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October 9-10, 2021
Adana / TURKEY



CONFERENCE PROCEEDINGS BOOK

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AUTHOR	AFFILITION	ABSTRACT TITLE
Shitu, S Obafunmi, T. I Yakubu, S.	*College of Science and Technology*	Assessment Of Microbiological Quality Of Dried Powder Okra And Baobab Marketed Within Kaduna State, Nigeria
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O. Zouirech K. Mikou Badiaâ Lyoussi Houssine Derwich	*Université Sidi Mohammed Ben Abdellah.*	Optimization Of The Extraction Of Hula From Seeds And N. Sativa, L. Sativum And L. Usitatissimum And Comparative Study Of Physico-Chemical Properties, Antioxidant And Antimicrobial Activities Of The Extracted Oils
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Popoola Moshood ABIOLA	*Federal College of Animal Health and Production Technology*	Phenotypic Characterization And Body Indices Of Nigerian Heterogenous Rabbit Population Under Backyard Systems Of Production
Yusuf SOLMAZ	*Tekirdağ Namık Kemal University*	The Effect of Biostimulants on Soil Fertility and Plant Production
Morakeng Edward Kenneth LEBAKA	*University of Zululand*	The Value And Relevance Of Farm And Garden Plants Towards Preservation And Sustainability Of The Variety Of Traditional Practices And Rituals: The Case Of The Bapedi Culture
Caner KAYIKCI Musa GENÇCELEP Abdullah KARASU Loğman ASLAN Cumali ÖZKAN Tunahan SANCAK	*Van Yuzuncu Yıl University*	Serum Immunoglobulin And Nitric Oxide Levels In Calves With Arthritis And Omphalitis

CONTENTS

CONGRESS ID	I
PROGRAM	II
PHOTO GALLERY	III
CONTENTS	IV

Authors	TITLE	Page Number
ABSTRACTS		
Saeed OLYAEE Atefeh NAJIBI	Instruction Of Linear Integrated Circuits Within The Framework Of Theoretical-Practical Training	2
Chadha AYED Rania KOUKI Rouaa DHIBI Najla DHEN Ismahen ESSAIDI Bouthaina Al Mohandes DRIDI	In Situ Phenotypic Diversity of *Onopordum nervosum* spp platylepis in The Region Kairouan in Tunisia	3
Najla DHEN Ismahen ESSAIDI Samra Akef BZIOUECH Ines LAGNEB Latifa CHEBBI Bouthaina Al Mohandes DRIDI	Effect Of Biochar And Arbuscular Mycorrhizal Fungus On Salt Stressed Lettuce (*Lactuca sativa* L.) Plants	5
Najla DHEN Ismahen ESSAIDI Rania KOUKI Shadha Ben ROMDHANE Chadha AYED Bouthaina Al Mohandes DRIDI	Morphological Traits Evaluation, Phenolic Composition, Antioxidant Activity And Clotting Milk Activities Of Flower Aqueous Extract Of Wild And Cultivated Onopordum Nervosum Platylepis Murb.	7
Somayyeh RAZZAGHI	Soil Organic Matter – The Robust Indicator Of Soil Quality	9
Rania KOUKI Chadha AYED Najla DHEN Rouaa DHIBI Ismahen ESSAIDI Bouthaina Al Mohandes DRIDI	In Situ Morphological Characterization Of Onopordum Nervosum Platylepis Murb. Populations From Northern And Central Tunisia	10
Ismahen ESSAIDI Najla DHEN Rihen ZORGUI Zohra Ben CHEIKH Jamel Eddine Ben ABDA Messaoud MARS	Effect Of Substituting Milk Powder With Fabaceae Sources (*Vicia faba*, *Lens culinaris* and *Gledistsia triachantos*) On The Quality Of Yoghurt	12
Ristina Siti SUNDARI Lies SULISTYOWATI Trisna Insan NOOR Iwan SETIAWAN	Revive Food Security throughout Urban Farming in Household Scale on Limited Land in Tasikmalaya, Indonesia	14
Ayandiji, A. Umeobi, U.M.	Factors Influencing Online Purchase On Perishable Crops In Oyo State, Nigeria	16
Ismahen ESSAIDI Najla DHEN Sejir CHEBIL Rania KOUKI Chadha AYED Bouthaina Al Mohandes DRIDI	Comparative Study Between The Effect Of Aqueous Extraction And Buffer Solution On Chemical Composition, Antioxidant And Clotting Milk Activities Of Onopordum Nervosum Ssp Platylepis Flowers	17

Arina YUDNIKOVA Anna GODYMCHUK	Effect Of Humic Acids On Zno Nanoparticles	137
Mustafa YİPEL Aysun İLHAN	Potentiation Of Toxicology With Proteomics: Toxicoproteomics	138
Oyewole Mojisola FAUZIYAH	Preference For Meat Consumption Among Rural Dwellers In Oyo State Nigeria	140
Fatma SATILMIŞ	Comparıson Of Serum Alkalen Phosphatase (Alp) Levels In Healthy And Wıth Mammary Tumor Dog	141
Imad ELBOJADDAYNİ Youssef El OUARDİ Issam JİLAL Abdelkrim OUAMMOU Soufian El BARKANY	Synthesis, Characterization and Application of New Zeolitic Material	143
Ulasi, J. I Okim R. S Edith G. O	Progeny Evaluation Of Some Sweet Potato Hybrids For High Yield, High Dry Matter And Starch In Humid Environment Of Umudike, Southeastern Nigeria	144
Shirin SHOKRPOUR Nesa ENFERADI Hassan DARABI	Analyzing The Trend Of Landscape Changes And Comparing Them To Changes In Land Prices; Case Study: Part Of The Karaj River In Alborz Province, Iran	146
Shitu, S Obafunmi, T. I Yakubu, S.	Assessment Of Microbiological Quality Of Dried Powder Okra And Baobab Marketed Within Kaduna State, Nigeria	147
Sait Muharrem SAY Mustafa ŞEHRİ Nermin Merve YALÇINKAYA	Emıssıons Assessment In Agrıcultural Productıon: The Case Of Apple Cultıvatıon	148
Sait Muharrem SAY Mustafa ŞEHRİ Nermin Merve YALÇINKAYA	Emıssıons Assessment In Fruıt Cultıvatıon: The Case Of Cherry Productıon In The Provınce Of Niğde	150
Popoola M.A Adebisi G.L Amao A.A Owoade S.A.	Training Needs Of Dairy Cattle Farmers In Oyo State, Nigeria	152
İlkay ÇOKA Ahmet KORKMAZ Güney AKINOĞLU	Comparıson Of Some Bean Varıetıes Grown Under Iron-Sufficıent Condıtıons In Terms Of Iron Nutrıtıonal Capabılıtıes	153
Popoola Moshood ABIOLA	Phenotypic Characterization And Body Indices Of Nigerian Heterogenous Rabbit Population Under Backyard Systems Of Production	155
Yusuf SOLMAZ	The Effect of Biostimulants on Soil Fertility and Plant Production	156
Morakeng Edward Kenneth LEBAKA	The Value And Relevance Of Farm And Garden Plants Towards Preservation And Sustainability Of The Variety Of Traditional Practices And Rituals: The Case Of The Bapedi Culture	157
Caner KAYIKCI Musa GENÇCELEP Abdullah KARASU Loğman ASLAN Cumali ÖZKAN Tunahan SANCAK	Serum Immunoglobulin And Nitric Oxide Levels In Calves With Arthritis And Omphalitis	158
Muhammad ZAHEER Ghulam Mujtaba SHAH	Analytical And Mathematical Models For Solute Transport In Low-Permeability Porous Media	160

ARTRITIS VE OMFALITISLI BUZAĞILARDA SERUM IMMUNOGLOBULIN VE NITRIK OKSIT SEVIYELERI

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ÖZET

Ruminantlardaki plasenta yapısından dolayı anneden yavruya immunoglobulin geçişi olmamaktadır. Bu yüzden buzağılar önemsenmeyecek seviyede düşük serum immunoglobulin seviyeleriyle doğarlar. Buzağıların kendi aktif ve koruyucu immun yanıtları oluşana kadar kolostrum ve sütten alınan immunoglobulinler eksternal koruyucu antikor kaynağı sağlarlar. Bu çalışmada klinik /radyolojik olarak omfalitis ve artritis tanısı konan buzağılarda serum, IgA, IgM, IgG, GGT ve NO düzeylerinin omfalitis ve artritis ile ilişkisinin araştırılması amaçlanmıştır. Bu çalışmanın hayvan materyalini Van ili ve çevresinden sağlanan 20 artritis ve 20 omfalitisli değişik ırk, yaş ve cinsiyette buzağı (çalışma grubu) ile klinik olarak sağlıklı ve aynı özelliklerde 20 buzağı (kontrol grubu) oluşturmuştur. Hayvanların klinik ve radyolojik muayeneleri yapılarak kan örnekleri toplandı. Kan örneklerinden GGT, immunoglobulin G, immunoglobulin M, immunoglobulin A ve nitrik oksit düzeyleri ELİZA cihazı ile tespit edildi. Sonuç olarak klinik olarak omfalitis ve artritis tanısı konan hayvanların serum IgA, IgM, IgG ve GGT seviyelerinde herhangi bir değişiklik gözlemlenmemiştir. NO serum seviyelerinde istatistiki anlamda omfalitis grubunda bir değişiklik gözlemlenmezken artritis grubunda belirgin bir artış gözlemlendiği belirlenmiştir.

Anahtar Kelimeler: Omfalitis, artritis, immunoglobulin, nitrik oksit, buzağı

SERUM IMMUNOGLOBULIN AND NITRIC OXIDE LEVELS IN CALVES WITH ARTHRITIS AND OMPHALITIS

ABSTRACT

There is no immunoglobulin transfer from the dam to calves in bovines. Because of this calves born with negligible immunoglobulin levels. Immunoglobulins that are taken from colostrum and milk ensure external antibody source until emerge of calves' own active, protective immune responses. The aim of this study was to investigate the relationship between serum, IgA, IgM, IgG, GGT and NO levels in the calves diagnosed with omphalitis and arthritis. The animal material of this study consisted of calves with arthritis (n=20) and omphalitis (n=20) and calves (control group n=20) with clinically healthy and the same characteristics. Clinical and radiological examinations were performed, and blood samples were collected. GGT, immunoglobulin G, immunoglobulin M, immunoglobulin A, and nitric oxide levels were determined by ELISA. As a result, no changes were observed in serum IgA, IgM, IgG and GGT levels of the animals diagnosed with omphalitis and arthritis. NO serum levels were not observed in the omphalitis group but a significant increase was observed in the arthritis group.

Keywords: Omphalitis, Arthritis, Immunoglobulin, Nitric oxide, Calf

AÇIKLAMA

Bu çalışma Yüzüncü Yıl Üniversitesi Bilimsel Araştırma Projeleri Koordinasyon Birimi tarafından TSA-2017-5926 nolu proje kapsamında desteklenmiştir.