# F54 POSTER

## ASSOCIATION STUDY OF A CAST GENE SNP WITH MEAT TENDERNESS IN *Bos indicus* CATTLE

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Tenderness is the main trait appreciated by beef consumers. During the postmortem period the μ-calpain protein is responsible for fiber muscle degradation, helping to tenderize meat. The central modulator of μ-calpain activity is the CAST gene product, the Calpastatin protein. The SNP A/G identified in the 3'UTR region of CAST have been already reported as associated with tenderness in populations composed of *Bos taurus* animals. The aim of this study was to evaluate the association of this SNP with tenderness in a *Bos indicus* cattle population. For this, 111 animals were genotyped using TaqMan® probes in Real Time PCR. Phenotypic data were obtained by the Warner Bratzler shear force (SF) method at 24 hours postmortem. The statistical analysis used a mixed model including fixed effects of contemporary group and genotypes, age of the animal at the time of measurement and pH as a covariate and the random effect of bull. It was not found significant association between the SNP in CAST gene and SF in this Nellore breed population. This result could be due to the limited number of animals. Thus the sample size must be increased to conclude whether this SNP is usefull for explaining the variation of SF in this population of Nellore breed.

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