MEDICINE

Kasugamycin Effective Against Urinary Infection

➤ AN ANTIBIOTIC that kills rice plant fungus has been found effective against human urinary infections in tests conducted.

Dr. Hamao Umezawa, discoverer of the antibiotic, reported its success to an international gathering of microbiologists and chemotherapists in Washington, D.C.

The chemical, called kasugamycin, is named after its place of origin. It was isolated from a soil sample taken from the garden of Kasuga shrine in Nara City, Japan.

Dr. Umezawa's original intention was to find a cure for the number one destroyer of Japanese rice. Kasugamycin was chosen from 3,000 culture filtrates. Its effect on the rice fungus was "remarkable," Dr. Umezawa said.

The antibiotic also displayed low toxicity to animals as well as plants. Experiments were therefore started to find possible uses as a medical drug for humans.

Kasugamycin showed an inhibiting effect against the bacteria pseudomonas, the Japanese scientist reported.

Pseudomonas can be inhibited by drugs already on the market, but the organism has continually shown an unusual capacity to survive drugs. Urinary tract infections caused by pseudomonas include everything from the serious kidney disease to cystitis, a bladder infection that is difficult to cure and recurs at periodic intervals. Cystitis may end in a kidney infection. Pseudomonas also causes the blue pus infection of burns.

Dr. Ichikawa, president of the First National Hospital in Japan, tested the antibiotic and reported proof of its effectiveness against urinary infection.

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AGRICULTURE

New Antibiotic May Rid Swine of Worms

➤ EXCELLENT TEST RESULTS against the parasites that have plagued farm animals through the ages were shown by a new antibiotic, still in the experimental stage.

The antibiotic, called anthelvencin, was isolated at the Lilly Research Laboratories in Indianapolis. Successful tests with it were reported to specialists in antimicrobial agents and chemotherapy, gathered in Washington, D.C., for an international conference.

Scientists of Eli Lilly and Company revealed that the new antibiotic was 100% successful against whipworm in tests on swine.

It also eliminated 96% of the large roundworms and 78% of the nodular worms. The antibiotic was fed to the swine in their food—12 grams per ton.

However, further investigation is necessary before the agricultural value of anthelvencin as a worm killer can be settled.

If given orally, the antibiotic is relatively nontoxic in animals, but it becomes more dangerous when injected, precluding its use in humans.

Anthelvencin was taken from cultures of streptomyces, a family of microorganisms notable as a source of antibiotics.

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