

Rosen himself thinks that "if nematodes are present, then the use of organic matter in such soil will not remove the possibility of wilt development, although it may partially alleviate the losses that might be incurred by stimulating the growth of the plant."

It is thus apparent that there is fundamentally very little difference in the three views in so far as they relate to the practical use of organic fertilizers in cotton wilt control under usual field conditions. Rosen's present important work will doubtless stimulate further detailed investigation of the effectiveness of organic matter in the control of cotton wilt in the field, and it is hoped will lead to more extensive practical use of such material by cotton farmers, as has always been recommended as good practice by the pathologists of the U. S. Bureau of Plant Industry.

In this general connection reference may be made to the recent work by C. J. King and H. F. Loomis, of the U. S. Bureau of Plant Industry, on the control of cotton root-rot caused by *Phymatotrichum (Ozonium) omnivorum* (*Jour. Agric. Res.*, 32: 297-310, 1926), which is summarized in part as follows: "Experiments conducted in the Salt River Valley and at Sacaton, Arizona, to test the effects of manure and other organic materials on the control of root-rot have consistently shown a reduction in the infected area and the number of cotton plants dying from the disease following the treatment."

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PLASMA CALCIUM

ACCORDING to the observations of Dr. J. B. Collip as reported in *The Journal of Biological Chemistry*, Volume LXIV, June, 1925, the thyroparathyroidectomized dog is no more responsive to the plasma calcium-raising principle contained in a hydrochloric acid extract of bovine external parathyroid glands than the normal dog.

Several tests on the effect of such an extract, prepared according to the method of the writer, have convinced us that the thyroparathyroidectomized albino rat is much more responsive to the calcium-raising principle than the normal albino rat.

The parathyroid preparation used in these tests was one which had previously been standardized by testing its reaction on normal dogs. Fifteen milligrams of the preparation in 0.85 per cent. sodium chloride solution produced an increase in the plasma calcium of a 12 to 13 kilogram dog, 3 to 4 milligrams, 15 to 17 hours following subcutaneous administration.

The potency of this preparation is further illus-

trated by citation to an experiment in which 60 milligrams was administered, in four doses of 15 milligrams each, to a 13.6 kilogram dog, during the course of 48 hours. During that time six plasma calcium determinations were made. The initial calcium value was 11.85 and the terminal value at which death occurred was 26 milligrams per 100 cc. of plasma.

When 15 milligrams of this preparation was administered to several normal albino rats, no noticeable increase above the normal value was found after seventeen hours. Thirty milligrams administered in two equal doses seventeen hours apart were necessary to produce an increase of approximately 5 milligrams in the plasma calcium of a normal rat.

Nine milligrams of the preparation was found to double the plasma calcium of a thyroparathyroidectomized rat of approximately the same weight, while 15 milligrams gave a value of 17.5 milligrams per 100 cc. of plasma.

We also found that as in the dog the plasma calcium value of the rat begins to drop very soon after parathyroidectomy. After reaching a value between 5 and 8 milligrams per 100 cc. of plasma, the calcium value has been found the same 200 days following thyroparathyroidectomy.

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THE ANCIENT AMERICAN CIVILIZATIONS AND CALENDARS

UNDER the above title and within a period of eight months I recently made a communication, consecutively, to the British Association for the Advancement of Science in Oxford, the International Congress of Americanists in Rome, the Anthropological Society of Washington, D. C. and the Sociedad Científica "Antonio Alzate" in Mexico City.

In this communication I first pointed out that all the ancient American centers of civilization were situated between the tropics; that within this zone the year consists of two seasons only: the dry and the wet and a striking phenomenon occurs, namely, the passage of the sun through the zenith twice a year, at irregular intervals, according to the differences of latitude.

I next submitted irrefutable historical, documentary, archeological and pictorial proofs that the ancient astronomer-priests, inhabiting even widely separated parts of this tropical zone, observed the phenomenon by means of gnomons consisting of upright poles, stelae, pillars, altars or constructions with vertical walls, and interpreted the periodically recurring total disappearance of their shadows about noon, as

a "descent of the sun-god," whom they represented, pictorially and sculpturally, under the form of a human being descending head foremost or seated, at rest, within the solar disk; or under the form of different birds or of a jaguar. As in Mexico, when the phenomenon occurs towards the end of the dry season, it heralds the advent of rain generated by the heat of the vertical solar rays and as the growth of vegetation ensued, the ancient Mexican sages began their solar years at the moment when, marking the approach of the rainy season, the sun-god descended upon the gnomons and these cast no shadows.

At the end of my communication to the Sociedad Antonio Alzate in Mexico City I made the suggestion that the ancient observation of the annual phenomenon, which marked the beginning of the Aztec New Year and is always allowed to pass by unobserved and unmentioned by the present inhabitants of the capital, be revived as a national school festival, which would be of educational and patriotic value as it would link the present with the past generations of native Mexicans. My suggestion was received with enthusiasm by the president and members of the society and on May 18 the impressive phenomenon was observed in several schools in Mexico City, the most important celebration being held in the great courtyard of the new normal school under the auspices of its directors, Señor Aguirre and Señora Berlanga; of Señor Gallo, the director of the Astronomical Observatory, and of Señor Heliadoro del Valle, who, with other eminent professors, initiated a celebration in which over six thousand pupils took part with song and dance. The hope I also expressed that this beautiful nature festival will likewise be revived in other anciently inhabited centers within the tropical zone bids fair to be realized next year, as official representatives of Peru and Guatemala have already expressed their intention to recommend the adoption of the same school festival in their countries, and it is probable that others will follow suit.

I am at present engaged in preparing for publication a book containing the complete presentation of the results of my researches on the subject which have extended over thirty years.

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QUOTATIONS

"YOUR MONEY'S WORTH"

No one group has done more to "debunk" the commercial practices of those dealing in the special mer-

chandise of the group than has the medical profession. Furniture dealers are by no means agreed that it is in the public interest to let it be generally known that a table made of birchwood with a thin veneer of mahogany is not the "solid mahogany" of the advertisement; the gentlemen in "suits and cloaks" are far from agreeing that there is any moral defection in describing a garment of cotton and shoddy as "all-wool"; furriers still act on the principle that it is permissible to unload dyed muskrat on the public as "Hudson seal"; the manufacturers of a well-known brand of soap admit privately that the slogan "99 and 44/100% pure" is a slogan rather than a fact. But, for over twenty years, the organized medical profession has attempted to bring to a minimum misrepresentation and deceit in the exploitation of medicinal products. Physicians, then, as a class, will probably be more interested than any other one group in the book recently published under the title "Your Money's Worth," by Stuart Chase and F. J. Schlink. Neither of the authors is a physician, but both of them have been trained to clear thinking and, what is equally evident from their book, to a lucid expression of facts. Mr. Chase, for some years on the staff of the Federal Trade Commission and at present a director of the Labor Bureau, Incorporated, is by profession a certified public accountant. Mr. Schlink, a mechanical engineer-physicist and an officer of the American Engineering Standards Committee, is fortified by an experience he had of some years on the staff of the National Bureau of Standards at Washington. "Your Money's Worth" appeared originally as a series of magazine articles, under the title "Consumers in Wonderland." The book deals not so much with adulteration of products and deceptive advertising as outstanding evils of modern merchandising as with the wastefulness of selling what are practically identical articles under various brand names and with the absence of impartial information available to the public. In a few of the industrial fields, the public is protected in its purchases by standardization worked out by the industry itself, but the ground thus covered is pitifully small. Medicine, however, has reason to feel proud of the fact that it was among the first, both in point of time and of importance, in establishing agencies whereby the public, through the profession, could be protected. In speaking of this phase of the problem, discussed by Messrs. Chase and Schlink, they say:

Far and away the leader among the technical societies from the point of view we are considering is the American Medical Association. It is as fearless as it is explicit in the exposure of quackery. Its Council on Pharmacy and