Puerto Rico, the planted Bermuda grass was being eaten by changas, *Scapteriscus vicinus* Scudder, although just outside the post, the native gramma grass, *Stenotaphrum secundatum,* flourished with undiminished vigor.

It should not be thought, however, that gramma grass, or any other native grass for that matter, will survive insect attacks under all conditions. Indeed, when supposedly ideal conditions are being artificially supplied for the grass, these may be even more favorable for some particular insect pest. Thus, a circle of yellow gramma grass surrounding the head of an underground sprinkler system was found to mark the limits of an exceptional abundance of a leafhopper, *Kolla fasciata* Walker, present in only normal numbers elsewhere on a lawn near Aguadilla, Puerto Rico.[7] Naturally, also, native vegetation has specific native pests, and large areas of gramma grass may have all the blades eaten down to the sprawling stalks by the little green Pyralid caterpillars of *Psara phaeopteralis* Guenée. These are only a few of the more obvious examples of the effect produced by specific members of the wild animal life of grasslands, but are ample to illustrate the necessity for including them in all ecological studies of pastures and meadows if these are to be considered at all complete.

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[7] *Jour. Econ. Ent.*, 33 (3): 584, February, 1940.

PROPER CREDIT FOR DISCOVERY OF "A RELATIONSHIP BETWEEN DENTAL CARIES AND SALIVA"

IN the March 31, 1944, issue of SCIENCE, Turner and Crane[1] report that they have discovered "a clear relationship . . . between the rate of starch hydrolysis by saliva and the incidence of caries in the individual." The note gives the impression that the finding is new, as indicated by the part quoted here and the absence of any reference to other work on this subject. Therefore, attention should be called to the fact that in 1941 Florestano, Faber and James,[2] using a much larger number of subjects, discovered and reported essentially the same results and conclusions. Consequently, credit for the finding should go to the latter group of workers.

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[1] N. C. Turner and E. M. Crane, SCIENCE, 99: 262, 1944.
[2] H. J. Florestano, J. E. Faber and L. H. James, *Jour. Am. Dental Assoc.*, 28: 1799–1803, 1941.

SCIENTIFIC BOOKS

PLANT VIRUSES

Plant Viruses and Virus Diseases. By F. C. BAWDEN. Second edition. xi + 294 pp. Waltham, Mass., Chronica Botanica Company. 1943. $4.75.

THE book represents an attempt to describe and correlate advances that have been made in the study of plant viruses during the last decade. It deals largely with less than a dozen viruses whose chemical and physical properties have been studied somewhat intensively. Such emphasis on the chemical and physical phases of virus work is perhaps justified, since it is in this field that plant virus research has made remarkable advances in recent years, but I suspect that most plant pathologists would prefer a book discussing virus diseases more broadly. On the whole the book is unusually well written and well illustrated. Biochemical and biophysical phases of plant virus research, especially, are presented accurately and entertainingly, although some descriptions of chemical methods seem unnecessarily long and detailed.

It is unfortunate that in a book of such excellence there should be some serious errors. Chapter 5, which the author states needed extensive alterations in the preparation of a second edition because of the growth of knowledge regarding the relationships between viruses and their insect vectors, may be cited in this connection. In discussing the latent period of viruses in insect vectors the author states on page 76 that the latent period "seems to start from the time the vectors leave the infected plant rather than from the start of feeding on it." The reviewer knows of no evidence anywhere in plant virus literature to support this statement. In discussing such viruses as aster yellows, whose vectors have prolonged latent periods, he states that "in published work there is no indication that vectors can ever infect healthy plants immediately after leaving infected ones." As a matter of fact such cases are reported in the literature. In discussing Black's evidence that the virus of aster yellows multiplies in the vector *Cicadula sexnotata* on page 80 he states, "it is noticeable that the number of successful inoculations is usually greater if the extracts of macerated insects are diluted 1/1000 than if diluted 1/100 or 1/10." This statement is misleading because Black's data do not indicate that dilutions at 1/1000 give more transmissions than dilutions at 1/100 or 1/10. Perhaps the most unsatisfactory section in the chapter is that dealing with work by Fukushi. The author cites the same two papers, published in 1934 and 1935, that were referred to in the first edition and makes essentially the same arguments against Fukushi's evidence that rice stunt virus multiplies in the vector. In papers published in 1939 and