News of Science

Cold Vaccine

On 19 Sept., Winston H. Price announced the development of a vaccine for one strain of the common cold. The virus is the JH virus (for Johns Hopkins), which Price isolated 4 years ago and which, in a 2-year study, he found to cause 30 percent of the cold cases examined. The vaccine proved to be 80 percent effective in treating the JH virus, and the work has been confirmed by three other laboratories.

Price, who is working under a grant from the Rockefeller Foundation, is an associate professor of epidemiology and biochemistry and director of the division of ecology at the Hopkins School of Hygiene and Public Health. In 1954 he won the Theobald Smith Award in the Medical Sciences, which is awarded annually by the AAAS. An article by Price, describing his work, is scheduled to appear in the September proceedings of the National Academy of Sciences. The full text of the article was published in the *New York Times* of 19 Sept. Here is Price's summary.

"1. The JH virus was found in association with an upper-respiratory outbreak in children.

"2. Children given a vaccine prepared from inactive JH virus showed an attack rate about 8 times lower than that of the children receiving the placebo injections.

"3. No untoward reactions were observed in 401 individuals receiving the vaccine, which was prepared from inactivated JH virus grown in monkey kidney epithelial tissue.

"4. It is concluded that the JH virus is the cause of the cold-like illness in humans and that an inactivated vaccine can be prepared from the virus which protects against the overt illness due to the JH virus."

Research and Freedom

In a recent article in the *Bulletin of the Atomic Scientists,* Stevan Dedijer, Yugoslav nuclear physicist, declared that what he called "underdeveloped countries" should seek a "persistent development of a general atmosphere of freedom" and that each should "take a mercilessly critical, objective look at itself and its new ideology from all angles." It appears from Dedijer's description of underdeveloped countries as "countries that have recently gained their independence and are experimenting with all kinds of social systems," that he is talking about Yugoslavia.

Dedijer fails to see anything of an imperialist plot in freedom of communication. Such freedom is "but a social mechanism developed by the 'capitalist imperialists' for their own good and essential for modern society." He also fails to see the Soviet Union's success in developing nuclear weapons as proof of the relative inefficiency of the democracies. Soviet secrecy about research may hide unnecessary waste, he maintains.

Stevan Dedijer studied in the United States at Princeton University, and served in the United States Army during World War II. He is now in Yugoslavia with the Rudjer Boshkovich Institute at Zagreb.

Rice Disease in Florida

A disease of rice that may be capable of seriously damaging the country's $200-million rice crop has been discovered at Belle Glade, Fla., just southeast of Lake Okeechobee, according to a joint announcement made 18 Sept. by the U.S. Department of Agriculture and the Florida Plant Board. Very little research has been done so far on the disease, *hoja blanca,* either in the United States or in other countries. The disease has been under observation for the past few years in Cuba and Venezuela. Until the recent discovery, the disease was not known to occur in the United States.

Rice plants and possibly certain grass weeds are infected by the disease in the Belle Glade area. Whether the disease may affect other grains or grasses is not known. Weeds that showed evidence of possible attack by the disease included barnyard grass (*Echinochloa colonum* or *E. crusgalli*) and *Panicum fasciculatum,* a weed related to millet. Unlike rice, these apparent hosts of the disease grow widely throughout Florida and other southern states. (Rice is produced commercially in Arkansas, Louisiana, Mississippi, Texas, and California.) Symptoms of the disease include yellowish-white discoloration or streaking of the leaves; the plants often fail to head.

Arrangements have been made (i) to spray with insecticide all the infected areas found so far, as a means of destroying suspected insect carriers of the disease; (ii) to plow under all infected rice in these areas; and (iii) to destroy infected grasses with chemical weed-killer. The destruction of all plants in the Florida areas where *hoja blanca* has so far been discovered is expected to be completed soon.

How *hoja blanca* got into this country is not known. It is believed to be caused by a virus and to be spread by insects, probably leaf hoppers. Early this year, an entomologist of USDA's Agricultural Research Service began investigations in Cuba to determine the particular insect or insects that may be responsible for spreading the disease. So far as Department scientists know, *hoja blanca* is not seed-borne, and they discount the possibility that it might have been brought in by imports from Cuba. Plant-quarantine regulations specifically forbid importation of rice and riceplant materials from disease-infested areas.

About 4000 varieties and strains of rice from the USDA's world rice collection have been grown where the *hoja-blanca* virus is epidemic in an effort to discover plant resistance. So far, some 285 lines of short- and medium-grain rice have been found with appreciable resistance to the disease. Most of these lines are introductions from Japan, China, and Formosa. Although none of the resistant lines so far discovered is equal in commercial acceptability to varieties now grown, some of them might serve in an emergency. They will also be used as breeding material for crossing with U.S. commercial varieties in an effort to produce new high-yielding, disease-resistant varieties.

No varieties of long-grain rice—especially important to southern U.S. growers—have been found with resistance to *hoja blanca.* However, time of planting is known to affect the susceptibility of rice plants to the disease, and there is a possibility that a shift in planting dates could permit the growing of present rice varieties even when *hoja blanca* is present. To test this possibility, year-round planting studies with five commercial varieties of U.S. rice have been under way in Cuba since the fall of 1956. These include the long-grain varieties, Bluebonnet 50, Century Patna 231, and Toro, and the medium-grain varieties Nato and Zenith.

All additional varieties and strains of rice in the USDA world collection not previously tested—including some 3000 entries—will be planted in Cuba and