

## **Trans-scrotal ultrasonography and breeding soundness evaluation of bulls in a herd of dairy and beef cattle with poor reproductive performance**

### **ABSTRACT**

The present study was undertaken to determine the fertility soundness of unselected bulls used for breeding based on a standard breeding soundness evaluation technique (BSE) and trans-scrotal ultrasonography (TSU). A total of 8 bulls, with the mean age of 5½ years (ranged from 3½ - 8 years) and the mean weight of 651.5kg (ranged from 480-840 kg) were evaluated. Three bulls were Friesian Sahiwal, 2 Brangus and the rest were Brahman-KK (Kedah Kelantan) cross, Simmental-KK cross and KK breed (one from each). Out of the total bulls examined, 3 (37.5%) were found to be unfit to be used for breeding due to their physical unsoundness and/or poor semen quality. The use of TSU has revealed the presence of testicular lesions in 3 bulls. The finding of TSU (suggestive of testicular degeneration) in one bull was reflected by a poor semen quality of the BSE results. Despite the presence of lesions of idiopathic unilateral hydrocele and bilateral fibrotic foci lesion in the other two bulls, the BSE findings for semen quality were not compromised. In conclusion, there was enough evidence to support our hypothesis that the observed drop in the reproductive performance of the herd was partly the result of using bulls with poor breeding soundness for fertility.

**Keyword:** Breeding soundness evaluation; Bulls; Poor reproductive performance; Trans-scrotal ultrasonography