Plant Galls

This book is a revision of the author's earlier work "Key to American Insect Galls," New York State Museum Bulletin, 200, 1917. About 2000 American galls are recorded, classified according to the plant families. Skeleton keys are used within the families, keys which are too incomplete to make ready identification possible. In the oak group, the reader is often abandoned to a list of 20 or more forms from which he must make a choice by reading descriptions.

A far more serious defect in this account of plant galls is the highly inadequate treatment of the biology of galls in the introductory chapter. No mention is made of Kuster's classification of gall types, though Kuster is the world authority on gall structure. The introduction of evolutionary concepts into the field of the higher galls has been totally neglected together with the theoretical application of the recent data on "organizers" which seems applicable in these studies. The most significant literature in these fields has been ignored.

It is unfortunate that the extensive bibliography of the earlier work could not have been included in this new edition, since the earlier bulletin has long been out of print. Only 18 references are given.

To any one interested in expending his acquaintance with animal induced galls, this book is about the only work to which he can turn to find a summary of the American forms. It, thus, should be represented in every biological library.

—*B. W. Wells.*

Plant Galls and Gall Makers. E. P. Felt. 364 pp. Comstock Publishing Company, Ithaca, New York. 1940.

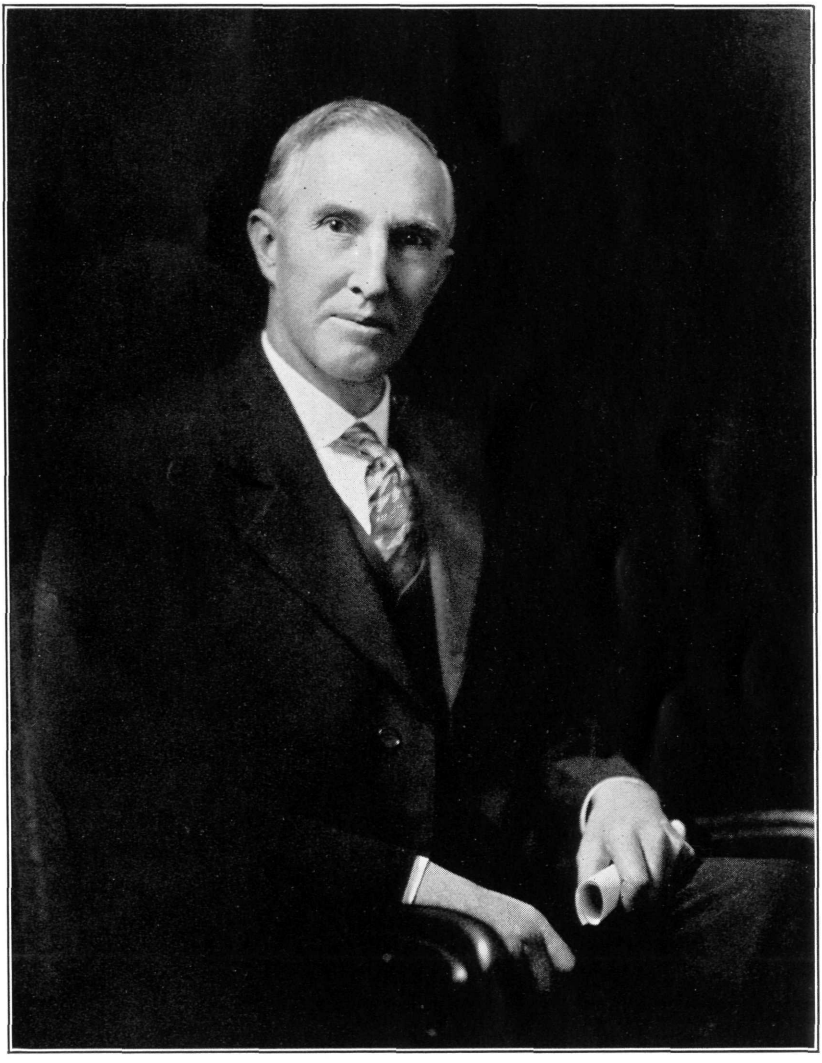
Is There Life on Other Worlds Than Ours?

Probably no other scientific question has been asked so often as has this one and probably no other question has received more unsatisfactory answers. In consequence, human imagination has soared and cheap fiction has prospered. The facts involved in the answer to the question are extraordinarily difficult to assemble in such form that a satisfactory answer is possible. No less a person than the Astronomer Royal of England now makes the effort and has done it exceptionally well. To be sure, the question is still unanswered as it must inevitably be for many years to come but here, at least, is a sober, understandable discussion of the elements and difficulties involved in the answer.

Mr. Jones discusses first the physical setting, then the conditions necessary for life as we know it, then goes on to a critical examination of the methods and limitations of investigation. This last discussion should be of particular interest to any one who wishes to understand why the question still remains unanswered. He also reviews the conditions that probably exist on the planets and comes to the general conclusion that on Mars life, if any, must be nearly done and on Venus it may be just beginning.

The book is well illustrated and interestingly written. There is an unfortunate error on page 37 in the chemical formula for sugar which has one atom of oxygen and one atom of hydrogen too many but this in no wise detracts from the value of the book. The reviewer heartily recommends this book to those who would like to see this problem as it stands today.—*C. E. H.*

Life on Other Worlds, by H. Spencer Jones. X*X*299 pp. with 17 plates. The Macmillan Company, New York. 1940.



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