

SCIENCE

VOL. LXXII

FRIDAY, OCTOBER 10, 1930

No. 1867

<i>Forest Pathology</i> : DR. ERNEST E. HUBERT.....	351	SON and PAUL E. GRIFFITH. <i>Brazilin Stain on Smear Preparations of Oenothera Pollen Mother Cells</i> : JOSÉ M. CAPINPIN.....	369
<i>Doctorates Conferred in the Sciences by American Universities</i> : CLARENCE J. WEST and CALLIE HULL	357	<i>The American Association for the Advancement of Science:</i>	
<i>Scientific Events:</i>		<i>Joint Meeting of the Executive Committee of the American Association and the Executive Committee of the Pacific Division</i> : DR. J. MURRAY LUCK	371
<i>Medical Center for Uruguay; The Testing Laboratory of the Bureau of Standards; Bear River Migratory Bird Refuges; Memorial to George Westinghouse</i>	358	<i>The National Academy of Sciences</i>	372
<i>Scientific Notes and News</i>	361	<i>Science News</i>	x
<i>Discussion:</i>			
<i>Saline Drinking Water and Abnormal Livestock</i> : PROFESSORS L. S. PALMER and C. H. ECKLES. <i>Age of the Hounsfield Bentonite</i> : DR. G. MARSHALL KAY. <i>Regulation of Body Temperature in Opossums of the Genus Marmosa</i> : DR. OTIS WADE. <i>Concerning Owl Attacks</i> : PROFESSOR ALBERT M. REESE. <i>Homo sapiens, var. Chicagoiensis</i> . DR. RAMSAY SPILLMAN	364		
<i>Quotations:</i>			
<i>The British Association at Bristol</i>	367		
<i>Scientific Books:</i>			
<i>Thompson on the Biological Control of Insect and Plant Pests; Tothill, Taylor and Paine on The Cocoanut Moth in Fiji</i> : DR. L. O. HOWARD.....	368		
<i>Scientific Apparatus and Laboratory Methods:</i>			
<i>A Variable Resistance Pneumograph and an Electromagnetic Tambour</i> : PROFESSOR LYMAN S. JUD-			

SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. McKEEN CATTELL and published every Friday by

THE SCIENCE PRESS

New York City: Grand Central Terminal

Lancaster, Pa.

Garrison, N. Y.

Annual Subscription, \$6.00

Single Copies, 15 Cts.

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary, in the Smithsonian Institution Building, Washington, D. C.

FOREST PATHOLOGY¹

By Dr. ERNEST E. HUBERT

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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

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 tree-inhabiting 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.

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

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By ARTHUR T. HENRICI, M.D.

Professor of Bacteriology at University of Minnesota

For the bacteriologist and medical technician who are continually confronted with molds, yeasts and actinomycetes, Dr. Henrici has written a book which will be found valuable both as a textbook and as a reference handbook.

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