# TURKISH JOURNAL OF VETERINARY & ANIMAL SCIENCES

http://journals.tubitak.gov.tr/veterinary/



# TURKISH JOURNAL OF VETERINARY AND ANIMAL SCIENCES

Editor-in-Chief Assistant Editor-in-Chief Mehmet BAŞALAN, Kırıkkale University, Turkey Nuh KILIÇ, Aydın Adnan Menderes University, Turkey Betül Zehra SARIÇİÇEK Ankara University, Turkey

**VOLUME 44 • ISSUE 6 • 2020** ISSN 1300-0128 • E-ISSN 1303-6181

### **SCOPE OF JOURNAL**

- The Turkish Journal of Veterinary and Animal Sciences is published electronically 6 times a year by the Scientific and Technological Research Council of Turkey (TÜBİTAK).
- Accepts English-language manuscripts on all aspects of veterinary medicine and animal sciences.
- Contribution is open to researchers of all nationalities.
- Original research articles, review articles, short communications, case reports, and letters to the editor are welcome.
- Manuscripts related to economically important large and small farm animals, poultry, equine species, aquatic species, and bees, as well as companion animals such as dogs, cats, and cage birds, are particularly welcome.
- Contributions related to laboratory animals are only accepted for publication with the understanding that the subject is crucial for veterinary medicine and animal science.
- Manuscripts written on the subjects of basic sciences and clinical sciences related to veterinary medicine, nutrition, and nutritional diseases, as well as the breeding and husbandry of the above-mentioned animals and the hygiene and technology of food of animal origin, have priority for publication in the journal.
- A manuscript suggesting that animals have been subjected to adverse, stressful, or harsh conditions or treatment will
  not be processed for publication unless it has been approved by an institutional animal care committee or the equivalent thereof.
- The editor and the peer reviewers reserve the right to reject papers on ethical grounds when, in their opinion, the severity of experimental procedures to which animals are subjected is not justified by the scientific value or originality of the information being sought by the author(s).

## **SCOPE OF JOURNAL**

- Ahmet ÜNVER, Canakkale Onsekiz Mart University, Turkey
- Armağan HAYIRLI, Atatürk University, Turkey
- Asım KART, Mehmet Akif Ersoy University, Turkey
- Attila Karsi, Mississippi State University, U.S.A.
- Bozena OBMINSKA-MRUKOWICZ, Wroclaw University of Environmental and Life Sciences, Poland
- Ercan KURAR, Necmettin Erbakan University, Turkey
- Fredric N. OWENS, Pioneer HiBred Int Inc, U.S.A.
- Haja KADARMIDEEN, University of Copenhagen, Denmark
- Hasan ÖZEN, Kafkas University, Turkey
- Huitao FAN, Purdue University, U.S.A.
- İbrahim DEMİRKAN, Afyon Kocatepe University, Turkey
- İbrahim KÜRTÜL, Karabük University, Turkey
- Kadir KIZILKAYA, Adnan Menderes University, Turkey
- Krysztof LUTNICKI, University of Life Sciences in Lublin, Poland
- Margarita TERENTJEVA, Latvia University of Agriculture, Latvia

- Mehmet AKBULUT, Selçuk University, Turkey
- Mehmet ÇALICIOĞLU, Fırat University, Turkey
- Mehmet KURAN, Ondokuz Mayıs University, Turkey
- Mehmet Ulaş ÇINAR, Erciyes University, Turkey
- Murat YILDIRIM, Kırıkkale University, Turkey
- Mustafa ARICAN, Selçuk University, Turkey
- Mustafa SAATCI, Muğla Sıtkı Koçman University, Turkey
- Necmettin ÜNAL, Ankara University, Turkey
- Nuri ALTUĞ, Namık Kemal University, Turkey
- Roberto DAVOLI, University of Bologna, Italy
- Sedat YILDIZ, İnönü University, Turkey
- Sema BİRLER, İstanbul University, Turkey
- Siyami KARAHAN, Kırıkkale University, Turkey
- Şükrü Metin PANCARCI, Balıkesir University, Turkey
- Zafer SOYGÜDER, Yüzüncü Yıl University, Turkey

### **ABSTRACTED AND INDEXED**

- Science Citation Index Expanded
- Scopus
- Academic Search Complete

# CONTENTS

and Hampshire Down × Merino crossbreed lambs reared under intensive conditions1155
Vasfiye KADER ESEN, Selim ESEN, Orhan KARADAĞ, Alper ÖNENÇ, Cengiz ELMACI
Thermal rearing environment effect on behavior and metabolic profile of laying hens
Light and scanning electron microscopic examination of the Saanen goat heart
Effect of chemical- and toxin binder-treated cotton seed cake on milk production, milk composition, and aflatoxin concentration in milk of Nili Ravi lactating buffaloes
Production and egg quality traits of organic hens in a laying period under commercial conditions in Turkey1188 Onur SARIBAŞ, Umut Sami YAMAK
Biochemical and physiological responses of Nili-Ravi Buffalo ( <i>Bubalus bubalis</i> ) to heat stress
Growth, fattening performance, and carcass characteristics of Saanen, Turkish Hair × Saanen, and Honamlı × Saanen crossbred kids
Prevalence of ectoparasites on a stray cat population from "Town of Knowledge" Kota Samarahan, Sarawak, Malaysian Borneo
Effect of prebiotics on the growth performance, haematological, biochemical, and histological parameters of African catfish ( <i>Clarias gariepinus</i> ) in recirculating aquaculture system
The effect of year, month, region, and herd size on bulk tank somatic cell and standard plate count, and the determination of optimum herd size in the intensive Holstein Friesian dairy farms in the Turkish Republic of Cyprus 1232 Hatice Dilek ARSOY
Chemical compounds and gas production kinetics of annual ryegrass hay in distinct nitrogen levels and cutting heights 1243 Juliana Reolon PEREIRA, Marcela Abbado NERES, Itacir Eloi SANDINI, Ana Carolina FLUCK, Olmar Antônio Denardin COSTA, Laércio Ricardo SARTOR
Retrospective evaluation of factors affecting superovulatory response in embryo production in Simmental cattle1250 Hüseyin ERDEM, Hasan ALKAN, Tahir KARAŞAHİN, Şükrü DURSUN, Fatma SATILMIŞ, Mehmet GÜLER
The role of resveratrol on mast cell and chymase and tryptase expression in blunt-chest-trauma-induced acute lung
injury in rats
Effect of light-emitting diode (LED)-based colors on production performance and welfare of commercial layers 1269  Fazal RAZIQ, Jibran HUSSAIN, Athar MAHMUD, Khalid JAVED

The effects of season and chick sex on certain performance parameters in commercial turkey farms in the Aegean Region
The effect of <i>Staphylococcus aureus</i> extracellular products (SECP) on performance, selective innate immune indexes, and humoral immune response against avian influenza and Newcastle disease vaccines in broiler chickens1291 <b>Teimour TABARI, Younes PAPI, Esmaeil AZIZI, Forough TALAZADEH, Ramezan Ali JAFARI, Masoud GHORBANPOOR</b>
Oxidative stress in calves with enzootic pneumonia
How consumers' consciousness and perception levels affect purchase intention of organic chicken meat in Turkey1306 Bilge ACAR BOLAT, Ferhan KAYGISIZ, Diren BULUT
Comparative evaluation of the effects of different thawing methods on bull sperm characteristics with computer-assisted semen analysis