

AGRICULTURE

Blight Threatens Crops

Tomato blight is attacking crops in nationwide epidemic, causing great damage. New chemicals are proving successful controls.

► IF THERE is a shortage in canned tomatoes and tomato juice this winter, it can be blamed on one of the most severe epidemics of the tomato blight disease that has ever struck the country. Already this fungus plague has caused serious loss to the tomato crop in Maryland, Delaware, New Jersey and Pennsylvania, states Dr. J. E. Heuberger, professor of plant diseases at the University of Delaware.

Fast becoming a headache in the headachy business of food production, this vicious fungus, which runs in cycles and is now at the crest of a cycle, has already struck many of the most important growing areas. The infection has moved up the Atlantic seaboard, from Florida into Georgia, then into the Carolinas and Virginia, thence over Maryland, Delaware, New Jersey and Pennsylvania.

All possible means of control, including airplanes, are being used, but there is no adequate control equipment in

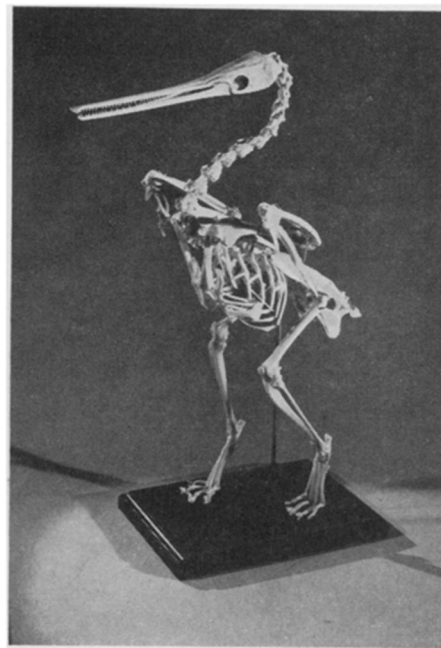
many areas since growers never before needed it.

Dr. Heuberger explains that until recently the growers' only weapon against the blight has been copper. This year, however, several new organic fungicides are being used to combat the disease. Various dithiocarbamates have proved effective. Two of these are disodium ethylene bis dithiocarbamate and zinc ethylene bis dithiocarbamate.

These chemicals have also been used against the blight where it has struck potatoes. Growers around Homestead, Fla., are said to have average yields of 100 bushels per acre higher under the new treatment than during previous years when only the old copper treatment was used.

Several experiment stations have reported that the dithiocarbamates are compatible with DDT, and make an excellent dual-purpose treatment for the control of insects and fungus disease on potatoes.

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"EXAM" BIRD—This rare skeleton was created by osteologists of Ward's Natural Science Establishment of Rochester, N. Y., for a college professor to use in testing students in comparative anatomy. The bird was fabricated from the hind legs of a cat; the backbone, wings, breastbone (without wishbone) and neck of a chicken; and the skull of a gar pike (a fish).

AERONAUTICS

Supersonic Plane Drive On

Race to build aircraft to beat the speed of sound is on in earnest. British and American rocket-powered models are ready for demonstration.

► THE RACE to beat the speed of sound with airplanes is on in earnest. British air officials announce that British engineers have plans for aircraft that will fly faster than sound, that models will be built and air-tested, and that later a full-size supersonic plane will be built.

These models will be rocket-powered and pilotless. They will be taken aloft and launched from ordinary aircraft, the London Transatlantic Daily Mail states. They will be guided by radio control, and will automatically "tell" the parent plane how they are behaving by means of radio-telemetering.

Radio-telemetering is an electronic system that measures stresses and strains

and reports the results constantly to a ground station or perhaps to an accompanying plane. An American type installed in U. S. Navy planes demonstrated recently how well a plane without a pilot can be guided in the air and its performances recorded.

America's entry in the supersonic speed race is the Army-Bell Aircraft XS-1, built according to principles learned by scientists of the National Advisory Committee for Aeronautics in its laboratories and supersonic and other wind tunnels.

The XS-1 has already been thoroughly tested without power in glider and diving performances, and will soon be given try-outs in gradually increasing

speeds when its rocket engines are installed. The supersonic test will be made later. Under present plans, it will not be pilotless. The same man who has handled it in the tests already made is expected to guide it in the break-through of the supersonic wall.

Other English developments in aviation parallel those in America, with perhaps more stress placed on gas-turbine and jet-propulsion than is emphasized in this country. The English have a 30,000-pound "flying wing" powered with turbo-jets that may be in the air later this year. They have a tailless airliner powered by four jet engines that will be put into commercial service over the Atlantic by 1950, it is expected.

An English jet-propelled Gloster Meteor climbed recently to an altitude of 46,500 feet, and reached an unofficial speed of 630 miles an hour, it is reported. Its official speed is 606 miles an hour.