

SPECIAL BULLETIN

NOVEMBER, 1931

**STORRS**  
**Agricultural Experiment Station**

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**The Drawing and Handling  
of  
Blood Samples  
for the  
Serological Diagnosis  
of  
Bang's Abortion Disease**

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DEPARTMENTS OF ANIMAL DISEASES AND DAIRY HUSBANDRY

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**CONNECTICUT AGRICULTURAL COLLEGE**  
**STORRS, CONNECTICUT**

## THE DRAWING AND HANDLING OF BLOOD SAMPLES FOR THE SEROLOGICAL DIAGNOSIS OF ABORTION DISEASE

During the past two or three years dairymen of the state have shown considerable interest in the Connecticut Plan for the control of Bang's abortion disease, as is indicated by the increase in the number of samples submitted for examination. With the increase in the amount of blood testing, the control of the movement of reacting animals has become an important problem. Consequently, on July first, 1931, a cooperative plan was adopted by the Commissioner on Domestic Animals, in which the Storrs Agricultural Experiment Station actively participates. Under this plan, which is described in a recent pamphlet issued by the Commissioner's office, entitled "The Connecticut Plan for the Establishment and Maintenance of Cattle Herds free from Bang's Abortion Disease, as Determined by the Serological Tests", equipment for the collecting of blood samples may be secured by licensed veterinarians from the Storrs Station upon request. Official record sheets are supplied by the Commissioner's office. For the making of satisfactory tests it is necessary that the samples arrive at the laboratory properly identified and in a fresh condition. The following suggestions are offered to facilitate the bleeding and the handling of the blood tubes.

### Drawing of Blood Samples

The animal is placed in a stanchion\*, a small rope halter fitted over the head as a slip noose, and the rope drawn over the horizontal bar above the stanchion. In this manner the animal's head may be drawn either to the right or to the left. The jugular vein is distended by applying pressure with the thumb of the left hand. As soon as the vein is distended noticeably, a sterile veterinary needle held in such a position as to form an angle of about 30 degrees with the surface of the skin, with the needle pointing toward the head, is inserted and the sample of blood collected in a sterile test tube. With animals having a large neck, particularly bulls, it is sometimes necessary to place a rope around the neck close to the shoulders and to draw the loop tight

\*For those who have had experience in collecting blood for the test the stanchion is not necessary.

in order to distend the vein. An illustration of the method described here is shown in the accompanying figure.

As the needles provided have been sterilized, they should not be removed from the package until they are to be used.

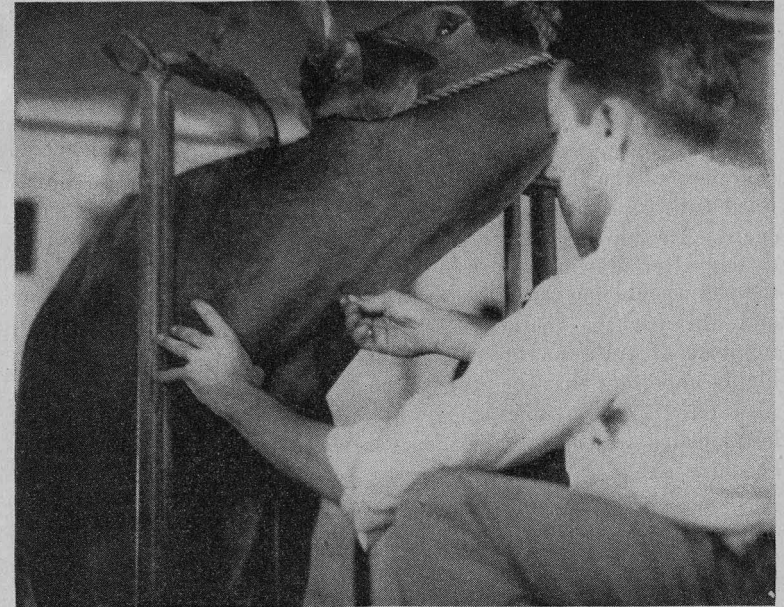


FIG. 1—SHOWING MANNER OF DRAWING BLOOD SAMPLE.

### Labeling of Tubes

A number corresponding to the one placed on the identification sheet must be placed on the etched area of the tube. This should be done with an ordinary lead pencil.

### Care of Samples

As soon as the blood is drawn the tubes should be tightly stoppered, labeled and placed in an almost horizontal position until the blood is thoroughly clotted. This requires about 30 minutes.

After the clot has formed the tubes containing the blood should be packed tightly together (upright) in the small sections of the shipping container. Cotton or paper should be placed in partially filled compartments.

### Care of Needles

After drawing a sample the wire plunger should be placed in the used needle and the needle returned to the shipping container without washing. Unless the needles can be thoroughly cleansed and rinsed with alcohol it is best to return them without attempting to remove the clotted blood.

### Shipment of Samples

During warm weather ice should be placed around the tall copper container of the shipping pail. In cold weather this space should be filled with paper or excelsior. Small lots of samples, where the use of our regular shipping container is not feasible, should be chilled immediately after drawing and left on ice until ready for mailing. Such samples should be carefully packed (each tube wrapped in paper) and the package marked "*perishable*" and "*fragile*". For small numbers of tubes an ordinary cigar box serves the purpose. It is highly important that the packages be sent to the laboratory by Special Mail Delivery or by messenger. In order to avoid delay or possible loss, all packages and correspondence intended for the laboratory should be addressed—

DEPARTMENT OF ANIMAL DISEASES  
ATWATER LABORATORY, STORRS, CONNECTICUT.

### Fees

At the present time it is necessary to make a charge of thirty-five cents for each sample tested, in order to finance the laboratory work involved in conducting the official test. This is to be paid directly to the Commissioner of Domestic Animals, Hartford.

### Information on the Blood Test

Questions regarding the method of conducting the tests and the interpretation of results will be answered gladly.

# STORRS Agricultural Experiment Station

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A Record of the Guernsey Herd  
at the Connecticut Agricultural College

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GEORGE C. WHITE  
AND  
CHARLES OLIVER

CONNECTICUT AGRICULTURAL COLLEGE  
STORRS, CONNECTICUT