



LARGER GROWTH FASTER—To speed the growth of young plants, water containing terramycin is poured on young sorrel, a spinach-like plant, by Dr. Louis G. Nickell, chemist of Chas. Pfizer & Co., Brooklyn, N. Y. Even though the plants are young, the size difference between plants watered with terramycin solution and untreated sprouts can be noted.

PHYTOCHEMISTRY

Spurt Plant Growth

➤ JUST A soupcon of the antibiotic terramycin in the water fed to corn seedlings gives them a spurt of growth.

Usually used to cure and prevent diseases, the so-called wonder drug can also stimulate plant growth, Dr. Louis G. Nickell, head of the phytochemistry laboratory of Chas. Pfizer & Co., Brooklyn, N. Y., told the American Institute of Biological Sciences meeting in Ithaca, N. Y. Antibiotics have also been used in feed for poultry and hogs to stimulate their growth. Seemingly both effects are obtained by holding down the growth of undesirable microorganisms.

Five parts of terramycin per million of water used in watering sweet corn seeds for only four days almost doubled the weight of the plants above ground at four weeks.

Tests with sorrel, a member of the buckwheat family that closely resembles spinach, showed that when terramycin treatment is stopped completely at an early stage, growth gains continue. Dr. Nickell reported that

at 46 days a flat of sorrel given the antibiotic averaged 3.8 inches higher than the untreated plants of the same age, and had more leaves.

Experiments on radish seeds with penicillin showed that when the antibiotic was mixed in the soil at a rate of 10 units of penicillin per gram of soil, the radishes averaged from almost twice to almost three times as large as the untreated radishes.

He also reported growth stimulation of pansies with terramycin.

Stimulation of plant tissue culture with antibiotics, Dr. Nickell said, sheds new light on the mechanism of antibiotic growth stimulation in animals. Scientists do not know why antibiotics stimulate animal growth, but some of the most popular theories hold that the bacterial population of the animal's intestine is altered by the antibiotic in some way.

After more experiments, such use of antibiotics may aid practical farming.

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GENETICS

New Rabbit Breed Walks Like Dachshund

➤ A RABBIT that moves in an undulating walk or run like that of a Dachshund dog instead of hopping like a normal rabbit has developed by mutation from a strain of New Zealand White rabbits in California, Drs. P. B. Sawin and D. D. Crary of Jackson Laboratory, Bar Harbor, Maine, reported at the American Institute of Biological Sciences in Ithaca, N. Y.

The recessive hereditary character of this Dachs-rabbit is the result of abnormal cartilage development. The upper limbs are short, the hip and shoulder joints poorly developed, and in some cases the skull is deformed.

The Dachs-rabbit is normal at birth, becoming deformed as it develops. It can be identified by a long finger-like piece of cartilage at the base of the ear.

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PHOTOGRAMMETRY

Lens Snaps Clearer Photos High in the Air

➤ A NEW wide-angle lens for aerial cameras that gives much clearer, sharper pictures from thousands of feet in the air was described to the International Society of Photogrammetry meeting in Washington. The lens was shown for the first time in this country at the map-makers' meeting.

"The outstanding feature of this new lens is that even the extreme corners of pictures get the light necessary for good definition," Albert Schmidheini of the Henry Wild Company, Herrbrugg, Switzerland, told SCIENCE SERVICE. In the other wide-angle types so far built, he explained, the light falls off towards the corners. Definition is not so good and accurate spotting of details more difficult.

The new lens unit contains ten separate pieces of accurately ground glass, some curved inward, some outward in shape; other wide-angle lenses contain only five such separate pieces. The "completely different" system was developed by Dr. Ludwig Bertele of the Swiss concern.

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PUBLIC HEALTH

September Now Is Healthiest Month

➤ SEPTEMBER CAN claim the title of healthiest month of the year, having the smallest death toll of any month, the Life Insurance Institute, New York, finds.

U. S. mortality statistics for the country as a whole and the calendar distribution of life insurance death claims both show this.

A century ago, September was one of the worst months of the year with a death toll nearly twice that of winter months and one of the two highest monthly mortality rates.

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