	DETERMINATION OF UNIQUE POLYMORPHISM IN BOVINE GROWTH
Τίτυιο:	HORMONE GENE: A POTENTIAL GENETIC MARKER
AUTOR (ES):	UNANIAN, M.M.; DeNISE, S.K.; ZHANG, H.M.; AX, R.L.
INSTITUIÇÃO	: Dept. of Animal Science, University of Arizona, Tucson

Growth hormone (bST) is a highly publicized hormone because of its ability to increase production and alter nutrient partitioning. The growth hormone has been mapped to bovine cromosome 19 and serve as a genetic marker for meat and milk production. The goal of this study was to search for new allele in this gene using restriction fragment lenght polymorphism (RFLP) analysis. Genomic DNA was estracted from semen samples of 189 bulls representing eight breeds (Angus, Holstein, Brahman, Wagyu, Limousin, Simmental, Gelbvieh,' Hereford) and amplified by polymerase chain reaction (PCR). A PCR-RFLP polymorphism was detected within bST gene through digestion with restriction enzyme Hae III and separated on 4% agarose gels. The identified fragment consists of 441-bp, encompassing the fifth exon and 3' flanking region of the gene. Three distinct patterns (EE, EF and FF) were observed. The genotypic frequencies in the 189 bulls from eight breeds tested were 3% for the FF, 8% for the EF and 89% for EE The F allele was identified only in genotype. Brahmman, Holstein and Waqyu crossbreeds. This new polymorphism could be used as a genetic marker to recognize and predict performance characteristics.

PALAVRAS CHAVLS: Bovine, PCR-RFLP, genomic DNA, production.