

4th World Conference on

SYNTHETIC BIOLOGY AND GENETIC ENGINEERING

November 09-10, 2017 Singapore

**A M Alseaf**

Qassim University, Saudi Arabia

Molecular characteristics of Aradi goats with prediction equation of growth pattern

To specify morphological characteristics and choose preferable growth equation for kids up to 24 weeks of age, in Aradi goats, 338 kids of fathered by 25 sires and mothered by 153 does were used. Also, 74 individuals used in assisted with 29 microsatellites markers to identify molecular characterization. Results illustrated the linear equation was preferable according to easy compute, have two linear additive parameters and equation accuracy. The accuracy of that equation was very high ranged from 0.996 and 0.993 for predicted weights in male and female, respectively. Five loci showed only three alleles for each, while the rest of markers ranged from 13 alleles in loci CSRD247 and RM088 to four alleles in locus ILSTS011. The average of observed heterozygosity was 0.63 ranged 0.89 in BM2113 locus to 0.17 in ILSTS002 locus. The expected heterozygosity reached the maximum value in locus RM088 and the minimum one in locus OARE129, the average value was 0.65. The polymorphic information content values ranged from 0.85 (RM088) to 0.22 (OARE129). Thus, the investigation on a set of 29 microsatellites revealed high degree of genetic variability in Aradi goat indicating an important indigenous genetic resource.

Recent Publications

1. M F El-Zarei, A M Al-Seaf, A A Al-Haidary, A B Okab, E M Samara and K A Abdoun (2017) Comparison of Heat-shock Protein gene (*HSP70-1*) Sequence in Aradi and Damascus Goat breeds (*Capra hircus*) raised under heat stress conditions. *Journal of Experimental Biology and Agricultural Sciences*; S63-S67.
2. E Mousa, M F Elzare, A M Alseaf (2016) Prediction of lactation curve in Saudi Arabia, damascus and their crossbred goats. *Journal of Agricultural and Veterinary Sciences*; 9(2): 209-230.

Recent Projects

QTLs detection in crossbreed between Saudi Aradi and Damascus goat genome. Kingdom of Saudi Arabia, King Abdul-Aziz City for Science and Technology, General Directorate of Research Grants Programs.

Fixation of genotypic and phenotypic factors assisted by biotechnology tools for Qassim line produced by crossing between Damascus and Aradi Goats. Financing by Deanship of Scientific Research, Al-Qassim University.

"Phenotypic characterization of Saudi sheep assisted by molecular genetic variation and distances". Kingdom of Saudi Arabia, King Abdul-Aziz City for Science and Technology, General Directorate of Research Grants Programs.

"Genetic characterization of Saudi Arabia (Qassim region) sheep breeds using DNA markers". Financed by deanship of scientific research, Qassim University.

valuation: measurement, description and judgment. It allows for value-pluralism. This approach is responsive to all stakeholders and has a different way of focusing.

a.alseaf@qu.edu.sa