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, Missis-

sippi, 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 hojablanca 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

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

Venezuela next spring. At that time, late in the planting season, rice seems to be most susceptible to *hoja blanca*, and the test for disease resistance is therefore likely to be more conclusive.

Atomic Post Filled

President Eisenhower has appointed Robert M. McKinney to represent the United States on the International Atomic Energy Agency, which was organized to carry out the President's Atoms for Peace program of 1953. McKinney, a Santa Fe, N.M., publisher, served as chairman in 1955 and 1956 of a panel on the impact of the peaceful uses of atomic energy. A Democrat, he supported Adlai E. Stevenson in the last Presidential campaign.

The appointment, which was made over Republican protests, is subject to Senate confirmation in January. When the impending appointment became known before Congress adjourned, Senator William F. Knowland (R.-Cal.) and Meade Alcorn, Republican national chairman, announced their displeasure. There may be a tough fight in the Senate over confirmation, but McKinney can expect strong support from Senator Clinton P. Anderson (D.-N.M.), who exercises considerable influence in the joint House-Senate Committee on Atomic Energy.

Chemical Society Building

The American Chemical Society will open this fall a \$3-million drive for funds to build a new eight-story national head-quarters on the site of the society's present building at 1155 16 St. N.W., Washington, D.C. The society's headquarters staff, which numbered 29 when the present building was acquired, now totals 204

Besides offices, the new building will have a library, a meeting room seating 250 persons, accommodations for committee meetings, and a lobby large enough to make possible educational displays of interest to Washington visitors. Faulkner, Kingsbury, and Stenhouse are the architects. Plans have been approved by the Zoning Board of the District of Columbia.

More Nuclear Tests

The Atomic Energy Commission and the Department of Defense plan to begin a new series of nuclear tests in April 1958 at the Eniwetok Proving Ground in the Pacific to advance the development of weapons for defense against aggression, whether air-borne, missileborne, or otherwise mounted. Test operations will be governed by the declaration made in the Bermuda communique on 24 March 1957 of the intention of the United States "to conduct nuclear tests only in such manner as will keep world radiation from rising to more than a small fraction of the levels that might be hazardous."

An important objective of the tests will be the further development of nuclear weapons with greatly reduced radioactive fallout so that radiation hazard may be restricted to the military target. A United Nations agency will be invited to designate an international group to observe one of the detonations involving limited fallout, and studies are under way to determine the instrumentation which will facilitate their observation without making disclosures that would compromise restricted weapon information.

Radioisotopes Training for Latin America

The University of Puerto Rico has established a Radioisotope Techniques Training Center following a pattern similar to the Special Training Division of the Oak Ridge Institute of Nuclear Studies. This center is financed by the Atomic Energy Commission with the purpose of providing training in radioisotope techniques for Latin American scientists. The dates for the courses that will be offered during the rest of the academic year are as follows: 4 Nov.-29 Nov. 1957; 6 Jan.-31 Jan. 1958; 3 Mar.-28 Mar. 1958; and 5 May-30 May 1958. For further information write to: Director, Centro de Entrenamiento en al Manejo de Radioisótopes, Universidad de Puerto Rico, Río Riedras, Puerto Rico.

IGY Data Exchange

There is evidence that both Soviet and Western scientists who are participating in the International Geophysical Year are withholding scientific information, according to Walter Sullivan's report in the New York Times on 17 Sept. Much of the success of the work during the IGY depends on the free exchange of information among the participating countries, because in many cases scientific observations from one place on the earth's surface will have little meaning until they have been coordinated with observations from other places.

Most Western scientists agree that the Soviets have been giving information more freely than in the past. In fact, a Soviet scientist recently lent an American scientist some unpublished maps that gave valuable data bearing on studies of

the earth's structure. Nevertheless, in those fields that might be considered to border on the military, little data has been forthcoming from Soviet scientists.

Western scientists also appear to be holding back information. The reason is not because the data must be kept secret, but to provide a bargaining point in efforts to get the Soviet scientists to release comparable information. One instance of withholding data concerns the results of a recent survey that serves to correct present information about the relative positions of Europe and North America.

Reactor School

The Atomic Energy Commission has accepted 62 scientists and engineers, 50 of them from 21 foreign countries, for enrollment in the sixth session of the commission's International School of Nuclear Science and Engineering at Argonne National Laboratory, Lemont, Ill. A part of the President's Atoms for Peace program, the training session is shared by the International School, North Carolina State College, and Pennsylvania State University.

The enrollment brings to 355 the number of scientists and engineers pursuing the course in unclassified reactor technology. Of these, 267 have come from 42 foreign countries. The 88 American students have been sponsored largely by United States firms interested in nuclear energy.

News Briefs

Humble Oil and Refining Company's Refining Research and Development Division is occupying a newly completed extension to its main laboratory building at the Baytown, Tex., Research Center. The 27,000-square-foot expansion provides a 70-percent increase in laboratory space and about a 40-percent increase in office space. The extension will house research personnel who formerly occupied space in other buildings and will provide for expansion in the staff. The building provides facilities for research in petroleum refining and petrochemical development.

Bjorksten Research Laboratories for Industry, Inc., Madison, Wis., has announced the opening of its new Houston, Tex., laboratory for sponsored industrial research. Luther L. Yaeger, vice president, will be in charge.

Stockholders of Schering Corporation and White Laboratories, Inc., voted on 19 Sept. to merge the two firms into a single pharmaceutical company. The