in the East. He states that a number of European governments have expressed lively interest in his method of growing crops without soil.

Extensive experiments have been carried out with a large variety of economic plants, even including a full-sized banana tree. Results indicate that for the present at least profits can not be expected from crops consisting of dry seeds, like wheat and other grains, particularly when these also depend for their value on high protein content. It appears more profitable to raise plants in the fresh vegetable class, which have high water content and are valued mainly for carbohydrates, vitamins, attractive flavor and mineral salts. Tomatoes have thus far proved the most successful of hydroponic crops. The system is used either in greenhouses, or out of doors where the climate of growing season is favorable. In the continuously mild tropical climate of Wake Island, cultivation will be carried on entirely in the open.

ITEMS

THE first recorded case in which the substitution of heavy hydrogen, or deuterium, for ordinary hydrogen in a chemical reaction produces a color change, is reported in the *Journal of Chemical Physics*. Professor Victor K. LaMer and Samuel H. Maron, of Columbia University, describe their color-change experiments which are still in progress. It is well known that the substitution of a deuterium atom (D) for hydrogen atoms (H) in chemical compounds produces a material with different physical characteristics but, until the LaMer-Maron experiments, this change was never observable to the senses. In the tests the change from hydrogen to deuterium atoms produced a light yellow color in a previously clear solution. The chemicals involved in the tests were a solution of proto-nitroethane in heavy water and a compound made of barium, oxygen and deuterium.

SYPHILIS apparently afflicted almost half the Indians in some communities along the Potomac River. Displaying Indian bones marred by disease, before the Anthropological Society of Washington, Dr. T. D. Stewart, of the U. S. National Museum, raises the question: Where did syphilis come from? Prehistoric America has generally been blamed for giving the world this serious malady. Recent archeological discoveries in Maryland warrant reopening the question, and may lead to the opposite verdict, that white men from Europe brought syphilis to America. Possibility that the Maryland and Virginia Indians caught their disease from white men of Jamestown, or other explorers or colonists is pointed out by Dr. Stewart, who finds particularly significant the spreading of the disease through so many Indians in one group. This is the way the disease would spread, and it is curious that supposedly very ancient cases of syphilis in America have been single skeletons, or Indians of uncertain antiquity. Indian bones marked by ravages of syphilis have a characteristic spongy surface, which Dr. Stewart says was caused by inflammation of the covering membrane of the bone.