

Short Communication

ANTIBODIES TO ENZOOTIC BOVINE VIRAL LEUKOSIS IN BOTSWANA

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Enzootic bovine viral leukosis (BVL) is a malignant neoplasia of the lymphoid tissues of cattle which is caused by a retrovirus of the oncornaviridae group. BVL is common in dairy cows in Europe, North and South America (Blood, Radostits and Henderson, 1985) but there is only limited serological evidence from Africa (Adu and Olson, 1981). Cattle sera from Botswana were tested for antibodies to BVL by agar gel immunodiffusion to provide this serological evidence.

Sera were collected from healthy dairy cows and beef cattle for slaughter. The agar gel immunodiffusion test for BVL antibodies was performed in 0.8% agarose in 0.05 M Tris buffer and 8% NaCl using the Pitman-Moore BVL reagents. (Pitman-Moore Inc, USA).

BVL antibodies were detected in 61 of 787 (7.75%) cattle sera examined. In dairy cattle 13 of 234 (5.55%) sera were positive and in beef cattle 48 of 553 (8.67%).

Antibodies to bovine viral leukosis were demonstrated in cattle sera suggesting that cattle were infected with this virus although clinical cases of BVL have not been documented from Botswana. The prevalence of 7.75% was lower than that reported from other countries; 20% in United States, 27% in France and 37% in Venezuela (Blood *et al.*, 1985). These antibodies were found in both dairy and beef cattle breeds although the prevalence of infection was higher in dairy cows which are kept longer.

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REFERENCES

- ADU, F. D. & OLSON, C. (1981). *Bulletin of Animal Health and Production in Africa*, 29, 255-258.
BLOOD, D. C., RADOSTITS, O. M. & HENDERSON, J. A. (1985). Bovine viral leukosis. In: *Veterinary Medicine*, 6th edn, Baillière Tindall, p 725.