

sonian, these hearings having allowed the first comprehensive congressional review of the institution conducted in well over 100 years.

Some witnesses were critical of the Smithsonian and its secretary, S. Dillon Ripley. For instance, Senator Barry Goldwater of Arizona, an aviation buff, complained that the Smithsonian's "top brass" had seriously neglected the Air and Space Museum and also the Museum of Natural History. Early this year the General Accounting Office, an auditing and investigative arm of the Congress, reported that the Smithsonian had in some instances followed careless practices. For example, the institution was said to have failed to keep a proper inventory of art works not on display and to have purchased office furnishings with money appropriated for construction work. And questions also had been raised within the institution's board of regents about the venture into magazine publishing.

Further, one witness at the hearings and some members of the subcommittee questioned plans for the Joseph H. Hirshhorn Museum and Sculpture Garden. This museum is now being built to house a collection of modern art which Hirshhorn, who comes to philanthropy by way of a career as an adventurer on the securities market, will donate. The propriety of naming the museum for Hirshhorn was again questioned, and the architectural plans for the museum, which some people believe will look like a huge gun turret, were criticized.

Despite these complaints, however, the subcommittee, chaired by Frank Thompson (D-N.J.), found in its review of the Smithsonian's activities more to praise than to criticize. After a meeting of the subcommittee on 14 August to outline a report on the hearings, Thompson told *Science*: "The tone of the report will not be critical. Rather, I think we'll be patting them on the back." He indicated that, while the various criticisms that have been made will not be overlooked, these have been "minor."

A member of the House Education and Labor Committee, Thompson has interested himself deeply in cultural affairs and was a sponsor of the legislation establishing the National Foundation on the Arts and the Humanities. Others on the subcommittee, such as John Brademas (D-Ind.), a Rhodes scholar who has made affairs of higher education one of his principal interests, also contribute to making this panel one

which, from the Smithsonian's standpoint, is almost ideally constituted.

Thompson said that, chiefly, the subcommittee's report, along with its published hearings, will serve to provide Congress with an extensive review of the Smithsonian's history, its current ac-

tivities, and its future plans. Included in the latter are plans for a big-dish radio telescope which would be the largest of its kind in the world and which would cost at least \$39 million. The subcommittee is recommending an initial \$2-million authorization for the

Corn Blight Threatens Crop

A new strain of fungus is blighting cornfields from Texas and Florida in the South to Minnesota and Wisconsin in the North. The extent of the damage will not be known until the September crop report is in, but Department of Agriculture officials have estimated that 10 percent or more of the field-corn crop may be destroyed.

The new strain of southern corn leaf blight, *Helminthosporium maydis*, attacks the leaves, stalk, and ears of the corn plants. George Irving, Administrator of the Agricultural Research Service, said there is no effective treatment for an infected field, but there is a fungicide which can be sprayed on corn to prevent development of the fungus. This fungicide, called Zineb, a carbamate, must be sprayed repeatedly to prevent growth of the fungus; the treatment is too expensive for use on field corn, Irving said. (Almost all of the corn grown in the United States is field corn, fed to dairy and beef cattle, hogs, and poultry.) The chemical is being used on fields of sweet corn, which is the kind people eat, and on seed corn. Agriculture Department officials said they were conducting no tests on the toxicity to humans of Zineb-treated corn. According to information from the Food and Drug Administration, Zineb has low toxicity. The FDA has set food tolerance levels for Zineb.

The best means of controlling the blackish-brown rot, according to Irving, is the use of resistant seed. The fungus attacks those plants that carry the *T* gene for male sterility, and about 70 to 90 percent of the corn hybrids grown in the United States have this gene. Seed companies plan to buy up disease-resistant seed if damage to the corn crop is extensive, and seed stocks may be multiplied by winter plantings in Latin America and Florida. The Agriculture Department plans to release two new strains of corn this fall, but seeds from these blight-resistant varieties will not be available in quantity to farmers until 1973 at the earliest. The department is also planning studies of the genetics of the fungus, sources of plant resistance, and the association between disease susceptibility and the *T* gene.

The fungus has been observed intermittently in the United States for many years. In 1969 the new, more virulent form was found in Illinois, and it was found in the 1969-70 winter crop in Florida. Southern corn leaf blight flourishes in a warm, moist climate; wind carries the spores, and moisture is needed for the spores to germinate. If the weather turns hot and dry the impact of the current blight may be blunted. Even if damage is extensive, some of the corn may be salvaged; recent feeding tests on cattle at agriculture experiment stations in the South have shown no toxic effects of the diseased corn. The effect of the fungus on the nutritional value of corn has not yet been determined, however.

Irving said the United States has some field corn stockpiled, less than a full year's supply, but the Agriculture Department does not plan to make decisions on measures such as restricting exports until the extent of the damage is known. Major producers of corn products, however, have already increased their prices for corn syrup and cornstarch, and the price of a bushel of corn has risen 26.5 cents since 7 August, to \$1.56 as of 2 weeks ago. In trading corn futures, the bushel price rose 27 cents last week, to \$1.53 for December. The prices of corn-fed animals may increase also.—NANCY GRUCHOW