the planidium. Needless to say this type of reproduction forms one of the most extraordinary adaptations to environment in the entire annals of entomology.

Harry Scott Smith
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## SOCIETIES AND ACADEMIES

### NEW ORLEANS ACADEMY OF SCIENCES

On Tuesday, November 22, 1916, the academy held a special public meeting to arouse the citizens of New Orleans to the danger threatening vegetation by the presence in the city in vast quantities of the Cottony Cushion Scale. More than two hundred people were present. Mr. T. E. Holloway, of the U. S. Bureau of Entomology, read a telegram from Mr. L. O. Howard regretting his absence, and then read a paper on the life history of the scale. Mr. E. Foster, assistant state entomologist, read a paper upon the different ways in which the scale was being disseminated. Mr. E. R. Barber, of the Bureau of Entomology, read a paper upon the relation to the scale of the Argentine ant, and showed how the presence of the ant complicated the situation. Professor R. S. Cocks, professor of botany, Tulane University, called attention to the very large number of host plants, over seventy, already being attacked, and the probability that the number would be greatly increased. Mr. J. B. Garrett, state entomologist, emphasized the importance of importing from California or Florida sufficient numbers of the vidalia beetle as the only way to control the pest.

After some discussion, a committee was appointed with Mr. Clarence F. Low, chairman, to call upon the mayor and request that the city supply the requisite funds to carry on the fight.

It is gratifying to be able to relate that the city authorities were properly impressed by the committee, and, together with the state, have agreed to furnish the requisite funds for obtaining and propagating the beetles.

R. S. Cocks,
*Secretary*

New Orleans Academy of Sciences
December 4, 1916

### THE BOTANICAL SOCIETY OF WASHINGTON

The 115th regular meeting of the Botanical Society of Washington was held in the Assembly Hall of the Cosmos Club at 8 P.M., Tuesday, November 7, 1916.

Michael Shapovalov, Dr. Howard G. MacMillan, Dr. Joseph Rosenbaum and F. E. Miller were elected to membership in the society.

Under Brief Notes and Reviews of Literature, Mr. W. T. Swingle called the attention of the society to a recent edition of an ancient Chinese work on botany, "The Cheng lei pen ts'ao," originally published in A.D. 1108. Dr. A. T. Tenaka reviewed briefly a recently issued "Handbook of Plant Diseases of Japan," by Jinzo Matsumura.

Dr. R. H. True presented a paper on notes on the life of John Bradbury. Information concerning the life of this early naturalist and explorer of the Missouri Valley is very meager. A considerable addition has been gained from the correspondence carried on between Bradbury and Thomas Jefferson who greatly influenced the course of Bradbury's life and work in this country. Bradbury's life, gathered from this and other available sources, was sketched in outline.

Pathological problems in the distribution of perishable plant products were discussed by Dr. C. L. Shear and Dr. W. A. Orton. The enormous losses in recent years caused by the deterioration and decay of fruits and vegetables between the field and the consumer have led to a more active interest in this subject and a desire on the part of those most directly affected to have the causes and means of prevention determined.

In most cases fungi are the active agents in causing the destruction of such products, and the problem is primarily pathological. In order to devise means of avoiding these losses, a thorough knowledge of all the factors and conditions involved must be obtained. Each fruit and vegetable has its own peculiarities and its own parasites. In some cases the cause of loss may be traced to the field, and in others to conditions of transportation and handling. In any specific case the cause and responsibility for the loss can only be determined by careful investigation of all the facts.

Specific cases of losses to strawberries, peaches, cranberries, watermelons, tomatoes and potatoes were cited to show the complexity of the problems and the danger of drawing any general conclusions from insufficient data. It was shown that the means of preventing such losses will depend upon the nature of the cause or causes, as determined by a knowledge of all the factors in any particular case.

The scientific program was followed by a social hour, with refreshments.

H. L. Shantz,
*Corresponding Secretary*