

Association between microsatellite genotypes and body weight at different ages in indigenous chicken ecotypes

■ B.H. RUDRESH, A.M. KOTRESH¹, M. ASHOK² AND H.N.N. MURTHY³

Members of the Research Forum

Associate Author :

¹Department of Veterinary
Physiology and Biochemistry
Veterinary College, SHIMOGA
(KARNATAKA) INDIA

²Krishi Vigyan Kendra,
(UAHS), Navule, SHIMOGA
(KARNATAKA) INDIA
Email: ashokmkvk@gmail.com

³Department of Livestock
Production and Management,
Veterinary College, BANGALORE
(KARNATAKA) INDIA

AUTHOR FOR CORRESPONDENCE :

B.H. RUDRESH

Department of Animal Genetics and
Breeding Veterinary College,
SHIMOGA (KARNATAKA)
INDIA

Abstract : The present study was carried out in six indigenous ecotypes of two divisions of Karnataka to assess association of twenty microsatellite genotypes belonging to thirteen chicken autosomes with Body weight at different ages. The general molecular technique protocols suggested by Sambrook *et al.* (1989) were adopted wherever required in PCR, electrophoresis, gel staining and reading. The analysis revealed significant difference ($p < 0.05$) among genotypes combined across ecotypes for nineteen microsatellite loci for body weight at sexual maturity. The validity of using thus, identified markers or alleles need further authentication by research in other populations and further proof by expression studies. Considerable numbers of significant associations were identified in later ages (particularly from sixth week) except for first week in earlier ages across all the microsatellite regions explored except MCW007. There was no significant difference among genotypes of any microsatellite regions for traits like day old, second, fourth, fifth and sixth week body weights suggesting absence of definite trend in the influence of microsatellite regions on body weights at different ages in the indigenous chicken ecotypes.

Key words : Microsatellite, Association, Significance, Genotypes

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