacy he taught not only plant phylogeny and pathology; on famous excursions he told them about history and folklore, about political and economical problems of the regions visited. He was very proud of his home region, the Emmental in the Swiss canton of Berne (where he was a citizen of a small village) and stuck to its old customs and its colorful dialect.

Many societies, periodicals, committees and industries secured Professor GÄUMANN'S collaboration. He gave his advice liberally, concise and without hesitation, based on common sense and long experience. His work brought him honorary degrees from the Universities of Paris, Bonn, Montpellier and Bordeaux, the Swiss Marcel-Benoist-Prize and the German Otto-Appel-Medal. He was a foreign associate member of the Academy of Sciences in Paris and a honorary member of many societies.

In the memory of all who have known Professor GÄUMANN personally he will remain as an outstanding personality of superior intellect, knowledge and will — sure of himself and aggressive but broad minded, generous and ready for a joke.

H. KERN