Historical Records of Avocado Scab in Florida and Cuba

ANNA E. JENKINS
Associate Mycologist, Mycology and Disease Survey, Bureau of Plant Industry, Washington, D.C.

Until the present, the earliest published record of avocado scab, caused by Sphaceloma perseae, Jenkins (3), has been in the year 1916, when the late Mr. W. J. Krome sent specimens from Bade Co., Fla., to the Florida Agricultural Experiment Station (8). The existence of the disease in Cuba was first recorded in 1920 by Bruner (2) who mentioned its distribution also in Florida.

During February 1937 when the writer visited Mrs. Krome, at the Krome Groves at Homestead, Dade Co., Fla., Mr. Krome's part in the early history of avocado scab was discussed, and certain of Krome's records of "Avocado diseases and pests" were consulted. From this source, as herein shown, was obtained evidence that the disease was already present on avocados in Florida in 1915 and in Cuba in 1916.

In the correspondence examined it was found that four diseased fruits of Trapp avocados from the Krome Groves were gathered by Mr. Wilson Popenoe, in September 1915, and transmitted to the U. S. Department of Agriculture, Washington, D.C., with the statement that Mr. Krome would like to know the cause of the trouble. At Washington a photograph was made of two of the fruits and this shows clearly that the disease in question was avocado scab (fig. 1, B. and C.), then new to science. The Trapp avocado, a West Indian seedling (7) has since been found to be a particularly susceptible variety (1, 8). In February 1937 after the avocado harvest, avocado scab was scarcely in evidence in the Krome Grove, but a severely affected fruit of another variety was finally found in the orchard (fig. 1, A).

The record of 1916 for Cuba consists also of a photographic print showing the disease on a young avocado. Mrs. Krome explained that the photograph, of which the negative is no longer available, was made by her husband when he went to Cuba in 1916. The legend on the reverse, which is in his handwriting, reads "Avocado scab on seedling from Cuba." The terminal part of the shoot is represented, and this shows the general effect of the disease, including torn mishapen leaves and typical lesions. The print was presented to the writer by Mrs. Krome, and it will be preserved as a specimen in the Mycological Collections of the Bureau of Plant Industry (No. 70385). It is somewhat faded for reproduction; instead there is shown a similar illustration of scab on an avocado seedling from Orlando, Fla., collected by Mr. H. E. Stevens and the writer in February 1937 (fig. 2).

The photograph of avocado scab on fruits of Trapp avocado gathered by Popenoe in the Krome Groves, where this variety was grown extensively in 1915 (6), thus shows that the disease was already present in Florida before Krome discovered it in Cuba. The
two photographs are valuable records of what is now the earlist record of the disease in the world (fig. 1, B and C) and the first in Cuba (fig. 2). Further information relative to the history and distribution of avocado scab is presented elsewhere (4, 5).

LITERATURE CITED
Fig. 1—Avocado scab on avocado fruit from Homestead, Florida. A. Fruit collected by Mrs. W. J. Krome on February 10, 1927. B. and C. Part of fruit and entire fruit of Trapp variety, collected by Wilson Popenoe, September 1915. Photographs by M. L. Feubert (A), and I. Marion Skill (B and C).
Fig. 2—Avocado scab on shoot of seedling avocado. Orlando, Florida. February 1937. Reduced. Photograph by M. L. F. Foubert.