ISSN Print: 2345-6604 Online: 2345-6566



Poultry Science



Winter / Spring 2017, Volume 5, Number 1 http://psj.gau.ac.ir





Table of Contents

- 1-5 Internal Traits of Eggs and Their Relationship to Shank Feathering in Chicken Using Principal Component Analysis Shaker AS & Aziz SR
- 7-15 Effects of Supplemental Zinc in a Wheat-Based Diet on Performance, Intestinal Viscosity, Immune System and Lipid Peroxidation of 21-Day Old Broiler Chickens Dibaiee-nia G, Akbari MR & Karimi S
- 17-24 Effects of Genetic and Non-genetic Factors on Body Weight and Carcass Related Traits in Two Strains of Japanese Quails Pourtorabi E, Farzin N & Seraj A
- 25-30 Allelic Polymorphism of GH, GHR and IGF-1 Genes and Their Association with Growth and Carcass Traits in Mazandaran Native Fowl Attarchi H, Tahmoorespur M, Ahani Azari M, Sekhavati MH & Mohajer M
- 31-40 Effects of Silymarin on Growth Performance, Internal Organs and Some Blood Parameters in Japanese Quail Subjected to Oxidative Stress Induced by Carbon Tetrachloride Behboodi HR, Samadi F, Shams Shargh M, Ganji F & Samadi
- 41-50 Comparing the Effects of Supplementary Antibiotic, Probiotic, and Prebiotic on Carcass Composition, *Salmonella* Counts and Serotypes in Droppings and Intestine of Broiler Chickens
 - Alonge EO, Eruvbetine D, Idowu OMO, Obadina AO & Olukomaiya OO
- 51-55 **Polymorphism of the SCNN1g Gene and its Association with Eggshell Quality** *Kheirkhah Z, Hassani S, Zerehdaran S, Ahani Azari M, Sekhavati MH & Salehinasab M*
- 57-64 Effects of Dietary Supplementation of Zinc and α-Tocopheryl Acetate on Performance and Zinc Concentrations in Egg and Tissues of Japanese Quails Aghaei A, Khosravinia H, Mamuoei M, Azarfar A & Shahriari A
- 65-70 **Bioaccumulation of Heavy Metals in Broilers Fed "Trinidad de Guedes" Phosphorite** *Valera M, Mollineda A & Gutierrez O*
- 71-81 Dietary Effect of Selenium-enriched Radish Sprouts, Vitamin E, and *Rhodobacter capsulatus* on Hypocholesterolemia and Immunity of Broiler *Tsujii H, Miah AG, Takeda I & Salma U*

POULTRY SCIENCE JOURNAL (PSJ)



Executive Director:

Najafinejad, A., President of GUASNR, Gorgan, Iran

Editor-in-Chief:

Zerehdaran S., GUASNR, Gorgan, Iran

Associate Editor:

Dastar B., GUASNR, Gorgan, Iran

Managing Editor:

Mirshekar R., GUASNR, Gorgan, Iran

Editorial Board Members: (Alphabetically)

Professor of Poultry Nutrition, GUASNR, Iran	
Professor of Poultry Nutrition, Ferdowsi University of Mashhad, Iran	
Professor of Poultry Pathology, Universiti Putra Malaysia, Malaysia	
Associate Professor of Poultry Nutrition, University of New England, Australia	
Professor of Poultry Nutrition, Shahrekord University, Iran	
Associate Professor of Poultry Nutrition, Universiti Putra Malaysia, Malaysia	
Associate Professor of Poultry Breeding and Genetics, Isfahan University of Technology, Iran	
Professor of Poultry Physiology, Universiti Putra Malaysia, Malaysia	
Professor of Poultry Nutrition, Sari Agricultural Sciences and Natural Resources University, Iran	
Associate Professor of Poultry Physiology, University of New England, Australia	
Associate Professor of Poultry Nutrition, GUASNR, Iran	
Professor of Poultry Physiology, University of Arkansas, USA	
Professor of Poultry Sciences, Ege University, Turkey	
Professor of Poultry Breeding and Genetics, Ferdowsi University of Mashhad, Iran	

Aims and Scope: Poultry Science Journal (PSJ) is an international scientific journal published by Gorgan University of Agricultural Sciences and Natural Resources (GUSNR), Gorgan, Iran. PSJ is an open journal that publishes original papers, research notes, and reviews of basic sciences as applied to poultry. Subjects are included all disciplines engaged in the field of poultry science and researches:

- Genetics and Biotechnology
- Hatchery Management
- Meat and Egg Quality
- Nutrition and Metabolism
- Physiology and Reproduction
- Production and Management

Preference is certainly given to papers from experimental and observational researches at the field, local, regional and global levels. The journal also features rapid publication of short communications.

Papers should be original, unpublished and not being considered for publication elsewhere. Papers based on limited data or of local importance and results from routine experiments will not normally be considered for publication.

Publishing plan: PSJ is published in yearly volumes of two issues on Winter / Spring and Summer / Autumn.

Contact information: Journals Office, Vice-Presidency for Research and Technology, Gorgan University of Agricultural Sciences and Natural Resources, Gorgan, Iran. Postal code: 49189-43464. Website: http://psj.gau.ac.ir, Email: psj@gau.ac.ir, Tel/Fax: 0098-17-32430522