

VETERINARY MEDICINE

Control of Coccidiosis Foreseen for Farmers

➤ SCIENTISTS BELIEVE they soon will be able to control coccidiosis, a parasitic disease that costs livestock and poultry owners \$50,000,000 per year.

Dr. John C. Lotz and R. G. Leek, parasitologists with the United States Department of Agriculture, reported in Washington that the attack on coccidiosis will be double-barrelled. One method consists of giving drugs to animals before they get the disease, and the other will be the spraying of fields where diseased animals have been.

The object of both techniques is to disrupt the normal life cycle of the parasite as it passes through the digestive tract of one animal, to the field, and into another animal.

The infective, egg-like, coccidial cysts, picked up from the field in forage, feed or water, can hatch inside the host animal only under certain conditions. If the shell of the cyst is not broken at the right time by the action of enzyme and bile, the parasite cannot mature and produce another generation of cysts.

Drugs that interfere with hatching action could be used to control the parasite within the animal host, the investigators reported in Agricultural Research, April, 1961. Enzyme-like sprays that destroy the shell of the cyst and expose the parasite to the elements could be used to kill off cysts lying in fields, waiting to be swallowed.

Thus livestock and poultry owners would have effective methods for fighting the disease while it is outside the animal, as well as when it is inside the host.

• Science News Letter, 79:255 April 22, 1961

BIOLOGY

Tumor Transplants "Take" in Mother Mice

➤ TRANSPLANTED MOUSE tumors ordinarily rejected will "take" in female mice after they bear offspring.

A study reported at the American Association for Cancer Research meeting in Atlantic City, N. J., indicated that the immune response in females that had borne offspring was modified in a specific way.

This finding is of particular importance in light of increased research on the role of immunity in resistance to human cancer.

Drs. Edward J. Breyere and Morris K. Barrett of the National Cancer Institute, Bethesda, Md., said the transplant would only be affective for a tumor from the strain of mice that sired the offspring.

Among inbred mice, a number of genes governs susceptibility and resistance to transplantation of tissue from members of one strain to those of another. Only when the strongest of these genes is alike in two strains is a transplant usually successful. Otherwise, the recipient may be immune.

Dr. Breyere, who was formerly at the institute, is now at American University, Washington, D. C.

• Science News Letter, 79:255 April 22, 1961

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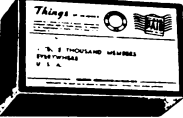
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