

ORIGINAL ARTICLES—

AN OUTBREAK OF BOVINE TRICHOMONIASIS IN QUEENSLAND AND ITS CONTROL.

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Bovine trichomoniasis was first diagnosed in Queensland in July 1950 and measures were subsequently adopted to eradicate the disease. This is an account of the outbreak and its control.

History of the Outbreak.*Breeding Records of Cows*

The herd concerned consisted of approximately 40 Australian Illawarra Shorthorn cows and prior to the introduction of a new bull in 1949 had a consistently good breeding record. The first cow mated to the new bull (1st Sept. 1949) conceived at the first service. Of three cows mated on 3rd Sept., two returned but the third did not show any evidence of oestrus until nine months later. Subsequently the remainder of the herd was served, and all except four cows returned to the bull at various intervals. All the known data are shown in Table 1.

The table shows that two cows (Nos. 4 and 10) proved infertile and one (No. 1) was culled for age. All of the remaining 30 animals for which records are available eventually conceived to a service by the bull. One of the cows (No. 39) subsequently aborted a four-month foetus, but as decomposition was advanced when found, the cause of the abortion could not be determined. This cow was slaughtered: an examination of her uterus failed to reveal any trichomonads, *Vibrio fetus* or *Brucella abortus* organisms. Three other cows (Nos. 37, 38 and 40) were also slaughtered but there was no opportunity of examining their uteri. Consequently, no final determination of the number of cows rendered permanently infertile was possible.

Possible Source of Infection.

The serious infertility in the herd was brought to the notice of the Department of

Agriculture and Stock by the owner, and vaginal washings were made by Mr. R. W. Hewetson, Assistant Husbandry Officer, by the method described by Bartlett (1949). Trichomoniasis was diagnosed at the Animal Health Station Yeerongpilly, from material from each of three cows.

As it appeared likely that infection had been brought into the herd by the bull, his history was investigated. It was learned that he had been in another herd for four years previously where the breeding record was said to be normal, 22 cows conceiving at the first, two at the second and four at the fourth or subsequent service.* It was claimed that any cows returning to the bull did so at regular intervals and that all pregnancies terminated normally. There was no opportunity of examining this other herd but it is of interest to note that another bull used earlier came originally from a southern stud in which trichomoniasis has been since diagnosed.

Preputial washings of the bull made on the 4th and 13th July, 1950 were negative but positive results were obtained later on several occasions and before slaughter in December, 1950.

Control Measures.

After consultation with the owner, Mr. R. D. Chester, Officer-in-Charge Cattle Husbandry Branch Department of Agriculture and Stock, and Mr. R. W. Hewetson devised a plan of control based on artificial insemination (A.I.) of the whole herd using a clean bull. This plan differs slightly from that proposed by Bartlett and Dikmans (1949) which allowed of natural service of heifers and any cows not served by the infected bull and was adopted when it was realised that the owner's records may not have been accurate.

*Trichomoniasis has since been detected in this herd.