



March - 2020



# VAN VETERINARY JOURNAL

This journal previously published as: **Van Yuzuncu Yil Universitesi Veteriner Fakültesi Dergisi**

ISSN: 2149-3359

E-ISSN: 2149-8644

## Owner

Prof. Dr. Zafer SOYGUDER (Dean)

## Editor-in Chief

Prof. Dr. Nihat MERT

Van YYU, Veteriner Fak., Dergi Editorlugu

Kampus / Van - Turkey

Tel: +90 (432) 225 10 28 Fax: +90 (432) 225 11 27

e-mail: vfd@yyu.edu.tr

## Editors (Editorial Board)

Prof. Dr. Zafer SOYGUDER (Language Editor)

Prof. Dr. Handan MERT (Proof & Quality Editor)

Prof. Dr. Abdullah YESILOVA (Statistical Editor)

Prof. Dr. Ismail Hakki EKIN (Section Editor)

Prof. Dr. Ozgur ISLEYICI (Section Editor)

Assoc. Prof. Dr. Leyla MIS (Section and Technical Editor)

Assoc. Prof. Dr. Bekir OGUZ (Section and Electronic Journal Editor)

Assoc. Prof. Dr. Abdullah KARASU (Section Editor)

Assist. Prof. Dr. Rabia Mehtap TUNCAY (Section Editor)

## Publication Board

Prof. Dr. Abuzer TAS (Univ. of Van Yuzuncu Yil)

Prof. Dr. Ali CINAR (Univ. of Ataturk)

Prof. Dr. Abeer F. El Nahas (Alexandria, EGYPT)

Prof. Dr. Askarbek TULEBAEV (Manas, KYRGYZSTAN)

Prof. Dr. Axel WEHREND (Giessen, GERMANY)

Prof. Dr. Berrin SALMANOGLU (Univ. of Ankara)

Prof. Dr. Devrim S. AKSU (Univ. of Van Yuzuncu Yil)

Prof. Dr. Ehab Abu-Basha (Irbid, JORDAN)

Prof. Dr. Gert W NIEBAUER (Vienna, Austria)

Prof. Dr. Hasan Altan AKKAN (Univ. of Mehmet Akif Ersoy)

Prof. Dr. Hasan Huseyin HADIMLI (Univ. of Selcuk)

Prof. Dr. James M. MAY (Nashville, TN, USA)

Prof. Dr. Kamil EKICI (Univ. of Van Yuzuncu Yil)

Prof. Dr. Logman ASLAN (Univ. of Van Yuzuncu Yil)

Prof. Dr. Nalan OZDAL (Univ. of Van Yuzuncu Yil)

Prof. Dr. Oguz SARIMEHMETOGLU (Univ. of Ankara)

Prof. Dr. Taylan AKSU (Univ. of Van Yuzuncu Yil)

Prof. Dr. Tevhide SEL (Univ. of Ankara)

Prof. Dr. Ufuk Tansel SIRELI (Univ. of Ankara)

Prof. Dr. Volkan AKYOL (Univ. of Uludag)

Prof. Dr. Tugba BINGOL (Univ. of Van Yuzuncu Yil)

Prof. Dr. Yeter DEGER (Univ. of Van Yuzuncu Yil)

Assoc. Prof. Dr. Bahattin CAK (Univ. of Van Yuzuncu Yil)

Assoc. Prof. Dr. Cristian Magdas (Cluj-Napoca, ROMANIA)

Assoc. Prof. Dr. Cumali OZKAN (Univ. of Van Yuzuncu Yil)

Assoc. Prof. Dr. Feraye Esen GURSEL (Univ. of Istanbul-Cerrahpasa)

Assoc. Prof. Dr. Hasan Huseyin ARI (Univ. of Cumhuriyet)

Assoc. Prof. Dr. Yildiray BASBUGAN (Univ. of Van Yuzuncu Yil)

Assist. Prof. Dr. Ali Rıza BABA OGLU (Univ. of Van Yuzuncu Yil)

Dr. Josip LOVRIC (Manchester, ENGLAND)

Dr. Omar ATROOZ (Mutah, JORDAN)

## Scientific Board of This Issue

Assist. Prof. Dr. Omer AKGUL (Univ. of Van Yuzuncu Yil)

Prof. Dr. Hasan Altan AKKAN (Univ. of Burdur Mehmet Akif Ersoy)

Prof. Dr. Gursoy AKSOY (Univ. of Hatay Mustafa Kemal)

Prof. Dr. Taylan AKSU (Univ. of Van Yuzuncu Yil)

Assoc. Prof. Dr. Ozgur CELEBI (Univ. of Kafkas)

Prof. Dr. Yeter DEGER (Univ. of Van Yuzuncu Yil)

Assist. Prof. Dr. Ismail DEMIRCI OGLU (Univ. of Harran)

Assist. Prof. Dr. Metin ERTAS (Univ. of Hakkari)

Prof. Dr. Timur GULHAN (Univ. of Ondokuz Mayıs)

Prof. Dr. Murat KABAK (Univ. of Ondokuz Mayıs)

Prof. Dr. Huseyin KARADAG (Univ. of Van Yuzuncu Yil)

Res. Assist. Dr. Emre KAYA (Univ. of Firat)

Prof. Dr. Ozgur KAYNAR (Univ. of Ataturk)

Prof. Dr. Huseyin NURSOY (Univ. of Bingol)

Assist. Prof. Dr. Ugur OZDEK (Univ. of Van Yuzuncu Yil)

Assoc. Prof. Dr. Cumali OZKAN (Univ. of Van Yuzuncu Yil)

Assoc. Prof. Dr. Serkan YILDIRIM (Univ. of Ataturk)

Prof. Dr. Nazmi YUKSEK (Univ. of Van Yuzuncu Yil)

Prof. Dr. Ibrahim YORUK (Univ. of Van Yuzuncu Yil)

This journal is published three times a year

All articles in this journal are available free of charge from <http://dergipark.gov.tr/vanvetj>

Year	Volume	Issue
2020	31	1

This journal indexed / abstracted in EBSCOhost, CAB Abstracts, ROOT INDEXING, J-Gate, COSMOS IF, TUBITAK-ULAKBIM, DRJI, ResearchBib, Turkiye Atif Dizini and Google Scholar