

## **Prof. MEHMET ALİ BAL**

### **Personal Information**

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### **International Researcher IDs**

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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 Eylül University, Veteriner Fakültesi, Zootekni ve Hayvan Besleme Bölümü, 2023 - Continues

Professor, Gaziantep University, İslahiye Vocational School, Department Of Veterinary, 2018 - 2023

Professor, Kahramanmaraş Sutcu Imam University, Faculty Of Agriculture, Department Of Zootechnics, 2015 - 2018

Associate Professor, Kahramanmaraş Sutcu Imam University, Faculty Of Agriculture, Department Of Zootechnics, 2010 - 2015  
Assistant Professor, Kahramanmaraş Sutcu Imam University, Faculty Of Agriculture, Department Of Zootechnics, 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 Vocational School, Department Of Veterinary, 2021 - 2023  
Head of Department, Gaziantep University, İslahiye Vocational School, Department Of Plant And Animal Production, 2018 - 2021

## Courses

Kedi ve Köpeklerde Beslenme İlkeleri, Undergraduate, 2023 - 2024  
Hayvan Besleme ve Beslenme Hastalıkları, Undergraduate, 2023 - 2024  
Yemler, yem hijyeni ve teknolojisi, Undergraduate, 2023 - 2024  
Yaban Hayatı ve Ekoloji, Undergraduate, 2023 - 2024  
Hayvan Yetiştiriciliği, Associate Degree, 2021 - 2022  
Hayvan Besleme, Associate Degree, 2020 - 2021  
Hastalıklar Bilgisi, Associate Degree, 2019 - 2020  
Süt Sığırı İşletmelerinde Yönetim Teknikleri, Postgraduate, 2018 - 2019  
Buzağı Beslenmesi ve Yetiştirilmesi, Postgraduate, 2017 - 2018  
HAYVAN BESLEMEDE MİKOTOKSİNLERDEN KORUNMA ve KONTROL YÖNTEMLERİ, Doctorate, 2016 - 2017  
Laktasyon Biyolojisi, Postgraduate, 2016 - 2017  
Silaj Biyokimyası ve Mikrobiyolojisi, Doctorate, 2016 - 2017  
Zooloji, Undergraduate, 2016 - 2017  
MEZBAHA ÜRÜNLERİ TEKNOLOJİSİ, Undergraduate, 2015 - 2016

## 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 fermentasyonunda 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 bağlayıcınının rumende aflatoksinleri bağlama etkinliği**  
Akkaya M. R., Bal M. A.  
Kafkas Üniversitesi Veteriner Fakültesi 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., Shinnors 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**  
Shinnors 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**  
Shinnors 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., Shinnors 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., Shinnors 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 Japanese 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 Hygiene, 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 Hygiene, 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, Hacı 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., GİRĞİN 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 Kahramanmaraş, 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, Glediçya Meyvesinin Katkı Maddesi Olarak Yonca Silajında Kullanımı, 2007 - 2009

Bal M. A., Project Supported by Higher Education Institutions, Süt sığırlarında aflatoxin B1 içeren yemlerin toksin bağlayıcılar ile kontrolü ve aflatoxin 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 İnokulant Olarak Kullanılan Laktik Asit Bakterilerinin Modifikasyonu, 2003 - 2005