Prof. MEHMET ALİ BAL

Personal Information

Email: mehmetali.bal@deu.edu.tr
Other Email: malibal40@gmail.com
Web: https://avesis.deu.edu.tr/mehmetali.bal

International Researcher IDs
ScholarID: bCwN-WYAAAAJ
ORCID: 0000-0002-8906-6633
Publons / Web Of Science ResearcherID: L-1613-2018
ScopusID: 7006730191
Yoksis Researcher ID: 159068

Education Information

Post Doctorate, University of Alberta, Faculty of Agricultural, Life & Environmental Sciences, Department of Agricultural, Food & Nutritional Science, Canada 2007 - 2008
Doctorate, University of Wisconsin - Madison, College of Agricultural and Life Sciences, Dairy Science, United States Of America 1995 - 2000
Postgraduate, University of Wisconsin - Madison, College of Agricultural and Life Sciences, Dairy Science, United States Of America 1993 - 1995
Undergraduate, Ankara University, Veteriner Fakültesi, Zootekni Ve Hayvan Besleme Bölümü, Turkey 1987 - 1992

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Utilization of corn silage by lactating dairy cows, University of Wisconsin - Madison, College of Agricultural and Life Sciences, Dairy Science, 1999
Postgraduate, Kernel milkline stage effects on the nutritive value of corn silage for lactating dairy cows, University of Wisconsin - Madison, College of Agricultural and Life Sciences, Dairy Science, 1995

Research Areas

Zootechnical and Animal Feed, Animal Nutrition and Nutritional Diseases, Ruminant

Academic Titles / Tasks

Professor, Dokuz Eylul University, Veteriner Fakültesi, Zootekni ve Hayvan Besleme Bölümü, 2023 - Continues
Professor, Gaziantep University, İslahiye Vocational School, Department Of Veterınary, 2018 - 2023
Professor, Kahramanmaras Sutcu Imam University, Faculty Of Agrıculture, Department Of Zootechnıcs, 2015 - 2018

Associate Professor, Kahramanmaras Sutcu Imam University, Faculty Of Agrıculture, Department Of Zootechnıcs, 2010 - 2015
Assistant Professor, Kahramanmaras Sutcu Imam University, Faculty Of Agrıculture, Department Of Zootechnıcs, 2002 - 2010
Research Assistant, University of Wisconsin - Madison, College of Agricultural and Life Sciences, Dairy Science, 1993 - 2000

Academic and Administrative Experience

Head of Department, Dokuz Eylul University, Veteriner Fakültesi, Zootekni Ve Hayvan Besleme Bölümü, 2023 - Continues
Head of Department, Gaziantep University, İslahiye Vocatıonal School, Department Of Veterınary, 2021 - 2023
Head of Department, Gaziantep University, İslahiye Vocatıonal School, Department Of Plant And Anımal Productıon, 2018 - 2021

Advising Theses

Bal M. A., COMPARATIVE ANALYSIS OF NUTRIENT CONTENTS IN PLANT AND ANIMAL FEED MATERIALS USING NEAR-INFRARED SPECTROSCOPY (NIR) AND WET CHEMISTRY, Postgraduate, K.HAMAD(Student), 2023
Bal M. A., Mikrobiyal kaynaklı buzağı ishallerinin önlenmesinde prebiyotik içeren yem katkı maddesinin kullanılması, Postgraduate, O.KABA(Student), 2020
Bal M. A., Silaj ve gıda kaynaklı laktik asit bakterilerinin (LAB) mısır ve yonca silajlarının fermantasyonunda inokulant olarak kullanım potansiyellerinin araştırılması, Doctorate, D.AYDIN(Student), 2019
Bal M. A., Bazı meyve ve sebze posalarının besin madde içerikleri ile potansiyel sindirilebilirliklerinin gaz üretim tekniği ile belirlenmesi, Postgraduate, Ç.KAYA(Student), 2016
Bal M. A., The physical and fermentation properties of various silages produced in commercial farms from different provinces of Kahramanmaraş, Postgraduate, A.AMER(Student), 2014
Bal M. A., Silaj kaynaklı laktik asit bakterilerinin bakteriyosin içerikleri yönünden incelenmesi, Postgraduate, T.İŞEVİ(Student), 2011
Bal M. A., Süt sığırlarında aflatoksin B1 içeren yemlerin toksin bağlayıcılar ile kontrolü ve aflatoksin M1 oluşumunun saptanması, Doctorate, M.REİS(Student), 2011
Bal M. A., Süt sığırı rasyonlarına ilave edilen canlı maya kültürünün (Saccharomyces cerevisiae NCYC R618) laktasyon performansı ve rumen parametreleri üzerine etkisi, Postgraduate, Ş.GÖKSU(Student), 2009
Bal M. A., Rasyon protein düzeyinin düve ve erkek danalarda büyüme, yemden yararlanma ve bazı kan parametreleri üzerine etkisi, Postgraduate, H.YARAR(Student), 2005

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Effects of Live Yeast Supplementation on Ruminal Parameters and Lactation Performance of Dairy Cows Fed Medium or High Levels of Dietary Concentrate**
Bal M. A., Goksu S.
KAFKAS UNIVERSITESI VETERINER FAKULTESI DERGISI, vol.19, no.1, pp.57-62, 2013 (SCI-Expanded)
II. **Efficacy of Modified Yeast Extract and HSCAS Containing Mycotoxin Adsorbent on Ruminal Binding Characteristics of Various Aflatoxins**
Akkaya M. R., Bal M. A.
KAFKAS UNIVERSITESI VETERINER FAKULTESI DERGISI, no.6, pp.951-955, 2012 (SCI-Expanded)
III. **Characterization of an anti-listerial enterocin from wheat silage based Enterococcus faecium**
Bal E. B. B., Isevi T., Bal M. A.
JOURNAL OF BASIC MICROBIOLOGY, vol.52, no.5, pp.496-503, 2012 (SCI-Expanded)

IV. **Effects of chemical additives and ensiling time on whole plant wheat silage microbial profiles inferred by phenotypic and 16S ribosomal DNA analyses**
Bal E. B. B., Bal M. A.
WORLD JOURNAL OF MICROBIOLOGY & BIOTECHNOLOGY, vol.28, no.2, pp.767-776, 2012 (SCI-Expanded)

V. **Efficacy of modified yeast extract and HSCAS containing mycotoxin adsorbent on ruminal binding characteristics of various aflatoxins Modifiye maya ekstraktı ve HSCAS içeren mikotoksin bağlayıcının rumende aflatoksinleri bağlama etkinliği**
Akkaya M. R., Bal M. A.
Kafkas Universitesi Veteriner Fakultesi Dergisi, vol.18, no.6, pp.951-955, 2012 (SCI-Expanded)

VI. **Antimicrobial susceptibilities of Coagulase-Negative Staphylococci (CNS) and Streptococci from bovine subclinical mastitis cases**
Bal E. B. B., Bayar S., Bal M. A.
JOURNAL OF MICROBIOLOGY, vol.48, no.3, pp.267-274, 2010 (SCI-Expanded)

VII. **Interaction between particle sizes of alfalfa hay and corn grain on milk yield, milk composition, chewing activity, and ruminal pH of dairy cows**
Bal M. A., Bal E. B. B.
TURKISH JOURNAL OF VETERINARY & ANIMAL SCIENCES, vol.34, no.1, pp.83-89, 2010 (SCI-Expanded)

VIII. **Interrelationship between nutrient and microbial constituents of ensiled whole-plant maize as affected by morphological parts**
Bal M. A., Bal E. B. B.
International Journal of Agriculture and Biology, vol.11, no.5, pp.631-634, 2009 (SCI-Expanded)

IX. **Effects of dim light at night on milk yield, milk composition and endocrine profile of lactating dairy cows**
Bal M. A., Penner G. B., Oba M., Kennedy A. D.
CANADIAN JOURNAL OF ANIMAL SCIENCE, vol.88, no.4, pp.609-612, 2008 (SCI-Expanded)

X. **Effects of hybrid type, stage of maturity, and fermentation length on whole plant corn silage quality**
Bal M. A.
Turkish Journal of Veterinary and Animal Sciences, vol.30, no.3, pp.331-336, 2006 (SCI-Expanded)

XI. **Comparison of in situ nutrient disappearance of alternative maize milling by-product feeds in lactating dairy cows**
Bal M. A., Shaver R.
South African Journal of Animal Science, vol.36, no.1, pp.7-12, 2006 (SCI-Expanded)

XII. **Stage of maturity, processing, and hybrid effects on ruminal in situ disappearance of whole-plant corn silage**
Bal M. A., Shaver R., Shinners K., Coors J., Lauer J., Straub R., Koegel R.
ANIMAL FEED SCIENCE AND TECHNOLOGY, vol.86, no.1-2, pp.83-94, 2000 (SCI-Expanded)

XIII. **Processing whole-plant corn silage with crop processing rolls on a pull-type forage harvester**
Shinners K., Jirovec A., Shaver R., Bal M. A.
Applied Engineering in Agriculture, vol.16, no.4, pp.323-331, 2000 (SCI-Expanded)

XIV. **Processing wilted alfalfa with crop processing rolls on a pull-type forage harvester**
Shinners K., Jirovec A., Shaver R., Bal M. A.
Applied Engineering in Agriculture, vol.16, no.4, pp.333-340, 2000 (SCI-Expanded)

XV. **Influence of mechanical processing on utilization of corn silage by lactating dairy cows**
Dhiman T., Bal M. A., Wu Z., Moreira V., Shaver R., Satter L., Shinners K., Walgenbach R.
JOURNAL OF DAIRY SCIENCE, vol.83, no.11, pp.2521-2528, 2000 (SCI-Expanded)

XVI. **Corn silage hybrid effects on intake, digestion, and milk production by dairy cows**
Bal M. A., Shaver R., Al-Jobeile H., Coors J., Lauer J.
JOURNAL OF DAIRY SCIENCE, vol.83, no.12, pp.2849-2858, 2000 (SCI-Expanded)

XVII. **Crop processing and chop length of corn silage: Effects on intake, digestion, and milk production by dairy cows**
Bal M. A., Shaver R., Jirovec A., Shinners K., Coors J.

JOURNAL OF DAIRY SCIENCE, vol.83, no.6, pp.1264-1273, 2000 (SCI-Expanded)

XVIII. **Effect of dietary thiamin supplementation on milk production by dairy cows**
Shaver R., Bal M. A.
JOURNAL OF DAIRY SCIENCE, vol.83, no.10, pp.2335-2340, 2000 (SCI-Expanded)

XIX. **Impact of the maturity of corn for use as silage in the diets of dairy cows on intake, digestion, and milk production**
Bal M. A., Coors J., Shaver R.
JOURNAL OF DAIRY SCIENCE, vol.80, no.10, pp.2497-2503, 1997 (SCI-Expanded)

Articles Published in Other Journals

I. **Antimicrobial Susceptibilities of Commensal Escherichia coli Isolates Recovered from Cloacal Samples of Japanase Quails and Chickens in Turkey**
Buyukunal E. B., Albazaz R. I., Bal M. A.
Pakistan Journal of Zoology, vol.51, no.4, pp.1439-1445, 2019 (Scopus)

II. **Rumen pH'sını Düzenleyici Katkı Maddeleri ve Etkileri**
BAL M. A.
Türkiye Klinikleri Journal of Animal Nutrition and Nutritional Diseases-Special Topics, vol.3, no.3, pp.161-170, 2017 (Peer-Reviewed Journal)

III. **Molecular tracking of cultivable lactic acid bacteria from digestive tract of Japanese quail (Coturnix coturnix japonica) fed with various grain sources**
BÜYÜKÜNAL E. B., BAL M. A., Hussein A.
Research Opinions in Animal and Veterinary Sciences, no.7, pp.33-41, 2017 (Peer-Reviewed Journal)

IV. **Antimicrobial susceptibility of large intestinal Escherichia coli isolates from cattle and sheep abattoir samples**
BÜYÜKÜNAL BAL E. B., MAHMOOD K., BAL M. A.
Research Opinions in Animal and Veterinary Sciences, vol.6, no.7, pp.211-217, 2016 (Peer-Reviewed Journal)

V. **Rumen Sıvısında İmmuno Affinite Kolon IAK ve Yüksek Performanslı Sıvı Kromatografisi HPLC Kombinasyonu ile Aflatoksinlerin Tayini**
AKKAYA M. R., ATALAY A. İ., BAL M. A.
Animal Health Production and Hygine, vol.4, no.2, pp.439-443, 2015 (Peer-Reviewed Journal)

VI. **Regional Distribution of Aflatoxin and Ochratoxin A Contaminated Beef and Dairy Cattle Feeds in Turkey**
AKKAYA M. R., BAL M. A.
Animal Health Production and Hygine, vol.2, no.1, pp.162-166, 2013 (Peer-Reviewed Journal)

VII. **Application of PCR RFLP of gap gene method as a molecular typing tool for coagulase negative Staphylococci from bovine and human origin identified with VITEK 2**
BÜYÜKÜNAL BAL E. B., BAL M. A., İşevi T., YULA E.
African Journal of Microbiology Research, vol.4, no.9, pp.775-782, 2010 (Peer-Reviewed Journal)

VIII. **Determination of nutritive value of wild chicory (Cichorium intybus) forage harvested at different maturity stage using in vitro and in situ measurements**
Ozturk D., Bal M. A., Erol A., Sahin M., Ozkan C., Karakas E., Ata M., Karabay P.
Pakistan Journal of Biological Sciences, vol.9, no.2, pp.253-259, 2006 (Scopus)

IX. **Nutritive value of sainfoin (Onobrychis viciaefolia) harvested at different maturity stages**
Bal M. A., Ozturk D., Aydin R., Erol A., Ozkan C., Ata M., KARAKAŞ E., Karabay P.
Pakistan Journal of Biological Sciences, vol.9, no.2, pp.205-209, 2006 (Scopus)

X. **Effects of black seed (Nigella sativa L.) supplementation on feed efficiency, egg yield parameters and shell quality in chickens**
Aydin R., Bal M. A., Ozuğur A. K., Toprak H. H. C., Kamalak A., Karaman M.
Pakistan Journal of Biological Sciences, vol.9, no.2, pp.243-247, 2006 (Scopus)

XI. **Effects of sulfur containing supplements on ruminal fermentation and microbial protein synthesis**
BAL M. A., ÖZTÜRK D.
Res. J. Anim. and Vet. Sci., vol.1, pp.33-36, 2006 (Peer-Reviewed Journal)

Books & Book Chapters

I. **UTILIZATION OF NIGELLA SATIVA (BLACK SEED) IN LIVESTOCK PRODUCTION**
BAL M. A., DEVECİ A.
in: Functional Foods and Nutraceuticals: Bioactive Compounds, Haci Ahmet DEVECİ, Editor, Livre de Lyon, Lyon, pp.149-158, 2022

II. **Ruminantlarda Sindirim**
BAL M. A.
in: Dukes Veteriner Fizyoloji, Sedat Yıldız, Armağan Hayırlı, Mehmet Ali Bal, Editor, Medipres, Malatya, pp.439-473, 2008

Refereed Congress / Symposium Publications in Proceedings

I. **Kaba Yem ve TMR Partikül Büyüklüğünün Süt Verimi ve Kompozisyonu ile Hayvan Sağlığı Üzerine Etkisi**
Bal M. A.
4. ULUSLARARASI HAYVAN BESLEME KONGRESİ, Antalya, Turkey, 29 February - 03 March 2024, pp.202

II. **THE PHYSICAL AND FERMENTATION PROPERTIES OF VARIOUS SILAGES PRODUCED IN COMMERCIAL FARMS FROM DIFFERENT PROVINCES OF KAHRAMANMARAS**
Ali Kasra A. A., Bal M. A.
International Ege Agriculture Congress, İzmir, Turkey, 1 - 03 November 2023, pp.278-297

Supported Projects

BAL M. A., ASLAN S., BULUT Z., KARAGÖZOĞLU F., GİRGİN H., Project Supported by Higher Education Institutions, Sığırcılık işletmelerinde hazırlanan ve yem fabrikalarında üretilen yemlerin (kaba, kesif, karma) besin madde sindirilebilirliklerinin in vitro yöntemlerle belirlenmesi ve hayvansal verim parametrelerinin iyileştirilmesi, 2023 - Continues
ÇABUK M., SEMEN Z., GİRGİN H., BAL M. A., GÜVENÇ BAYRAM G., ASLAN S., ÇOMAK İ., KARAGÖZOĞLU F., Project Supported by Higher Education Institutions, İzmirKiraz İlçesinde Üretilen Silajların Besin Madde İçeriği ve Silaj Kalitesinin Belirlenmesi, 2023 - Continues
Bal M. A., Project Supported by Higher Education Institutions, Bazı meyve ve sebze posalarının besin madde içerikleri ile potansiyel sindirilebilirliklerinin gaz üretim tekniği ile belirlenmesi, 2016 - 2017
Bal M. A., Project Supported by Higher Education Institutions, The physical and fermentation properties of various silages produced in commercial farms from different provinces of Kahramanmaras, 2013 - 2014
Bal M. A., Project Supported by Higher Education Institutions, Silaj kaynaklı laktik asit bakterilerinin bakteriyosin içerikleri yönünden incelenmesi, 2010 - 2011
Bal M. A., Project Supported by Higher Education Institutions, Süt sığırı rasyonlarına ilave edilen canlı maya kültürünün (Saccharomyces cerevisiae NCYC R618) laktasyon performansı ve rumen parametreleri üzerine etkisi, 2008 - 2010
Bal M. A., Kamalak A., TUBITAK Project, Gledicya Meyvesinin Katkı Maddesi Olarak Yonca Silajında Kullanımı, 2007 - 2009
Bal M. A., Project Supported by Higher Education Institutions, Süt sığırlarında aflatoksin B1 içeren yemlerin toksin bağlayıcılar ile kontrolü ve aflatoksin M1 oluşumunun saptanması, 2005 - 2007
Bal M. A., TUBITAK Project, Süt sığırlarında rasyon fiziksel formunun süt kompozisyonu , ruminal fermantasyon ve sindirilebilirlik üzerine etkisi, 2003 - 2006

Bal M. A., Özköse E., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Düşük Kaliteli Kaba Yemlerin Silaj Yapımında Kullanılmasına ve Sindirilebilirliğinin Artırılmasına Yönelik Olarak Fungal Enzimlerden Yararlanılarak İnokülant Olarak Kullanılan Laktik Asit Bakterilerinin Modifikasyonu, 2003 - 2005