

Trichomonas fetus infection of range bulls in South Florida

BULLS CONSIGNED TO SLAUGHTER during a five-day period at Kaplan Meat Packers, Inc., Bartow, Florida, were selected for the study. On the basis of history of origin, age, and body condition, each of these animals was assumed to have been used in natural service.

An individual artificial insemination pipette, fitted with a rubber bulb, was used to obtain a sample of smegma from the preputial fornix of each bull. These samples were collected during exsanguination immediately after the animals' death. While the lining of the prepuce was vigorously scraped with the pipette, the rubber bulb was squeezed to aspirate the loosened debris.

The collected smegma specimen (0.05 to 2 ml) was layered on a column of approximately 10 ml of a modified plastridge medium (Table 1)¹ at room temperature. Within four hours after collection of the specimen, the inoculated medium was placed in a water bath at 38C. Medium was pipetted from the bottom of each test tube after 24 and 48 hours of incubation, placed under a coverslip, and examined microscopically.

Initially, the specimen was examined at 40X to 100X magnification for the presence of protozoa with movement typical of *Trichomonas fetus* (jerky, with continual tumbling). Identification was based on the presence of an undulating membrane with one trailing flagellum and three anterior flagella visible at 400X magnification.

Results and Discussion

Results are presented in Table 2. Of the 109 bulls sampled, 8 (7.3%) were infected with *T. fetus*. The size of the sample and the number of Florida counties represented (15 of 67) did not permit accurate estimation of the prevalence of trichomoniasis throughout the state. The bulls that had the infection represented several breeds or types (Charolais, Angus, *Bos taurus* and *Bos indicus*, crossbred).

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Trichomoniasis was diagnosed in 8 (7.3% of 109) bulls processed by an abattoir in south Florida. This finding is discussed in relation to reports of the prevalence of *Trichomonas fetus* infection in bulls in areas where extensive agriculture is practiced. Trichomoniasis is briefly reviewed with emphasis on diagnosis and appropriate methods of control for large cow-calf operations.