

time signal observations upon which our findings were based, in the hope that others challenged by the problem presented might be interested to make further contributions.

We did not have long to wait. A Japanese investigator Kawasaki,¹² utilizing our tabulated data, soon took the floor and showed that the reversal in phase of our curve of longitude variations which we had attributed to the change in the declination of the moon from the north to the south side of the equator could be accounted for by an annual term of unknown origin, the annual term being the seasonal variation

in the values of longitude variation to which we had called attention.

We now know that Kawasaki was wholly right in showing that under the conditions peculiar to the times when the star observations were made such an annual term could produce the effect observed so far as the reversal of phase in the resulting curves was concerned. He made no attempt, however, to account for the occurrence of the annual term, or the seasonal variation, or to deny that such an effect could be related to the moon.

(To be concluded)

OBITUARY

WILLIAM TITUS HORNE

WILLIAM TITUS HORNE, professor of plant pathology in the University of California, died on April 12, 1944, after an illness of a few days. He was born near Kankakee, Ill., on November 8, 1876. Professor Horne received his early education in the public schools of Bennett and Lincoln, Nebr., and then attended the University of Nebraska from which he obtained a bachelor of science degree in 1898. After serving as instructor in the Nebraska Wesleyan University and University of Nebraska Farm School, he was employed in a fish hatchery at Karluk, Alaska, in 1901-1902. He took graduate study at Columbia University as fellow in botany in 1903-1904. At the Cuban Agricultural Experiment Station from 1904 to 1909 he served as assistant and then chief of the department of plant pathology. He came to the University of California at Berkeley as assistant professor of plant pathology in 1909 and was acting head of the division of plant pathology in 1919-1920. He transferred his activities to the Citrus Experiment Station in 1928, where he became associate professor and then professor of plant pathology in 1939. Here he had a long and useful service, especially in the field of avocado and subtropical diseases.

While at Berkeley, many students felt his kindly influence and careful instruction, and numbers of them are now active and prominent in scientific research, teaching and commercial life.

At Riverside he has made notable scientific contributions, especially to the better understanding of avocado disease problems. He made a host of friends by his friendly attitude and gentle, kindly life, not only among his immediate associates but among the growers as well. An excellent example of the appreciation of his work for the avocado industry is a quotation from a scroll presented to him on May 3, 1935:

The Avocado Department of the Los Angeles County Farm Bureau takes this means of expressing to William¹² S. Kawasaki, *Monthly Notices Royal Astron. Soc.*, 96: 818, 1936.

Titus Horne, Associate Professor of Plant Pathology at the University of California, its deep appreciation of the years of untiring and unselfish work devoted by him to the problems of the avocado industry. Much of this work has been beyond the requirements of his position. His modest, unassuming manner and deep human interest in the problems of the growers has endeared him to all of us.

Later, in 1938, he was asked by the California Avocado Association to present the medals at Atlixco, Mexico, in recognition of the sending of the Fuerte variety to California. In the same year his colleagues in plant pathology made him president of the Pacific Division of the American Pathological Society. He was a member of the American Association for the Advancement of Science, the American Phytopathological Society, the Mycological Society of America, the California Botanical Society, the Torrey Botanical Club, Sigma Xi and Alpha Zeta.

One of his most important publications since coming to Riverside was his 1934 bulletin on Avocado Diseases. He had ready at the time of his death a completed manuscript on "The Diseases of the Guava," which is being edited for publication by the University of California.

In 1906 he married Mary Tracy Earle, sister of the late Professor F. S. Earle, at Santiago de las Vegas, Cuba. Their beautiful home and garden at Riverside, from which friends received innumerable gifts of flowers and fruits, was an expression of their kindly life and endearing hospitality.

H. S. FAWCETT
L. J. KLOTZ
P. A. MILLER

AGRICULTURAL EXPERIMENT STATION,
RIVERSIDE, CALIF.

RECENT DEATHS

DR. DAVID EUGENE SMITH, professor emeritus of mathematics at Teachers College, Columbia University, died on July 29 at the age of eighty-four years.

DR. JOSEPH CHRISTIE WHITNEY FRAZER, research