

CHEMISTRY

Chlorophyll Wanting

Laboratory tests, including one using a chemical reaction rather than the human nose as an indicator, refute claims that chlorophyll has ability to deodorize.

► TESTS OF chlorophyll which refute claims for its ability to deodorize are reported by Dr. John C. Brocklehurst of the University of Glasgow and Stobhill General Hospital, Glasgow, in the *British Medical Journal* (March 7).

One of these tests gets away from reliance on the human nose as an indicator of chlorophyll action. In this test Dr. Brocklehurst used methylmercaptan gas, one of the substances contributing to the odor of the gas normally present in the lower bowel.

This gas was made to pass through a baffle of filter paper soaked in chlorophyll solution. Then it bubbled through tubes containing iodine. Mercaptan combines with iodine to form colorless hydriodic acid, so the time taken to decolorize a standard iodine solution could be taken as a measure of how much mercaptan was stopped by the chlorophyll with which the filter paper was soaked.

There was no difference in the time taken for mercaptan to go through water and chlorophyll solutions, including one commercially prepared for use on a wick to deodorize air. The chlorophyll did not re-

duce the amount of gas passing over to the indicator, Dr. Brocklehurst states.

Other tests, made with the human nose as indicator, showed that it did not remove the smell of mercaptan.

Some nose tests, on excreta from an incontinent patient, who was given chlorophyll tablets or pills on alternate three-day courses, also showed no difference in odor during the chlorophyll or non-chlorophyll periods. The person who did the smelling for these tests did not know which days the patient got the chlorophyll tablets.

Other tests, which many doctors and laymen can make on themselves, involved taking chlorophyll tablets every four or six hours for 24 hours before eating asparagus. The tablets did not prevent the asparagus odor from developing in the urine.

The odor of one drop of perfume, used in another test, persisted in the experimental jars for five months although all the concentrated chlorophyll solution it was put in had evaporated in 14 days.

A test with onions had to be abandoned after 24 hours because the smell of the chlorophyll-treated onions was so offensive.

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ASTRONOMY

Moon Has Argon "Air"

► THE MOON does have a breathable, though very thin, atmosphere. This atmosphere, or "air," consists of slight amounts of argon and perhaps other noble gases, and there are at least a few breaths of it, Dr. Harlow Shapley of Harvard College Observatory states.

This very thin atmosphere would not, he warned, be very "sanitary" to breathe. The argon in the moon's "air" comes from radioactive decay of a potassium isotope in rocks brought to the surface by bombardment of myriads of meteors.

Argon makes up about one percent of the earth's atmosphere, and is believed to have come from the spontaneous radioactive decay of a form of potassium over a long period of time. Volcanic action, however, hurls many more potassium-containing rocks to the surface where decay products are released.

A little of the moon's argon might escape the moon's surface entirely, Dr. Shapley said, but most of it, being quite heavy and not active chemically, would probably stay to make an extremely thin blanket.

Lighter elements, such as hydrogen, nitrogen or oxygen, released as a result of

meteoric bombardment of the moon are either so light they would escape into space, or else they might, as they are formed, combine with other materials in the rocks.

Other noble gases, elements such as krypton and xenon that are very inactive chemically, might also make up part of the moon's atmosphere, Dr. Shapley believes.

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MEDICINE

Leukemia Is Mimicked By Milder Blood Disease

► ONE-FIFTH OF patients thought to have one kind of leukemia, often called blood cancer, may actually be suffering from another and comparatively non-malignant blood disease.

Patients with the non-malignant blood disease have a life expectancy of from five to 25 years, compared to the three to five years for those with chronic myelogenous leukemia.

This hopeful finding for some supposed leukemia patients comes from research announced by the American Cancer Society

and performed at the University of Chicago under the direction of Drs. Matthew Block and Leon Jacobson.

The non-malignant blood disease is called myeloid metaplasia. It sometimes is caused by tuberculosis or cancer but sometimes occurs as a primary disease. Symptoms include fever, spleen and liver enlargement and tendency to bruise easily and bleed profusely. These mimic the symptoms of leukemia.

Treatment of the two conditions is entirely different, so definite diagnosis is important, the Chicago doctors stress. The diagnosis, they found, can be made by microscopic examination of a bit of spleen removed for this purpose.

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AERONAUTICS

Helicopters Now Carry Supplies to Front Lines

► MOSQUITO-TAILED HRS helicopters are making it difficult for Chinese Reds to recapture their bunkers in Korea after hard-hitting Marines have blasted them out, the Sikorsky Aircraft Co., Bridgeport, Conn., reports.

The helicopters carry construction supplies to advancing Marines, thus allowing the Leathernecks to rebuild and occupy battered bunkers before the Reds can counter attack.

Timbers are presawed to the proper length behind the front line. They are loaded into helicopters along with empty gunny sacks that later will serve as emergency sand bags. Timber and sacks are dropped to advancing Marines when a covey of Communists has been flushed from a bunker.

The technique has been so effective that it has been made a standard Marine combat maneuver.

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HORTICULTURE

Cherry Blossoms to Bloom Without Sprays

► CHOOSING CHERRY blossom time in Washington will be left up to mother nature this spring, following two seasons of trying to retard early blossoming with hormone sprays.

Horace Wester, technical adviser to the National Capital Parks, has reported that he does not plan to use hormone treatments on the famous trees if they threaten to bloom too early for the Cherry Blossom Festival.

Past attempts to hold back blossoming with hormone sprays did not prove effective enough to warrant their large-scale use again, Mr. Wester said, although the chemicals do show some effects on younger plants.

The Cherry Blossom Festival comes a week later this spring, April 8 to 12, to avoid conflicting with Easter week.

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