

Investigation of Polymorphism in 5- Flanking Region of Pit-1 gene and its association with growth traits in Iranian native Goose

Akbari, M.¹; Ghaffari, M.²; Hashemi, A.³ and Elyasi Zarringhabaie, Gh.⁴

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Abstract

The objective of this study was the detection of polymorphism in 5- Flanking region of Pit-1 gene and its association with growth traits in Iranian native Goose by PCR-SSCP method. For this purpose, blood samples were taken from 160 Goose from East Azerbaijan breeding station located in Malekan. DNA was extracted from whole blood using the Bailes method and polymerase chain reactions were performed for amplification of 241 bp fragment containing in 5- Flanking region of Pit-1 gene. Single Strand Conformation Polymorphism (SSCP) was used for genotyping. For this purpose, vertical electrophoresis of PCR products was performed on 8% acrylamide gel, at 120 V, for 18 h at 4 C°. Silver-staining of gels is used to detect, resulted in four genotypic patterns of 1, 2, 3 and 4 with frequencies of 31.2%, 36.4%, 7% and 25.4%, respectively. Analysis of variance was performed using GLM proc of SAS software. The statistical analysis indicated that the effect of different patterns was significant on the 30-Day Bodyweight, but on the 60-90-150 -Day Bodyweight had no significant effect.

Key words: Polymorphism, Gene, Goose, Growth traits, Marker, Iran

1- MSc Graduated of Genetics and Animal Breeding, Faculty of Agriculture, Urmia University, Urmia, Iran

2- Assistant Professor, Department of Animal Science, Faculty of Animal Science, Urmia University, Urmia, Iran

3- Associate Professor, Department of Animal Science, Faculty of Animal Science, Urmia University, Urmia, Iran

4- Instructor, East Azarbaijan Agricultural and Natural Resources Research and Education Center, Tabriz, Iran

Corresponding Author: Ghaffari, M, E-mail: m.ghaffari@urmia.ac.ir

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