

Diagnostic Labs For Livestock

U of A Now Has Two

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At the present time, two laboratories dealing with complete animal diagnostic service are maintained in the State of Arizona. One is located on the campus of the University of Arizona in Tucson; the other, activated in July 1957, is in central Arizona at the University of Arizona Experiment Farm at Mesa. Both laboratories are staffed by personnel of the U of A Animal Pathology Department.



Drs. Ned W. Rokey (left) and William J. Pistor check a centrifuge used in testing blood samples.

Prevention, Control Emphasized

Probably the most important aspect of the work at both laboratories is prevention and control of disease in animals through research. This research, in turn, is a bulwark against the spread of disease from animal to man.

In addition to the research work, both laboratories provide diagnostic services. Perhaps it is in this field of diagnosis that the laboratories are best known to most people.

Laboratory Is A Tool

It is practically impossible for any



Diagnostic Lab at the U of A Experiment Farm near Mesa.

laboratory to determine the causative agent of disease in 100 percent of the cases presented. A laboratory never can replace the presence in the field of a competent, well-trained person who can thoroughly examine and evaluate the various factors which may be causing disease. Veterinarian practitioners are trained along these lines.

A laboratory can only report what is found in a single — or at most, in a few — specimens. A laboratory finding is a tool — and only a tool — to be used in final determination of the cause of disease.

Laboratory tests can't be made in a hit-or-miss manner. For example, there are hundreds of tests for poisons only. In each of these tests, part of a specimen must be used. If any laboratory should set out indiscriminately to run all of the many tests for all of the many poisons, an entire herd of animals would be needed. The same is true for laboratory tests for the infectious diseases.

A complete history given when the animal is presented gives an indication as to which of the laboratory tests are needed.

Animals presented for laboratory examination need to be typical of the sick animals in the herd or flock. When such animals are not representative of the group, results which are misleading can be obtained from the laboratory.

If sick animals are brought to the laboratory while still alive, informative tests and examinations can be made before the animal necessarily is killed for necropsy examination. When an animal dies, the sooner it reaches the laboratory, the greater the possibility that laboratory tests will be accurate.

Often a veterinarian practitioner will determine that only part of an animal needs to be examined by the laboratory. This particular part of the animal, often called a specimen, usually is held under refrigeration until it can reach the laboratory.

When an animal has been dead for some time, tissues and organs deteriorate, even when refrigeration is held for an excessive length of time. In these, deteriora-

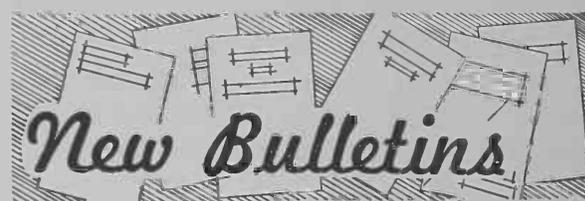
tion often is so great that laboratory examinations and tests are impractical — if not impossible — and of little value.

It must be emphasized that laboratory findings are only a part of the complete disease picture.

How many times have you heard, "Why bother sending anything to the laboratory anyway? By the time we get an answer, everything we have will be dead."

Provides Protection

Often it's true that a disease has run its course — some animals in a herd or flock have died and others recovered — before the laboratory findings are reported. To a flock or herd owner and his veterinarian, many times, it's not just a case of what to do this time. Rather, it's a case of what can be learned to help protect against future outbreaks of the disease.



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