



Ankara Üniversitesi  
**V**eteriner  
**F**akültesi  
**D**ergisi

**Veterinary Journal of Ankara University**

ISSN 1300-0861 • E-ISSN 1308-2817 Volume 70 • Number 4 • Year 2023

Ankara Univ Vet Fak Derg - [vetjournal.ankara.edu.tr](http://vetjournal.ankara.edu.tr) - Open Access



# Ankara Üniversitesi Veteriner Fakültesi Dergisi

Volume: 70 • Number: 4 • Year: 2023

## Veterinary Journal of Ankara University

Quarterly Scientific Journal

ISSN 1300-0861 E-ISSN 1308-2817

### Publisher

On behalf of Ankara University, Faculty of Veterinary Medicine  
Prof. Dr. Ender YARSAN  
Dean

### Editorial Board

#### Editor-in Chief

Prof. Dr. Levent Altıntaş, Türkiye

#### Editorial Board

Assistant Professor Aytaç Ünsal Adaca, Türkiye  
Assistant Professor Ozan Ahlat, Türkiye  
Prof. Dr. Yılmaz Aral, Türkiye  
Dr. Farah Gönül Aydın, CertAqV, Türkiye  
Associate Prof. Dr. Caner Bakıcı, Türkiye  
Dr. Bülent Baş, Türkiye  
Assistant Professor Gökben Özbakış Beceriklisoy, Türkiye  
Associate Prof. Dr. Nüket Bilgen, Türkiye  
Prof. Dr. Yasemin Salgırlı Demirbaş, Dip ECAWBM, Türkiye  
Prof. Dr. Begüm Yurdakök Dikmen, Türkiye  
Prof. Raphael Guatteo, Dipl ECBHM, Dipl ECAWBM Fransa  
Prof. Dr. İ. Safa Gürcan, Türkiye  
Associate Prof. Dr. İlke Karayel Hacıoğlu, Türkiye  
Prof. Shimon Harrus, İsrail  
Associate Prof. Laura Hernández Hurtado, Portekiz  
Associate Prof. Dr. Güzin İplikçiöğlü Aral, Türkiye  
Prof. Dr. Halit Kanca, Türkiye  
Prof. Dr. Görkem Kismalı, Türkiye  
Dr. Afşin Kocakaya, Türkiye  
Associate Prof. Dr. Maria Graca Lopes, Portekiz  
Prof. Erdoğan Memili, ABD  
Dr. Ba Tiep Nguyen, Vietnam  
Associate Prof. Dr. Ömer Orkun, Türkiye  
Prof. Dr. Dušan Palić, CertAqV, Dipl ECAAH, Almanya  
Prof. Dr. Gonçalo Da Graça Pereira, Dip ECAWBM, Portekiz  
Associate Prof. Dr. Özge Sızmaz, Türkiye  
Prof. Dr. Calogero Stelletta, Dipl ECSRHM, İtalya  
Assistant Professor Yusuf Şen, Türkiye  
Associate Prof. Dr. Koray Tekin, Türkiye  
Prof. Angel Vodenicharov, Bulgaristan  
Dr. Nuh Yıldırım, Türkiye  
Assistant Professor Nevra Keskin Yılmaz, Türkiye  
Editorial Secretariat: Associate Prof. Dr. Caner Bakıcı

### Publisher

#### Address

Ankara University, Faculty of Veterinary Medicine  
Publication Subcommittee  
06070 Ankara, Türkiye

Tel: 90 312 317 03 15, Fax: 90 312 316 44 72

E-mail: vfdergi@veterinary.ankara.edu.tr

URL: <http://vetjournal.ankara.edu.tr>

Publication Type: Peer-reviewed and published quarterly online by DergiPark Akademik

### Advisory Board

Prof. Dr. Mehmet Akan, Ankara University  
Prof. Dr. Çiğdem Altınsoat, Ankara University  
Prof. Dr. Wolfgang Bäumer, Berlin Freie University  
Prof. Dr. Alev Gürol Bayraktaroğlu, Ankara University  
Prof. Dr. Gerhard Breves, Hannover Veterinary Medicine University  
Prof. Dr. Heiner Bollwein, Zurich University  
Prof. Dr. Ali Bumin, Ankara University  
Prof. Dr. R. Teodor Cristina, Banat's University  
Prof. Dr. Ahmet Çakır, Ankara University  
Prof. Dr. Roman Dabrowski, Lublin Life Science University  
Prof. Dr. Ali Daşkın, Ankara University  
Prof. Dr. Cornelia Deeg, Münih Ludwig Maximilian University  
Prof. Dr. İbrahim Demirkan, Afyon Kocatepe University  
Prof. Dr. Bilal Dik, Selçuk University  
Prof. Dr. Levent Dirikolu, Louisiana University  
Prof. Dr. Marc Drillich, Vienna Veterinary Medicine University  
Prof. Dr. Bülent Ekiz, Istanbul-Cerrahpaşa University  
Prof. Dr. Emel Ergün, Ankara University  
Prof. Dr. Frank Gasthuys, Gent University  
Prof. Dr. Tamay Başağaç Gül, Ankara University  
Dr. Pawel Görka, Krakow Agriculture University  
Prof. Dr. Berrin Kocaoğlu Güçlü, Erciyes University  
Prof. Dr. Rıfık Hazıroğlu, Ankara University  
Assoc. Prof. Dr. Jia-Qiang He, Virginia Polytechnic Institute and State University  
Prof. Dr. Şeref İnal, Selçuk University  
Prof. Dr. M. Taner Karaoğlu, Ankara University  
Prof. Dr. Abdullah Kaya, Selçuk University  
Prof. Dr. Arif Kurtde, Ankara University  
Prof. Dr. Mariusz P. Kowalewski, Zurich University  
Prof. Dr. Osman Kutsal, Ankara University  
Prof. Dr. A. Serpil Nalbantoğlu, Ankara University  
Prof. Dr. Ceyhan Özbeyaz, Ankara University  
Prof. Dr. Hatice Öge, Ankara University  
Prof. Dr. Hakan Öztürk, Ankara University  
Prof. Dr. Lazo Pendovski, Skopje Ss. Cyril and Methodius University  
Prof. Dr. H. P. Salmann, Hannover Veterinary Medicine University  
Prof. Dr. Sabine Schäfer-Somi, Vienna Veterinary Medicine University  
Prof. Dr. Franz Schwarzenberger, Vienna Veterinary Medicine University  
Prof. Dr. Antti Sukura, Helsinki University  
Prof. Dr. Mehmet Şahal, Ankara University  
Prof. Dr. Adnan Şehu, Ankara University  
Prof. Dr. Hamdi Uysal, Ankara University  
Prof. Dr. Rıfat Vural, Ankara University  
Prof. Dr. Sakine Yalçın, Ankara University  
Prof. Dr. Hakan Yardımcı, Ankara University  
Prof. Dr. Ender Yarsan, Ankara University

This journal is covered by **SCI-EXP** and **JCR** of Thomson Reuters®, **Cabells Journalytics**, **International Scientific Indexing**, **CAB Abstracts**, **Academindex**, **ABCD Index**, **Global Health**, **CAB Direct**, **Database Subsets**; **Scopus** and **TR Dizin** database systems.



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

© Ankara Üniversitesi Veteriner Fakültesi Dergisi

All rights reserved. All or part of this Journal, or part or all of the scientific studies in the Journal, cannot be reproduced or published by electronic, mechanical, photocopying or any recording system without the written permission of the Ankara University Faculty of Veterinary Medicine, in accordance with the provisions of the Law No. 5846.

### Web Address

<http://vetjournal.ankara.edu.tr>

Ankara Üniversitesi Basımevi / Ankara University Press

İncitaşı Sokak No:10 06510 Beşevler / ANKARA

Tel: 0 (312) 213 66 55

Basım Tarihi: 29/09/2023

## CONTENTS

### Research Article

- Determining the variables affecting the prices of animal products by the network analysis in Türkiye  
**Ahmet Cumhuri Akın, Murat Polat, Burak Mat, Mustafa Bahadır Çevrimli, Mehmet Saltuk Arıkan, Zeynep Özel, Mustafa Ağah Tekindal** 359
- The protective effect of caffeic acid phenethyl ester on cadmium-induced liver toxicity: A histopathological and biochemical study  
**Hacı Ahmet Deveci, Gökhan Nur, Abdulsamed Kükürt, Mushap Kuru, Ayla Deveci** 367
- Use of a bipolar vessel sealing device in canine orchietomy  
**Ceren Yaman, Halit Kanca** 375
- Expression and distribution of GPR55 and GPR119 during the development of rat testis  
**Hidayet Tutun, Volkan İpek, Musa Tatar, Ayşe Kızılyer, Muhammet Mükerrerem Kaya** 383
- Molecular and serological investigation of *Lawsonia intracellularis* in weanling foals in Türkiye  
**Kemal Metiner, Alper Mete, Erdal Erol** 395
- Effects of short-term transportation and lairage time on meat quality, *CAST*, *CAPN1*, *CAPN3*, *HSPA1A* gene expression levels and myofibrillary structure of *M. longissimus dorsi* of Kıvrıkcık breed sheep  
**Nüket Bilgen, Ahmet Ceylan, Funda Yılmaz Eker, Esra Akkaya, İsmail Şah Harem, Bengi Çınar Kul, Enver Barış Bingöl, Feraye Esen Gürsel, Atila Ateş, Doğukan Özen, Ömer Çetin, Alev Gürol Bayraktaroğlu, Tolga Kahraman** 401
- Anatomical evaluation and preparation procedure of a cross-sectioned kidney plastination of a thoroughbred horse with local polyester resin  
**Caner Bakıcı, Hasen Awel Yunus, Barış Batur, Okan Ekim, Selçuk Tunalı** 413
- Hepatoprotective effects of *Nigella Sativa* oil against acrylamide-induced liver injury in rats  
**Durmuş Hatipoğlu, Mehmet Özsan, Hasan Hüseyin Dönmez, Nurcan Dönmez** 419
- Evaluation of the combined effects of Turkish mad honey and 5-Fluorouracil in colon cancer model in rats  
**Efe Kurtdede, Mehmet Eray Alçıgır, Ahmet Mahmut Alperen, Berk Baran, Oğuz Kaan Karaca, Erman Gülendağ** 427
- Determination of *in vitro* digestibility and some quality characteristics of fermented sucuk foods produced for dogs  
**Oğuzhan Kahraman, Fatma İnal, Nurettin Gülşen, Mustafa Selçuk Alataş** 437
- Effects of algae derived pure  $\beta$ -Glucan on *In vitro* rumen fermentation  
**Ekin Sucu, Füsün (Ak) Sonat** 447
- An evaluation on research and publication ethics policies of journals publishing in the field of veterinary sciences in Türkiye  
**Gökhan Aşım, Esra Çelik, Emine Merve Danış** 453

### Case Report

- First molecular detection of *Neospora caninum* in red fox (*Vulpes vulpes*) brain sample in Türkiye  
**Ufuk Erol, Erdem Danyer, Armagan Erdem Utuk** 465
- Isolation of *Citrobacter freundii* from a dermal lesion of a captive Green iguana (*Iguana iguana*)  
**Bülent Baş, Kübra Gamze Çetin, İrem Ergin** 469
- A case of Monkeypox in a baby monkey  
**Özlem Özmen, Mehmet Kale, Volkan İpek, Hasbi Sait Saltık** 473



---

## EDITORIAL

---

Dear Readers;

It is with great pleasure and pride that we present to you the fourth and final issue of our journal for 2023. This issue contains a total of fifteen articles, including twelve research articles and three case reports, examining various fields of veterinary medicine. The selection of publications for this issue is based on the chronological order of acceptance dates. As the editorial team, we endeavor to follow this order as much as we can. We need to be fair in presenting your valuable work to the scientific community. I would like to take this opportunity to express my sincere gratitude and appreciation to you for choosing our journal as a platform to share your scientific work.

In the last quarter, JIF values and quartile rankings of SCIE journals were published. In this classification made by Clarivate, our journal has found its place among the Q3 class journals. This can be considered an important and proud achievement for our Journal. On this occasion, I would like to express my gratitude to all our stakeholders, especially the Editorial Board of the Journal. Of course, while we were experiencing this successful period for our Journal, the natural disasters in Morocco and Libya deeply saddened us. We wish God's mercy to those who lost their lives in these disasters and a speedy recovery to the injured. We also hope that such disasters will never happen again.

Dear readers; I would like to extend my sincerest regards to all of you, hoping that the last issue of our journal will contribute to the world of science.

Dr. Levent ALTINTAŞ

Editor in Chief

Ankara Üniversitesi Veteriner Fakültesi Dergisi