

Out of 384 tornadoes, he stated, seventy-eight per cent. moved northeast. Out of 452 tornadoes, eighty per cent. happened between noon and six o'clock in the evening.

NEW WORLD MADE FOR PLANTS AT BOYCE THOMPSON INSTITUTE

How plants respond to strange conditions never found in nature, such as daylight arbitrarily set at anything from zero to twenty-four hours a day, carbon dioxide ten times as concentrated as it is in normal air, and atmospheric moisture held anywhere that the manipulators want it, was told in an illustrated discussion before the American Association for the Advancement of Science by John M. Arthur of the Boyce Thompson Institution, Yonkers, N.Y.

One lot of plants was given ten times the normal amount of carbon dioxide and at the same time had its daylight period lengthened six hours with powerful electric lights. Red clover plants in this lot blossomed and produced a good crop of hay in 38 days, when under ordinary agricultural conditions two years would have been required for the same results. Spring wheat, barley and oats in the same group produced taller plants, yielding larger crops of both grain and straw, than control plants under normal conditions.

A second series of plants was given light for 24 hours a day, but no extra carbon dioxide. These did little better than the control plants, and on the whole not nearly as well as those that were given the extra gas. Apparently plants need a rest, for a tomato plant subjected to continuous light treatment finally died. A second tomato plant, given 19 hours of light and 5 hours' rest, survived and grew slowly, while a third, with 7 hours' rest each night, bore fruit.

With its facilities for complete and accurate control of all conditions affecting plant life, the Boyce Thompson Institute plans a long and extensive campaign of research into the fundamental problems of plant physiology.

DOCTORS' CHARGES CHANGE WITH MEDICAL PROGRESS

What should a doctor charge his patient? This is a question that was brought up before the American Association for the Advancement of Science meeting recently by Dr. Michael M. Davis of the United Hospital Fund of New York.

Since the advent of the specialist, the increase in the importance of the laboratory analysis, X-rays and therapeutic services, radical changes have come about in medical fees, Dr. Davis said. In the old days when most physicians did practically the same work, the fees charged were, so to speak, fixed by custom and were fairly uniform.

At the present time fees in cities, and to a less extent in the country, vary from \$1.00 a visit to the office of a country practitioner, to \$10,000 for a major operation by a surgeon of national reputation. Other costs besides doctors' fees have arisen, such as expenditures for laboratory and X-ray tests, nursing, and hospital charges.