

GENERAL SCIENCE

Red China's Michurinism

► "MICHURIN SAY" may replace "Confucius say" in Communist China.

Michurinism is now the canon of science in Chinese Communism, Dr. Alfred Zee Chang reports in *Science* (June 4). Dr. Chang, who lives in Washington, is engaged on research on Chinese society for the Center for International Studies of the Massachusetts Institute of Technology.

"The Communists worship the Russian horticulturist (Michurin) in a way the Chinese used to do honor to Confucius," Dr. Chang says. "There are Michurinian associations and experimental stations throughout the China mainland, and the practice of Michurinism is not confined to biological science alone.

"It is understandable in the Western world that when Michurinists are dominant, the usefulness of modern scientists is doomed."

Michurin is the "Burbank" of Russia, with many new varieties of fruit to his credit. He is the symbol of the value placed on practical applications of plant breeding to benefit the state as opposed to "pure science" research.

The Chinese Academy of Science has been reorganized by the Communists under the presidency of Marxist litterateur Kuo Mo-ju. Although the Communists seem well aware of the importance of scientific development to the Communist regime, they do not seem to have made much headway in wooing over the leading Chinese scientists or in the training of young scientific personnel.

The overemphasis of political training gave no room for any serious scientific study, Dr. Chang points out.

Most of the 50 scientists in the "Ko-lien" or All-China Association for Natural Sciences are leading scientists who received their training overseas. Twenty-three are known to have trained in the United States, four in Great Britain, three in Japan, two in France and one in Canada. Thus they are in contrast to the foreign-educated Communist leaders who were mostly schooled in the Soviet Union, France and Japan.

Nevertheless, Dr. Chang states that "the Communists have little appreciation of the talents and ability of leading scientists. In fact, these scientists, with their objective method of reasoning, represent a potential threat to Communism. All that stands between the scientists and their eventual euthanasia at the hands of the Communists is their immediate usefulness in technical matters and their congenital nonaggressiveness."

Since the "Anti-America-Aid-Korea Campaign" and later "Anti-Three and Anti-Five Movements," leading scientists in China have been treated ruthlessly in certain isolated cases. Self-criticism and ridiculous "confessions" have been written by scientists and made public in newspapers.

"At least one outstanding scientist," Dr. Chang said, "Chicago-trained Dr. Lo Chihwei, was definitely liquidated in March, 1952, because of his refusal to sign an anti-American declaration."

Science News Letter, July 10, 1954

MEDICINE

Diagnosing Diseases

► A METHOD for diagnosing diseases by changes in blood serum proteins won a prize in the exhibit section of the American Medical Association, San Francisco.

The method was developed and shown by Drs. Gerald R. Cooper and Emanuel E. Mandel of the Public Health Service's Communicable Disease Center and Emory University School of Medicine, Atlanta, Ga.

The diagnoses are made by determining the change in migration of charged particles through an electric field. This is called electrophoresis. Heretofore, expensive optical devices and complicated manipulations have been needed to detect blood serum protein changes by methods using electrophoresis.

It was all so complex that a \$3200-a-year technician was needed to run the machine. It had to be reserved for research purposes and, as Dr. Cooper said, "We doctors found ourselves studying the machine, not the disease."

He and Dr. Mandel have worked out a method of getting the same information from apparatus simple enough and cheap

enough to be used in the hospital clinical laboratory.

Filter paper and a machine adapted from the motion picture industry, called a film densimeter, are important parts of the new method.

Diseases that can be diagnosed with it are: multiple myeloma, in which tumors form in many places in the body; cirrhosis of the liver, including that following the now prevalent jaundice condition, hepatitis; several kinds of kidney disease; and probably the extremely rare ailment in which the blood is entirely lacking in gamma globulin, which carries protective antibodies against polio and other infectious diseases.

Besides its aid in diagnosis, Dr. Cooper explained that the method will help doctors watch what is going on in their patients, see how a disease is progressing, and follow results of treatment.

As a research tool, the new electrophoretic method should give clues to the mechanisms of diseases and consequently to their possible cures.

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• RADIO

Saturday, July 17, 1954, 3:15-3:30 p.m. EDT
"Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS station.

Dr. Frederick A. Aldrich, instructor in zoology, Rutgers University, the State University of New Jersey, New Brunswick, will discuss "Starfish."

GEOLOGY

Ask Australians to Seek Uranium on Holidays

► HOLIDAY AND weekend prospectors are being asked to aid a nation-wide search for uranium in New Zealand.

The government has enlisted their assistance because of the magnitude of the job. Officials of the Scientific and Industrial Research Department believe gold-bearing sands of the West Coast may yield results.

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ANTHROPOLOGY

Lop Man-Apes From Man's Family Tree

► THE MAN-APES of South Africa may not have been ancestors to modern man.

The possibility that the Australopithecinae may be lopped off man's family tree, or at least pushed down to an "uncle's" location, is pointed out by Dr. William L. Strauss, of Johns Hopkins University in *Science* (June 18).

His suggestion is based on results of a recent research tour through South Africa made by Dr. Kenneth P. Oakley of the British Museum and reported to the American Association of Physical Anthropologists. Dr. Oakley is one of the British scientists who recently denounced the famous Piltown Man as a hoax.

On the basis of personal direct observation of the sites where the fossil man-ape bones have been found, Dr. Oakley concludes that the Australopithecinae were not tool-makers and were not old enough geologically to be ancestors of the first tool-making hominids.

It is more likely, he believes, that the Australopithecines were living at the same time as did a race of more advanced hominids who did make tools. The tool-makers seem to have lived along the banks of rivers and lakes while the Australopithecines lived in the bushy ravines, or "kloofs" as they are called locally, where they frequently were the victims of meat-eating animals.

The limestone caves in which the remains of the fossil man-apes were found were probably not the homes of these ancient man-apes, Dr. Oakley believes. Instead they were probably occupied by the wild animals who devoured them and left their bones for modern anthropologists to find. The man-ape may have ducked into the cave to take shelter from rain or wind, or he may have been dragged there by his beast attacker.

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