EVALUATION OF THE SEMEN QUALITY OF A BUFFALO BULL IN THE BUFFALO BREEDING AND RESEARCH CENTRE, TELUPID, SABAH, MALAYSIA

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Abstract

Breeding Soundness Examination (BSE) is an evaluation of fertility of male animals. Semen quality and scrotal circumference of buffalo bulls were the parameters determined during BSE. This study was conducted at the Buffalo Breeding and Research Centre Farm, Telupid, Sabah, Malaysia to evaluate semen quality of buffalo bulls and determine the correlation between scrotal circumference with age. Nine buffalo bulls were selected of which 6 were Murrah-Swamp crosses and 3 local Swamp. The age of bulls ranged between 1 to 10 years with body weight ranging between 346 and 500 kg. Semen collection was done using an electroejaculator from only two swamp buffalo bulls of age 3 and 4 years. Semen was collected twice at one week interval. Scrotal size circumference was measured using a measuring tape. Semen was evaluated based on ejaculated volume, sperm motility, live sperm and sperm morphology. Semen volumes collected from the two buffalo bulls were 0.2 and 0.5 mL, respectively. The mean semen volume was 0.4 mL, general sperm motility was 77.5%, individual progressive sperm motility was 77.5%, live sperm was 66.0% and sperm abnormality was 9.25%. The measurement scrotal size showed that the Murrah-Swamp crosses had mean scrotal circumference of 27.16 cm while for the Swamp buffalo it was 23.33 cm. There was no significant ($p>0.05$) difference in scrotal circumference between the two breeds. However, correlation between scrotal circumference and age of bull were significant. In conclusion, semen characteristics of swamp buffalo bull in this farm meet the requirements for breeding soundness evaluation of the buffalo bull and as the buffalo bulls get older the circumference of the scrotum increases.

Keywords: breeding soundness evaluation, semen evaluation, scrotal size circumference, buffalo