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FOREST PATHOLOGY

By Dr. ERNEST E. HUBERT

PROFESSOR OF FORESTRY, SCHOOL OF FORESTRY, UNIVERSITY OF IDAHO

Forest pathology is a comparatively new branch of forestry science in the United States, yet within the brief span of its development in this country and in other countries of the globe there has been an imposing amount of literature contributed on this subject. Like the science of bacteriology, forest pathology emerged from a cloudy mass of misunderstanding then known as the theory of spontaneous generation and began a comparatively rapid development leading to its present height.

It is not strange that in the period when living organisms of a low order associated with putrefaction of matter, fermentation and disease of man, beast and insect were believed to have originated spontaneously that the same theory should be applied to the lower organisms found associated with the decay of wood and with tree diseases. In 1833, Theodore Hartig, a forester and professor at Braunschweig in

¹Presented before the Symposium on Forest Trees, Pacific Division of the American Association for the Advancement of Science, at Eugene, Oregon, June 19, 1930.

Germany, was the first investigator to study and record the occurrence of mycelium in wood. Under the influence of the Ungerian period he concluded that the organisms represented by these fungous threads developed by means of spontaneous generation from the rotted wood. He described this as the "breaking up of cell structure into balls or monads which later form rows and fuse to form fungus hyphae." Although an erroneous concept this was the beginning of forest pathology.

The early work in a newly occupied forest area is often given over to a survey or inventory type of inquiry which is frequently mycological in nature. This is an essential part of the knowledge of the treeinhabiting fungi found in any forest area. Since much of the mycological ground has been broken in the earlier development of forest pathology, there remains relatively less to be done in the future, and a greater share of the pathologist's time will presumably be devoted to the pressing problems in forestry that call for pathological study.

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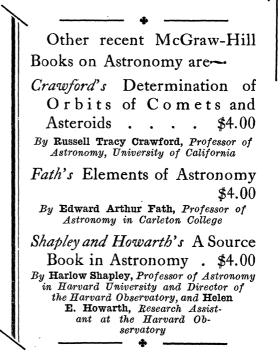
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Professor of Bacteriology at University of Minnesota

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