



Estimation of taurindicine hybridization of American Zebu cattle in Brazil

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ABSTRACT. Our objective was to estimate *Bos primigenius taurus* introgression in American Zebu cattle. One hundred and four American Zebu (Nellore) cattle were submitted to mtDNA, microsatellite and satellite analysis. Twenty-three alleles were detected in microsatellite analysis, averaging $4.6 \pm 1.82/\text{locus}$. Variance component comparisons of microsatellite allele sizes allowed the construction of two clusters separating *taurus* and *indicus*. No significant variation was observed when *indicus* and *taurus* mtDNA were compared. Three possible genotypes of 1711b satellite DNA were identified. All European animals showed the same restriction pattern, suggesting a Zebu-specific restriction pattern. The frequencies of *B. primigenius indicus*-specific microsatellite alleles and 1711b satellite DNA restriction patterns lead to an estimate of 14% *taurine* contribution in purebred Nellore.

Key words: Cattle; *taurus*; *indicus*; mtDNA; Microsatellites; 1711b satellite