Abstract

The aim of this study was to identified Khazak native chicken characteristics (native chicken Sistan region) and determine the quality of chicken eggs in the hens. Traits in the study were evaluated, including those of external and internal quality attributes that are associated with quality of chicken eggs had. For estimate genetic parameters of the model multivariate and determining factors of the single variate to ASReml software was used. Egg production, fertility, hatchability, age of sexual maturity and molting average, respectively 115.34, 56.88, 74.83, 5.54 and 2.10 respectively. For external quality chicken eggs: egg weight, egg width, egg length, shell thickness, shell color, shell weight, shell ratio and egg index, 43.04, 3.9, 5.08, 0.57, 1.52, 4.41, 10.18 and 0.77 respectively, was calculated and the internal quality traits: Albumin height , albumin weight, albumin ratio, Haugh unit, yolk weight, yolk proportion and yolk color were 5.94, 23.41, 53.73, 81.36, 14.20, 32.88 and 8.72, respectively. Heritability of traits for egg weight, shell weight, shell index, shell color, egg width, egg length, yolk weight, albumen weight, albumen height, yolk color, yolk ratio, haugh unit and albumin ratio were 0.50, 0.54, 0.30, 0.15. 0.49, 0.36, 0.32, 0.61, 0.42, 0.19, 0.66, 0.46 and 0.65, respectively. The highest correlation between phenotypic traits and egg internal genetic egg observed for width and egg weight between, 0.91 and 0.96, respectively. Among Internal egg characteristics, the highest phenotypic and genetic correlation observed between haugh unit and albumin height, 0.97 and 0.99, respectively.

University of Zabol
Graduate school
Faculty of Agriculture
Department of Animal Science

The Thesis Submitted for the Degree of M.Sc
(Animal Breeding)

Determination of Egg Qualitative Traits in Khazak Native Chicken

Supervisor:
Dr. M. Alipanah

Adviser:
Dr. M. Rokuei

By:
J. Deljoy Sarayan

June
2011