

Van Yuzuncu Yil University
Faculty of Agriculture

**YUZUNCU YIL UNIVERSITY
JOURNAL OF AGRICULTURAL SCIENCES**

YYU J AGR SCI

**YÜZÜNCÜ YIL ÜNİVERSİTESİ
TARIM BİLİMLERİ DERGİSİ**

YYÜ TAR BİL DERG

ISSN 1308-7576
e-ISSN 1308-7584

VAN – TÜRKİYE

Volume: 33

Issue: 3

September 2023



**Yuzuncu Yil University
Journal of Agricultural Sciences**

Yüzüncü Yıl Üniversitesi Tarım Bilimleri Dergisi

<https://dergipark.org.tr/en/pub/yyutbd>



YUZUNCU YIL UNIVERSITY JOURNAL OF AGRICULTURAL SCIENCES

(Yüzüncü Yıl Üniversitesi Tarım Bilimleri Dergisi)

Volume: 33

Issue: 3

September 2023

ISSN: 1308-7576, e-ISSN: 1308-7584

Owner

On Behalf of Yuzuncu Yil University Faculty of Agriculture

(Dean)

Prof. Dr. Murat TUNÇTÜRK

Manager in Charge / Chief Editor

Assoc. Prof. Dr. Tamer ERYİĞİT

Scope of Journal

Yuzuncu Yil University Journal of Agricultural Sciences covers topics of such as; Plant production (biotechnology, field crops, horticulture, plant protection, etc.), Animal production (animal and aquaculture production, etc.), Soil sciences (soil ecology, soil physics, soil chemistry, etc.), Others (agricultural irrigation, agricultural structures, agricultural energy systems, etc., food science, food technology, etc. With sustainable farming systems, etc.).

Associated Editors

Assoc. Prof. Dr.	ERDİNÇ, Çeknas	Van Yuzuncu Yil University, Faculty of Agriculture, Van
Assist. Prof. Dr.	ÇAKMAKCI, Talip	Van Yuzuncu Yil University, Faculty of Agriculture, Van

Editorial Board

Prof. Dr.	ÇELEN, Ahmet Esen	Ege Universtiy, Faculty of Agriculture, İzmir
Prof. Dr.	LUDIDI, Ndomelele Ndiko	University of The Western Cape, Department of Biotechnology, South Africa
Prof. Dr.	OKUT, Hayrettin	University of Kansas, Department of Population Health, USA
Prof. Dr.	SALAMON, Ivan	University of Presov in Presov, Department of Ecology, Prešov,
Prof. Dr.	TUNÇTÜRK, Murat	Van Yuzuncu Yil University, Faculty of Agriculture, Van
Assoc. Prof. Dr.	ERDOĞAN, Sibel	Van Yuzuncu Yil University, Faculty of Agriculture, Van

Statistical Consultants

Prof. Dr.	KESKİN, Sıddık	Van Yuzuncu Yil University, Faculty of Medicine, Van
Prof. Dr.	TAKMA, Çiğdem	Ege University, Faculty of Agriculture, İzmir
Prof. Dr.	YEŞİLOVA, Abdullah	Van Yuzuncu Yil University, Faculty of Agriculture, Van
Assoc. Prof. Dr.	SER, Gazel	Van Yuzuncu Yil University, Faculty of Agriculture, Van



Yuzuncu Yil University Journal of Agricultural Sciences

Yüzüncü Yıl Üniversitesi Tarım Bilimleri Dergisi

<https://dergipark.org.tr/en/pub/yyutbd>



Language Consultants

Assist. Prof. Dr.	ÇAKMAKÇI, Cihan	Van Yuzuncu Yil University, Faculty of Agriculture, Van
Assist. Prof. Dr.	TAŞKIN, Bilgin	Van Yuzuncu Yil University, Faculty of Agriculture, Van
Res. Assist. Dr.	TEKİN, Onur	Van Yuzuncu Yil University, Faculty of Agriculture, Van

Advisory Board

Prof. Dr.	ALP, Şevket	Landscape Architecture, Van Yuzuncu Yil University
Prof. Dr.	DANESH, Younes Rezaee	Plant Protection, Urmia University, Iran
Prof. Dr.	DEMİREL, Murat	Animal Nutrition, Van Yuzuncu Yil University
Prof. Dr.	GÜLSER, Fusun	Soil Science and Plant Nutrition, Van Yuzuncu Yil University
Prof. Dr.	HARRISON, Heslop	Department of Genetics and Genome Biology, University of Leicester, Leicester, United Kingdom
Prof. Dr.	KIJOA, Anake	Biomedical Sciences Institute of Abel Salazar, University of Porto, Portugal
Prof. Dr.	ÖZTÜRK, Özden	Field Crops, Selçuk University
Prof. Dr.	TUNÇTÜRK, Yusuf	Food Science, Van Yuzuncu Yil University
Prof. Dr.	TÜRKOĞLU, Nalan	Ornamental Plant Production, Van Yuzuncu Yil University
Prof. Dr.	SANCHEZ-YAÑEZ, Juan Manuel	Universidad Michoacana de San Nicolás de Hidalgo, Mexico
Prof. Dr.	ŞEKEROĞLU, Nazım	Department of Horticulture, Kilis 7 Aralık University
Prof. Dr.	ŞEN, Fazıl	Fisheries, Van Yuzuncu Yil University
Dr.	SALLEH, Wan Mohd Nuzul Hakimi Wan	Department of Chemistry, Faculty of Science and Mathematics, Sultan Idris Education University, Malaysia

Section Editors and Scientific Board

Prof. Dr.	AKSOY, Adem	Agricultural Economics, Atatürk University
Prof. Dr.	ARPALI, Diğdem	Field Crops, Van Yuzuncu Yil University
Prof. Dr.	ASLAN, Mahmut Murat	Plant Production, Kahramanmaraş Sütçü İmam University
Prof. Dr.	CAISIN, Larisa	State Agrarian University of Moldova
Prof. Dr.	ÇALIŞKAN, Sevgi	Plant Production and Tech., Niğde Ömer Halisdemir University
Prof. Dr.	EKİNCİ, Melek	Horticulture, Ataturk University
Prof. Dr.	ERDOĞAN, Reyhan	Landscape Architecture, Akdeniz University
Prof. Dr.	GHAVİ HOSSEİN-ZADEH, Navid	Animal Breeding and Genetics, University of Guilan
Prof. Dr.	HEPAKSOY, Serra	Horticulture, Ege University
Prof. Dr.	IBRALIU, Alban	Crop Production, Agricultural University of Tirana, Albania
Prof. Dr.	ISLAM, Mohammad Sohidul	Department of Agronomy, Hajee Mohammad Danesh Science and Technology University
Prof. Dr.	KARASAWA, Marines Marli Gniech	Department of Genetics, "Luiz de Queiroz" College of Agriculture, University of Sao Paulo
Prof. Dr.	KURTAR, Ertan Sait	Horticulture, Selçuk University
Prof. Dr.	MEHMETİ, Arben	Plant Protection, University of Prishtina
Prof. Dr.	ÖZGÖKÇE, M. Salih	Plant Protection, Van Yuzuncu Yil University
Prof. Dr.	SHRESTHA, Jiban	Nepal Agricultural Research Council (NARC), National Plant Breeding and Genetics Research Centre (NPBGRC), Nepal
Prof. Dr.	ŞAHİN, Üstün	Agricultural Structures and Irrigation, Atatürk University
Prof. Dr.	TUNÇTÜRK, Rüveyde	Field Crops, Van Yuzuncu Yil University
Prof. Dr.	WAN, Chunpeng	Jiangxi Agricultural University
Assoc. Prof. Dr.	AĞLAR, Erdal	Horticulture, Van Yuzuncu Yil University
Assoc. Prof. Dr.	ALABOZ, Pelin	Soil Science, Isparta University of Applied Sciences
Assoc. Prof. Dr.	AMİRİNİA, Reza	Medicinal and Aromatic Plants, Urmia University
Assoc. Prof. Dr.	DEDEOĞLU, Mert	Soil Science, Selçuk University
Assoc. Prof. Dr.	DEMİRER DURAK, Emre	Plant Protection, Van Yuzuncu Yil University
Assoc. Prof. Dr.	DETHOUP, Tida	Department of Plant Pathology, Kasetsart University
Assoc. Prof. Dr.	FAID-ALLAH, Eslam	Animal Production, Menofia University
Assoc. Prof. Dr.	FAYED, Marwa A. A.	Medicinal and Aromatic Plants, University of Sadat City
Assoc. Prof. Dr.	GÖKDOĞAN, Osman	Agricultural Machinery and Technologies Engineering, Isparta University of Applied Sciences



Yuzuncu Yil University Journal of Agricultural Sciences

Yüzüncü Yıl Üniversitesi Tarım Bilimleri Dergisi

<https://dergipark.org.tr/en/pub/yyutbd>



Assoc. Prof. Dr.	İNÇİ, Hakan	Animal Science, Bingöl University
Assoc. Prof. Dr.	KIZILGECİ, Ferhat	Seed Cultivation Technology, Mardin Artuklu University
Assoc. Prof. Dr.	SHAHID, M. Qasim	Agricultural Biotech., South China Agricultural Univ., China
Assoc. Prof. Dr.	ŞATIR, Onur	Landscape Architecture, Van Yuzuncu Yil University
Assoc. Prof. Dr.	TERZİ, Ertuğrul	Fisheries, Kastamonu University
Assoc. Prof. Dr.	TÖLÜ, Cemil	Zootechnics, Çanakkale Onsekiz Mart University
Assoc. Prof. Dr.	YANKOV, Peter	Plant Protection, Technical University of Varna
Assist. Prof. Dr.	DEGHIMA, Amirouche	Agricultural Biotechnology, Mohamed Khider University of Biskra
Assist. Prof. Dr.	IQBAL, Muhammad Aamir	Agronomy, University of Poonch Rawalakot
Assist. Prof. Dr.	MIHALIKOVA, Marketa	Water Resources, Czech University of Life Sciences Prague
Assist. Prof. Dr.	POLAT YEMİŞ, Gökçe	Food Science, Sakarya University
Dr.	MALYSH, Julia	Plant Protection, All-Russian Institute of Plant Protection

Referee List in This Number

Prof. Dr.	AĞIRBAŞ, Ertuğrul	Recep Tayyip Erdoğan University, Faculty of Fisheries, RİZE
Prof. Dr.	ÇOŞKUN HEPCAN, Hilal	Ege University, Faculty of Agriculture, İZMİR
Prof. Dr.	DURMAZ, Yaşar	Ege University, Faculty of Fisheries, İZMİR
Prof. Dr.	KARACA, Serhat	Van Yuzuncu Yil University, Faculty of Agriculture, VAN
Prof. Dr.	ÖZTÜRK, Gülsüm	Ege University, Faculty of Agriculture, İZMİR
Prof. Dr.	TAŞKIN, Hatıra	Çukurova University, Faculty of Agriculture, ADANA
Prof. Dr.	ZENGİN, Murat	Pamukkale University, Faculty of Architecture and Design, DENİZLİ
Assoc. Prof. Dr.	BOYACI, Hatice Filiz	Recep Tayyip Erdoğan University, Faculty of Agriculture, RİZE
Assoc. Prof. Dr.	ÇELİK, Şenol	Bingöl University, Faculty of Agriculture, BİNGÖL
Assoc. Prof. Dr.	GÖKTUĞ, Tendü Hilal	Aydın Adnan Menderes University, Faculty of Agriculture, AYDIN
Assoc. Prof. Dr.	KARAMAN, Mehmet	Muş Alparslan University, Faculty of Applied Sciences, MUŞ
Assoc. Prof. Dr.	KIYMA, Zekeriya	Eskişehir Osmangazi University, Faculty of Agriculture, ESKİŞEHİR
Assist. Prof. Dr.	AKÇAY, Hulusi	Aydın Adnan Menderes University, Faculty of Agriculture, AYDIN
Assist. Prof. Dr.	AKIŞCAN, Yaşar	Hatay Mustafa Kemal University, Faculty of Agriculture, HATAY
Assist. Prof. Dr.	AYTOP, Yeşim	Kahramanmaraş Sutcu Imam University, Faculty of Agriculture, KAHRAMANMARAŞ
Assist. Prof. Dr.	BAŞDEMİR, Fatma	Harran University, Ceylanpınar Agriculture Vocational School, ŞANLIURFA
Assist. Prof. Dr.	GÖZE ÖZDEMİR, Fatma Gül	Isparta University of Applied Sciences, Faculty of Agriculture, ISPARTA
Assist. Prof. Dr.	KAKI, Barış	Uşak University, Faculty of Agriculture, UŞAK
Assist. Prof. Dr.	KIVRAK, Oğuzhan	Bandırma Onyedil Eylül University, Faculty of Engineering and Natural Sciences, BALIKESİR
Assist. Prof. Dr.	KÜÇÜK, Rabia	Malatya Turgut Özal University, Faculty of Agriculture, MALATYA
Assist. Prof. Dr.	ÖZMEN BAKIR, Gonca	Harran University, Faculty of Agriculture, ŞANLIURFA
Assist. Prof. Dr.	SEVİNDİK, Başar	İzmir Democracy University, Vocational School, İZMİR
Assist. Prof. Dr.	UBA, Abdullahi İbrahim	İstanbul Arel University, Faculty of Science and Letters, İSTANBUL
Assist. Prof. Dr.	USTA, Ayşe	Van Yuzuncu Yil University, Faculty of Science, VAN
Assist. Prof. Dr.	YOLCU, Muhammed Said	Sakarya University of Applied Sciences, Faculty of Agriculture, SAKARYA
Dr.	BARAN, Nurettin	Muş Alparslan University, Faculty of Applied Sciences, MUŞ
Dr.	CAVALLINI, Damiano	University of Bologna, Department of Veterinary Medical Sciences, ITALY
Dr.	NOHUTÇU, Lütfi	Van Yuzuncu Yil University, Faculty of Agriculture, VAN
Dr.	THAPA, Dhruva Bahadur	Nepal Agricultural Research Council, NEPAL
Dr.	TURAN BÜYÜKDİNÇ, Damla	Recep Tayyip Erdoğan University, Faculty of Agriculture, RİZE

Production Editors and Webmasters

Assist. Prof. Dr.	KARAGEÇİLİ, Mehmet Reşit	Van Yuzuncu Yil University
Res. Assist. Dr.	RİŞVANLI, Mehmet Ramazan	Van Yuzuncu Yil University

Copyeditors

Res. Assist.	BOYNO, Gökhan	Van Yuzuncu Yil University
Res. Assist.	FİDAN, Enes	Van Yuzuncu Yil University
Doctoral	ŞELEM, Ezelhan	Van Yuzuncu Yil University



Yuzuncu Yil University Journal of Agricultural Sciences

Yüzüncü Yıl Üniversitesi Tarım Bilimleri Dergisi

<https://dergipark.org.tr/en/pub/yyutbd>



Layout Editors

Postgraduate	KİTAPÇI, Talha	Van Yuzuncu Yil University
	ŞEKER, Hacer	Van Yuzuncu Yil University

Correspondence Address

Van Yuzuncu Yil University, Faculty of Agriculture, Zeve Campus, 65080, Van-TÜRKİYE
(Van Yüzüncü Yıl Üniversitesi, Ziraat Fakültesi, Zeve Yerleşkesi, 65080, Van-TÜRKİYE)

Phone

+90 (432) 225 10 56; 225 10 24

Fax

+90 (432) 225 11 04

e-mail

yyujagrsci@gmail.com

Web link: <https://dergipark.org.tr/en/pub/yyutbd>

Indexed by

Our Journal is abstracted and indexed in **CAB Abstracts**, **AGRIS**, **Google Scholar**, and **TUBITAK/ULAKBIM National Data Bank**. Listed in **ISC**, **EBSCO**, **DOAJ (Directory of Open Access Journals)**, **Ulrich's Directory**, **Bielefeld Academic Search Engine (BASE)**, **ISI Thompson Master Journal List (ZOOLOGICAL RECORD)**, and **SCOPUS**.

Press and Date: Efe Kirtasiye, September 2023, Van

Yuzuncu Yil University Journal of Agricultural Sciences is the continuation of the previously published **Yuzuncu Yil University, Agriculture Faculty Journal of Agriculture Sciences** and **Yuzuncu Yil University, Journal of Agriculture Faculty**.



CONTENTS

- ENVI-met Simulations of the Effect of Different Landscape Design Scenarios on Pedestrian Thermal Comfort: Haydar Aliyev Street338
Sevgi YILMAZ, Ahmet KURT, Muhammet GÖLCÜ
- Waterlogging Response of Lentil Cultivars Grown in Greenhouse Throughout The Early Vegetative and Recovery Period354
Seval ELİŞ, Behiye Tuba BİÇER, Mehmet YILDIRIM
- Effects of Data Augmentation Methods on YOLO v5s: Application of Deep Learning with Pytorch for Individual Cattle Identification363
Cafer Tayyar BATI, Gazel SER
- Correlates and Determinants of Involvement in Sweetpotato Production among Farming Households in Niger-Delta Area of Nigeria377
Ogheneakpobor OYIBO, Stella O. ODEBODE
- Morphological Characteristics and Chlorophyll Content of Dominant Weed Leaves After Peatland Fires in Oil Palm Plantation Areas389
Vauzia VAUZIA, Bella TRIANA, Dhea Pratiwi YEZA, Rizka Putri ALTI
- Evaluation of Sesame (*Sesamum indicum* L.) Lines Under Salt Stress for Yield Using SSR Markers397
Ghada M. SAMAHA, Lamyaa M. SAYED, Ayman A. SABER
- The Effect of Oregano (*Origanum onites*) Pulp to Quality Parameters of Meadow Silage408
Şirin Duygu YEŞİL, Mehtap GÜNEY
- Fresh Semen Quality of *Bos taurus*, *Bos indicus* and *Bos sondaicus* Bulls in the Tropical Condition420
Fabiana Mentari Putri WIJAYA, Sutopo SUTOPO, Daud SAMSUDEWA, Achmad SETIYONO, Asep SETIAJI
- Determination of the Factors Affecting the Honey Production Per Colony in Bingöl Beekeeping Enterprises429
Ersin KARAKAYA, Hakan İNCİ, Osman TOPLUK
- Development and Detection of Antimicrobial Properties of Polyherbal Handwash441
Zainab IRFAN, Sumon GIRI, Afsona KHATUN, Marwa A. A. FAYED
- Tocopherol Content of *Euglena* sp. Isolated from Yogyakarta under Glucose and Ethanol Mixture Treatment450
Wynona Zahra AQILLA, Dea Putri ANDESKA, Tia ERFIANTI, Brilian Ryan SADEWO, Eko Agus SUYONO
- Host-parasite Interactions between *Solanum aethiopicum*, *Meloidogyne incognita*, and *Fusarium oxysporum* f.sp. melongenae as Portrayed by Disease Traits and Crop Yield461
Elias Mjaika NDIFON
- Plant Growth Bio-stimulants of Seaweed Extract (*Sargassum boveanum*): Implications Towards Sustainable Production of Cucumber478
Edris SHABANI, Naser ALEMZADEH ANSARI, Mohammad Reza FAYEZIZADEH
- Exploring the Potential of Furofuran Lignans Isolated from *Beilschmiedia pulverulenta* for Drug Development: A Computational Approach491
Abubakar Siddiq SALIHU, Wan Mohd Nuzul Hakimi Wan SALLEH



Yuzuncu Yil University
Journal of Agricultural Sciences

Yüzüncü Yıl Üniversitesi Tarım Bilimleri Dergisi

<https://dergipark.org.tr/en/pub/yyutbd>



Callus Production in Geranium (*Pelargonium quercetorum* Agnew) Growing Naturally in Türkiye503
Metin KOÇAK, Sibel TURAN SİRKE, Cansu KUZĞUN, Mehtap YILDIZ