

GENETIC EVALUATION OF FERTILITY COMPONENTS IN ZEBU BULLS

C.R. QUIRINO¹

¹Centro de Ciências e Tecnologias Agropecuárias - Universidade Estadual do Norte Fluminense - *crq@uenf.br
Av. Alberto Lamego, 2000. Pq. Califórnia- CEP 28.015-620 Campos dos Goytacazes, RJ. Brazil

Abstract

Genetic parameters were estimated for semen traits, scrotal circumference, testicular dimension and body weight. A total of 1460 ejaculates, testicular dimension and body weight measurements from Nellore bulls were analyzed. Animal Model for repeated observations was used to estimate heritabilities, phenotypic and genetic correlation between the reproductive traits. Heritability estimates for scrotal circumference was .41, for body weight was .38. For volume, motility, vigor and gross motility were, respectively, .20, .15, .55 and .07 and. For morphological semen traits were, respectively, .59, .21 and .58. Genetic correlation between all testis measurements was high. Genetic correlation between scrotal circumference and semen traits were high and significant. These results suggest that there is an important additive genetic variability for all reproductive traits studied and that scrotal circumference could be used as a selection criteria for fertility of bulls.

Key words: Nellore bulls, semen, scrotal circumference, genetic parameters