

## VETERINARY MEDICINE

**Foot-Mouth Virus Culture Made from Tongue Tissue**

➤ **VACCINE** against aftosa, or foot-and-mouth disease, may eventually be produced without having to make a whole cow sick. In the meantime, investigations of this costly menace to the livestock industry can be carried on in the laboratory, growing the virus on tissue from near the upper surface of a slaughtered cow's tongue.

How this is done was demonstrated in a motion-picture lecture presented before the Society of American Bacteriologists in Washington, by Dr. Harry W. Schoening of the U. S. Department of Agriculture. The film was made in the veterinary research laboratory of the Netherlands Department of Agriculture, where the scientist in charge, Dr. Herman Frenkel, originated the tissue-culture method for keeping the virus growing. American and Dutch scientists have been collaborating there in efforts to find better means for fighting the epidemic of aftosa now raging in Mexico. A colleague of Dr. Schoening's, Dr. Irvin Eichhorn, who has been in Europe on this mission, took the pictures.

The tissue selected for the propagation of the virus outside the body of a living animal comes from just beneath the upper surface of a cow's tongue. This is kept in fresh condition in a dish of Tyrode's solution, a physiologically balanced mixture of the chemicals normally found in the body fluids.

The tissue-culture method has great practical advantages over the study methods hitherto used in aftosa studies, Dr. Schoening pointed out. Inoculating a live cow with the disease is expensive, in terms of both first cost and upkeep, besides being pretty tough for the cow. The tongue material used can be obtained in any desired quantity from slaughterhouses, at very low cost.

At present, the tissue-culture method is being used primarily for research on the virus, but its eventual employment in large-scale production of aftosa-preventing vaccine is being considered. If this is successful, it will obviate the present costly necessity of making some cows sick in order to save the health of others.

Science News Letter, April 9, 1949

## ENTOMOLOGY

**DDT Not Poison To Insect Hearts**

➤ **DDT** is not a heart poison to insects, Prof. Demorest Davenport of Santa Barbara College demonstrated in a series of experiments. The hearts of the insects he used kept right on beating after the rest of the bodies were thoroughly poisoned with DDT.

Jerusalem crickets, incidentally, is more than a mild form of "cussing". The insects used by Prof. Davenport were Jerusalem crickets.

Science News Letter, April 9, 1949

**Science Service Radio**

➤ **LISTEN** in to a discussion on "Bigger and Brighter Easter Lilies" on "Adventures in Science" over the Columbia Broadcasting System at 3:15 p.m. EST, Saturday, April 16. Dr. Samuel Leonard Emsweller, a principal horticulturist at U. S. Department of Agriculture, Bureau Plant Industry Station, Beltsville, Md., will be the guest of Watson Davis, director of Science Service. Dr. Emsweller will tell where and how we got Easter lilies, what is being done to produce even whiter and statelier ones, how they are propagated and grown, and something of the ills they suffer and what can be done about them.

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**VETERINARY MEDICINE**

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**On This Week's Cover**

➤ **SHAM** battles and strutting on prairie knolls mark the annual spring courtship dances of the sharp-tailed grouse.

Only the cocks perform, while the hens quietly watch the unique dances. There is strutting, clicking and mock combat—all to impress the watching hens.

The dancers gather at sunrise and sunset. First, there is the sound of whirring wings, followed by a low "cac-cac-cac-cac" and short "gobbles."

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