

## DOÇ. DR. AYŞE HANDAN BAYSAL

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1. **Adı Soyadı:** Ayşe Handan Baysal
2. **Doğum Tarihi:** 09.04.1970
3. **Unvanı:** Doçent
4. **Öğrenim Durumu:**

Derece	Alan	Üniversite	Yıl
Lisans	Gıda Mühendisliği	Ege Üniversitesi	1993
Y. Lisans	Gıda Mühendisliği	Ege Üniversitesi	1996
Doktora	Gıda Mühendisliği	Ege Üniversitesi	2002

5. **Akademik Unvanlar:**

**Doçentlik Tarihi :** 15.10.2015

**Yardımcı Doçentlik Tarihi :** 05.07.2011 (Sayı:B.30.2.İYE.0.17.12.00/353)

### 6. Yönetilen Yüksek Lisans ve Doktora Tezleri

#### 6.1. Yüksek Lisans Tezleri

1. Mirobiological characterization of 'Hurma' olives grown in Karaburun Peninsula  
(Karaburun Yarımadasında yetişen 'Hurma' zeytininin mikrobiyolojik karakterizasyonu, Temmuz 2013 - Gözde Seval KARSLI-Tamamlandı)
2. Real-time PCR as a molecular tool for the enumeration of probiotics in commercial products  
(Ticari ürünlerdeki probiyotiklerin sayımı için moleküler bir araç olarak gerçek zamanlı PCR, Temmuz 2016 - Ödül ÖZ - Tamamlandı)
3. Differentiation of filamentous fungi by polymerase chain reaction (PCR) and Fourier transform infrared (FTIR) spectroscopy  
(Filamentöz fungusların polimeraz zincir reaksiyonu (PCR) ve Fourier dönüşüm kızılılolesi (FTIR) spektroskopisi ile ayırt edilmesi, Temmuz 2017 - Sinem GÜNGÖR - Tamamlandı)
4. Developing probiotic lozenges to improve oral health  
(Ağız sağlığını iyileştirmek için probiyotik pastil geliştirilmesi, Temmuz 2019 - Menşure ELVAN - Tamamlandı) Tez Eş danışmanı (danışman Prof.Dr. H. Şebnem HARSA)
5. Environmental factors influencing bacterial biofilm formation and inactivation  
(Bakteriyel biyofilm oluşumu ve inaktivasyonunu etkileyen çevresel faktörler, -devam ediyor - Mert ÜREĞEN)
6. Inactivation of *Bacillus subtilis* and *Bacillus cereus* vegetative cells and spores by UV-C light  
(*Bacillus subtilis* ve *Bacillus cereus* vejetatif hücreleri ve sporlarının UV-C ışık ile inaktivasyonu, -devam ediyor - Selen ALKAY)

#### 6.2. Doktora Tezleri

1. Antimicrobial, antioxidant properties and chemical composition of some spices/herbs  
(Bazı baharat/bitkilerin antimikroiyal, antioksidan özellikleri ve kimyasal bileşimleri, Aralık 2013 - Tamamlandı)
2. Resistance properties and control of *Alicyclobacillus acidoterrestris*  
(*Alicyclobacillus acidoterrestris*'in kontrolü ve direnç özellikleri, Temmuz 2014 - Çelenk MOLVA - Tamamlandı)
3. Applications of MID-IR spectroscopy for identification of wine and olive yeasts and characterization of antimicrobial activities of phenolics on yeasts  
(Şarap ve zeytin mayalarının tanımlanması ve fenoliklerin mayalar üzerine antimikroiyel aktivitelerinin karakterizasyonu için MID-IR spektroskopisi uygulamaları, Aralık 2015 - Canan CANAL - Tamamlandı) Tez Eş danışmanı (danışman Doç.Dr. Banu ÖZEN)

## 7. Yayınlar

### 7.1. Uluslararası hakemli dergilerde yayınlanan makaleler (SCI)

1. CANAL, C., OZEN, B., **BAYSAL, A.H.** Characterization of antimicrobial activities of olive phenolics on yeasts using conventional methods and mid-infrared spectroscopy. *Journal of Food Science and Technology*- Mysore, 56(1): 149-158 (2019)
2. MOLVA, C., **BAYSAL, A.H.** Modeling growth of *Alicyclobacillus acidoterrestris* DSM 3922 type strain vegetative cells in the apple juice with nisin and lysozyme. *AIMS Microbiology*, 3(2): 315-322 (2017)
3. SOZBİLEN, G.S., **BAYSAL, A.H.** Microbial profile and bacterial characterisation of naturally debittered Hurma olives compared to non-debittered Erkence variety during ripening period. *International Journal of Food Science and Technology*, 51(9): 2099-2105 (2016)
4. MOLVA C., **BAYSAL, A.H.** The effect of sporulation medium on *Alicyclobacillus acidoterrestris* guaiacol production in apple juice. *LWT - Food Science and Technology*, 69: 454-457 (2016)
5. ZENGİN, H., **BAYSAL, A.H.** Antioxidant and antimicrobial activities of thyme and clove essential oils and application in minced beef. *Journal of Food Processing and Preservation*, 39(6): 1261-1271 (2015)
6. MOLVA C., **BAYSAL, A.H.** Evaluation of bioactivity of pomegranate fruit extract against *Alicyclobacillus acidoterrestris* DSM 3922 vegetative cells and spores in apple juice. *LWT - Food Science and Technology*, 62(2): 989-995 (2015)
7. MOLVA C., **BAYSAL, A.H.** Effects of pomegranate and pomegranate-apple blend juices on the growth characteristics of *Alicyclobacillus acidoterrestris* DSM 3922 type strain vegetative cells and spores. *International Journal of Food Microbiology*, 200: 52-56 (2015)
8. MOLVA C., **BAYSAL, A.H.** Analysis of *Alicyclobacillus acidoterrestris* spores from different sporulation media subjected to wet-heat. *Microbiology Research*, 6(1): 11-13 (2015)
9. MOLVA C., **BAYSAL, A.H.** Antimicrobial activity of grape seed extract on *Alicyclobacillus acidoterrestris* DSM 3922 vegetative cells and spores in apple juice. *LWT - Food Science and Technology*, 60(1): 238-245 (2015)
10. **BAYSAL, A.H.** Comparison of conventional culture method and fluorescent in situ hybridization technique for detection of *Listeria* spp. in ground beef, turkey, and chicken breast fillets in Izmir, Turkey. *Journal of Food Protection*, 77(12): 2021-2030 (2014)
11. ZENGİN, H., **BAYSAL, A.H.** Antibacterial and antioxidant activity of essential oil terpenes against pathogenic and spoilage-forming bacteria and cell structure-activity relationships evaluated by SEM microscopy. *Molecules*, 19(11): 17773-17798 (2014)
12. MOLVA C., **BAYSAL, A.H.** Effect of sporulation medium on wet-heat resistance and structure of *Alicyclobacillus acidoterrestris* DSM 3922-type strain spores and modeling of the inactivation kinetics in apple juice. *International Journal of Food Microbiology*, 189: 82-88 (2014)
13. **BAYSAL, A.H.**, MOLVA Ç., ÜNLÜTÜRK, A. UV-C light inactivation and modeling kinetics of *Alicyclobacillus acidoterrestris* spores in white grape and apple juices. *International Journal of Food Microbiology*, 166: 494-498 (2013)
14. UNLUTURK, S., ATILGAN, M.R., **BAYSAL, A.H.**, UNLUTURK, M.S. Modeling inactivation kinetics of liquid egg white exposed to UV-C irradiation. *International Journal of Food Microbiology*, 142: 341-347 (2010).
15. **BAYSAL, A.H.**, ICIER, F. Inactivation kinetics of *Alicyclobacillus acidoterrestris* spores in orange juice by ohmic heating: Effects of voltage gradient and temperature on inactivation. *Journal of Food Protection*, 73(2): 299-304 (2010)
16. ATILGAN, M.R., UNLUTURK, S., **BAYSAL, A.H.**, TARI, C. Use of UV-C radiation as a non-thermal process for liquid egg products (LEP). *Journal of Food Engineering*, 85: 561-568 (2008)
17. **BAYSAL, A.H.**, ÜNLÜTÜRK, A. Efficacy of selected chemicals on survival of *Salmonella* on turkey meat. *Sciences des Aliments*, 27(1): 73-82 (2007)
18. **BAYSAL, A.H.**, ÜNLÜTÜRK, A. Effects of selected chemicals on microbial stability of turkey meat. *Sciences des Aliments*, 27(1): 59-71 (2007)
19. **DİNÇER, A.H.**, BAYSAL, T. Decontamination techniques of pathogen bacteria in meat and poultry. *Critical Reviews in Microbiology*, 30, 197-204. (2004)
20. TURANTAŞ, F., GÖKSUNGUR, Y., **DİNÇER, A.H.**, ÜNLÜTÜRK, A., GÜVENÇ, U., ZORLU, N. Effect of potassium sorbate and sodium benzoate on microbial population and fermentation of black olives. *Journal of the Science of Food and Agriculture*, 79, 1197-1202. (1999)

## **7.2. Uluslararası diğer hakemli dergilerde yayınlanan makaleler**

1. KOMEN, G., **BAYSAL, A.H.**, HARSA, S., Gliadin Degradation Ability of Artisanal Lactic Acid Bacteria, The Potential Probiotics from Dairy Products - Journal of Nutritional Therapeutics, 2(3): 163-172. DOI: <http://dx.doi.org/10.6000/1929-5634.2013.02.03.4> (2013)
2. **DİNÇER, A.H.**, ÜNLÜTÜRK, A. Thermal resistance of *Bacillus coagulans* in phosphate buffer and tomato juice. Advances in Food Sciences, 24, 144-147. (2002)

## **7.3. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (*Proceedings*) basılan bildiriler**

1. YILDIRIM, I.P., **BAYSAL, A.H.** UV-C Irradiation for Inactivation of *Escherichia coli* and *Staphylococcus aureus* on Blueberries. International Conference on Food and Biosystems Engineering, FaBE2019 Proceedings pp.177 (Abstract), Crete island, 30 May – 02 June (2019). Oral presentation.
2. CETIN, E.N., **BAYSAL, A.H.** UV-C Light for Inactivation of *Staphylococcus aureus* on Agar Medium. International Conference on Food and Biosystems Engineering, FaBE2019 Proceedings pp.196 (Abstract), Crete island, 30 May – 02 June (2019). Poster presentation.
3. YILDIRIM, I.P., **BAYSAL, A.H.** UV-C Irradiation for Decontamination of Blueberries and Redberries. 3rd International Congress on Food Technology, Association of Food & Nevşehir Hacı Bektaş University/Turkey, Cappadocia, Nevşehir, Turkey, 10-12 October (2018). (Abstract). Poster presentation.
4. MOLVA, C, **BAYSAL, A.H.** Control of *Alicyclobacillus acidoterrestris* by pomegranate extract in apple juices. 5th International Conference Sustainable Postharvest and Food Technologies-INOPTEP2017 and 29th National Conference Processing and Energy in Agriculture-PTEP2017. Vršac, Serbia, 23-28 April (2017). Oral presentation. Oral presentation.
5. GUNGOR, S., **BAYSAL, A.H.** Application of Fourier transformed mid infrared FTIR spectroscopy as a technique for the identification of *Aspergillus* and *Penicillium* species. Current and Future Trends in Food Mycology-Methods, Taxonomy, and Emerging Problems. Freising, Germany, June 13-15 (2016). Oral presentation.
6. CANAL, C., **BAYSAL, A.H.**, ÖZEN, B. Characterization of yeast flora of hurma olives grown in Karaburun peninsula in Turkey using molecular methods. The International Food Congress "Novel Approaches in Food Industry (NAFI 2014)", Kuşadası, Turkey, 26-29 May (2014). Oral presentation.
7. CANAL, C., **BAYSAL, A.H.**, OZEN, B. Characterization of yeast flora of 'Hurma' olives grown in Karaburun Peninsula in Turkey. "2nd International Conference on Microbial Diversity", Italy, Turin, 23-25 October (2013). Poster presentation.
8. ÖZCAN, D., **BAYSAL, A.H.** DNA-Based Molecular Characterization of Fungi Isolated FROM 'Hurma' Olive. "2nd International Conference on Microbial Diversity", Italy, Turin, 23-25 October (2013). Poster presentation.
9. KARSLI, G.S., **BAYSAL, A.H.** Characterization and Identification of Bacteria Isolated from 'Hurma' Olives Grown in Karaburun Peninsula. "2nd International Conference on Microbial Diversity", Italy, Turin, 23-25 October (2013). Poster presentation.
10. **BAYSAL, A.H.**, MOLVA, Ç. Thermal inactivation of *Alicyclobacillus acidoterrestris* spores grown on different media. Microbial Spoilers in Food 2013, France, Quimper, July, 1-3, (2013). Poster presentation.
11. **BAYSAL, A.H.**, MOLVA, Ç. UV-C inactivation of *Alicyclobacillus acidoterrestris* spores from different media. Microbial Spoilers in Food 2013, France, Quimper, 1-3 July (2013). Poster presentation.
12. **BAYSAL, A.H.**, KARSLI, G.S. Fungi isolated from Hurma olives grown in Karaburun peninsula "CBS One Fungus = Which genes" symposium, Holland, Amsterdam, 10-11 April (2013).
13. BAYSAL, T., GOKSUNGUR, Y., **BAYSAL A.H.**, DAGBAGLI, S., KANDEMIR GIRAY N.S. Optimization of pullulan production by *Aeurobasidium pullulans* and investigation of the effect of pullulan films containing chemical preservatives antioxidant and antimicrobial on the shelf life of intermediate moisture foods. (Abstract). International Food Technology Annual Meeting, IFT, Las Vegas, USA, 25-29 June (2012). Oral presentation.
14. **BAYSAL, A.H.**, MOLVA, Ç. Antimicrobial Effectiveness of Natural Compounds Against *Alicyclobacillus acidoterrestris* under different temperatures. (Abstract). International Food Technology Annual Meeting, IFT, Las Vegas, USA, 25-29 June (2012). Poster presentation.
15. **BAYSAL, A.H.**, YAVUZDURMA,Z H. Chemical Composition and Antimicrobial Effect of Turkish Bay laurel. (Abstract). International Food Technology Annual Meeting, IFT, Las Vegas, USA, 25-29 June (2012). Poster presentation.
16. **BAYSAL, A.H.** Detection of Microbial Ecology in Wine. 35th World Congress of Vine and Wine, 10th General Assembly of the OIV, Izmir, Turkey, 18-22 June (2012). (Fulltext) Poster presentation.
17. **BAYSAL, A.H.** Microbial safety and shelf life extension of poultry meat products by fruit based extracts and derived products. NEEFOOD2012 The First North and East European Congress on Food St. Petersburg, Russia, 22-24 April (2012) (Abstract). Poster presentation.

18. KARSLI G.S., **BAYSAL A.H.** Characterization of microbial flora of Hurma olives grown in Karaburun Peninsula in Turkey. NEFOOD2012 The First North and East European Congress on Food (2012). (Abstract). Oral presentation.
19. **BAYSAL, A.H.**, PLANCHON S., GAGNIER S., BALIARDA A., GOHAR M., NIELSON-LEROUX C., BROUSSOLLE V., CARLIN F. Sporulation and resistance properties of *Bacillus weihenstephanensis* grown in chemically defined synthetic media, natural and artificial soil media, biofilm and insect larvae. 5th European Spores Conference London (GB) Royal Holloway, University of London, London, United Kingdom, 16th - 19th April (2012). Poster presentation.
20. KOMEN, G., **BAYSAL, A.H.**, HARSA, S., Recent developments in formulating gluten-free food products. International Symposium on Health Benefits of Foods-From Emerging Science to Innovative Products, 2011, October 5-7, Prague, Czech Republic, (2011). Poster presentation.
21. **BAYSAL, A.H.**, Identification of foodborne yeasts using culture-independent methods. 2nd International ISEKI Food Conference 2011, August 31-September 2, Milan, Italy, (2011). Poster presentation.
22. **BAYSAL, A.H.**, KAYA, Z., ATILGAN, M.R., ÜNLÜTÜRK, S. Inhibition of sorbic and benzoic acids and short wave ultraviolet (UV-C) light treatment on *Saccharomyces cerevisiae* in apple juice. The International Food Congress "Novel Approaches in Food Industry (NAFI 2011)" May 26, 2011 - May 29, Cesme, Izmir, (2011). Poster presentation.
23. KOMEN, G., **BAYSAL, A.H.**, HARSA, S. Characterization of Gliadins During Sourdough Fermentation for Gluten Intolerance, pp. 191. *Vth International Bioengineering Congress*, Izmir, Turkey, 16-19 June (2010). Poster presentation.
24. KOMEN, G., **BAYSAL, A.H.**, HARSA, S. Structural Changes of Gliadins During Sourdough Fermentation, 11<sup>th</sup> International Congress on Engineering and Food (ICEF2011) "Food Process Engineering in a Changing World", Athens, Greece, 22-26 May (2011). Oral presentation.
25. **BAYSAL, A.H.**, Prevalence of *Listeria* spp. in Retail Raw Ground Beef in Izmir, Turkey: A Comparison of Standard Cultural Method and Fluorescent *in situ* Hybridization (FISH) Technique for Detection, pp. 120. *ISOPOL XVII International Symposium on Problems of Listeriosis*, Porto, Portugal, 5-8 May (2010). Poster presentation.
26. KOMEN G., **BAYSAL A.H.**, HARSA S. Degradation of toxic gliadin peptides during sourdough fermentation by using lactic acid probiotic bacteria, pp. 31. *COST 928 Final Workshop* (31), Naples, Italy, 2-4 March (2010). Poster presentation.
27. KOMEN G, BAYSAL AH, HARSA S Sourdough Fermentation as a Promising Approach to Gluten free Diet. Xth International Gluten Workshop, Clermont-Ferrand, France, 7-9 September, (2009). (Fulltext)
28. **BAYSAL, A.H.**, Inhibition of *S. typhimurium* by Lysozyme Combined with Olive Leaf Extract in Edible Pullulan Film Coated on Chicken Breast Fillets, pp. 83. *4th International Symposium on Food Packaging—Scientific Developments supporting Safety and Quality*, Prague, Czech Republic, 19-21 November (2008). Poster presentation.
29. HAKGUDER, B., ATILGAN, M.R., **BAYSAL, A.H.**, UNLUTURK, S. Antimicrobial Efficacy of UV-C Radiation on *Escherichia coli* K-12, *Escherichia coli* ATCC 8739 and *Escherichia coli* O157:H7 in White Grape Juice, *Delegate Manual, O17.3. 1st European Food Congress, Session Food Processing—From Substrate to Food Safety 2—Decontamination*, Ljubljana, Slovenia, 4-9 November (2008). Oral presentation.
30. ALTINELATAMAN, C., KOREL, F., **BAYSAL, A.H.**, Investigation of color change with lipid oxidation, chemical decomposition and microbial growth of cold stored sea bass (*Dicentrarchus labrax* L.) fillets by machine vision system. WEFTA 2008 38th WEFTA Annual Meeting Seafood from catch and aquaculture for a sustainable supply-Session 3. Future challenges in seafood safety and quality assessment. Florence, Italy, 17-19 September (2008). Oral presentation.
31. **BAYSAL, A.H.**, ICIER, F., Effects of Ohmic and Conventional Heating on *Alicyclobacillus acidoterrestris* Spores in Apple Juice Concentrate. FoodMicro2008 The 21st International ICFMH Symposium "Evolving Microbial Food Quality and Safety", Aberdeen, Scotland, United Kingdom, 1-4 September (2008). Poster presentation.
31. **BAYSAL, A.H.**, GOKSUNGUR Y., BAYSAL T., Harsa S. Effects of Pullulan-Based Edible Film Impregnated with Potassium Sorbate, EDTA and Ascorbic acid on the Microbiological Properties of Intermediate Moisture Apricot. FoodMicro2008 The 21st International ICFMH Symposium "Evolving Microbial Food Quality and Safety", Aberdeen, Scotland, United Kingdom, 1-4 September (2008). Poster presentation.
33. **BAYSAL A.H.**, HARSA S. Survival of *Escherichia coli*, *Staphylococcus aureus*, *Bacillus cereus* and *Listeria innocua* During Refrigerated Storage of 'Şalgam' Juice-A Traditional Fermented Turkish Beverage. FoodMicro2008 The 21st International ICFMH Symposium "Evolving Microbial Food Quality and Safety", Aberdeen, Scotland, United Kingdom, 1-4 September (2008). Poster presentation.
34. ATILGAN M.R., **BAYSAL A.H.**, UNLUTURK S.. Antimicrobial Efficacy of UV-C Radiation on *Escherichia coli* K-12, *Escherichia coli* O157:H7 and *Listeria innocua* in Liquid Egg White. FoodMicro2008 The 21st International ICFMH Symposium "Evolving Microbial Food Quality and Safety", Aberdeen, Scotland, United Kingdom, 1-4 September (2008). Poster presentation.

35. **BAYSAL, A.H.**, UNLUTURK S. Efficacy of short wave ultraviolet light (UV-C) irradiation on *Alicyclobacillus acidoterrestris* spores in grape juice. XII. International Congress of Bacteriology and Applied Microbiology & XII. International Congress of Mycology, Istanbul, Turkey, 5-9 Ağustos (2008). Poster presentation.
36. **BAYSAL, A.H.**, ÜNLÜTÜRK, S. Efficacy of short wave ultraviolet light (UV-C) irradiation on *Alicyclobacillus acidoterrestris* spores in apple juice. 2nd International Congress on Food and Nutrition, İstanbul, 24-26 October (2007). Oral presentation.
37. ATILGAN, M.R., UNLUTURK, S., **BAYSAL, A.H.**, Thermal and non-thermal processing of liquid egg products. 2nd International Congress on Food and Nutrition, İstanbul, 24-26 October (2007). Poster presentation.
38. BAYSAL, T., KANDEMIR, N.S., **BAYSAL, A.H.**, Effects of pullulan-based edible film impregnated with lysozyme and EDTA on the microbiological and physicochemical properties of fresh-cut iceberg lettuce and cucumber, FoodSmarts2007 IFT Annual Meeting & Food Expo, , Chicago, Illinois, USA, 28 July-1 August (2007). Oral presentation.
39. **BAYSAL, A.H.**, BAYSAL, T.. Effects of nonthermal food processing methods on the functional properties of fruit and vegetables. International Symposium on "Functional Foods in Europe-International Developments in Science and Health Claims", St. Julian's, Malta, 9-11 May (2007). Poster presentation.
40. **BAYSAL, A.H.**, ÇAM, M., HARSA, Ş., Functional properties of 'Şalgam Juice': A traditional fermented Turkish beverage. International Symposium on "Functional Foods in Europe-International Developments in Science and Health Claims", St. Julian's, Malta, 9-11 May (2007). Poster presentation.
41. ATILGAN, M.R., UNLUTURK, S., **BAYSAL, A.H.**, TARI, C. Short Wave Ultraviolet Light (UVC) Inactivation of *Escherichia coli* (ATCC 8739) in Liquid Egg White, 5<sup>th</sup> International Congress on Food Technology "Consumer Protection through Food Process Improvement and Innovation in the Real World", Thessaloniki, Greece, March (2007). Oral presentation.
42. **BAYSAL, A.H.**, BAYSAL, T. Edible Antimicrobial Coatings and Films on Fresh Fruit and Vegetables, 5<sup>th</sup> International Congress on Food Technology "Consumer Protection through Food Process Improvement and Innovation in the Real World", Thessaloniki, Greece, March (2007). Oral presentation.
43. **BAYSAL, A.H.**, BAYSAL, T. High pressure processing as a method for decontaminating poultry. XVIIth European Symposium on the Quality of Poultry Meat & XIth European Symposium on the quality of Eggs and Egg Products, 23-26 May, The Netherlands, 139, (2005). Poster presentation.
44. **BAYSAL, A.H.**, BAYSAL, T. Microbial Safety of Fresh Fruits and Vegetables, 3rd Central European Congress on Food, Sofia, Bulgaria, 22-24 May (2006). Oral presentation.
45. **BAYSAL, A.H.**, İÇİER, F. Inactivation of *B.licheniformis* Spores by Ohmic Heating of Milk. 3rd Central European Congress on Food, Sofia, Bulgaria, 22-24 May (2006). Poster presentation.
43. **BAYSAL, A.H.**, Biogenic Amines in Lactic Acid Fermented Vegetables, 3rd Central European Congress on Food, Sofia, Bulgaria, 22-24 May (2006). Poster presentation.
47. **BAYSAL, A.H.**, BAYSAL, T. Survival of pathogen bacteria in traditional fermented fruit and vegetable products, INTRADFOOD2005 Innovations in Traditional Foods, Polytechnical University of Valencia, Spain, 25-28 October, (2005). Oral presentation.
48. **BAYSAL, A.H.**, ÜNLÜTÜRK, A. Effects of Organic Acid and Phosphates on the Microbiological Stability and on survival of *Salmonella typhimurium* on Turkey Breast Meat, XVIIth European Symposium on the Quality of Poultry Meat & XIth European Symposium on the quality of Eggs and Egg Products, 23-26 May, The Netherlands, 138, (2005). Poster presentation.
49. **BAYSAL, A.H.**, BAYSAL, T. Probiotication of Fruit Juices, 2nd International Congress on Functional Foods and Nutraceuticals, İstanbul, Turkey, 4-6 May, (2006). Poster presentation.
50. **BAYSAL, A.H.** Phytochemicals in Fruits and Vegetables, 2nd International Congress on Functional Foods and, İstanbul, Turkey, 4-6 May, (2006). Poster presentation.
51. **BAYSAL, A.H.**, BAYSAL, T. Mycotoxins produced by heat resistant moulds and their importance in food industry, p.173, 2nd National Mycotoxin Symposium, İstanbul, May (2005). Poster presentation.
52. **BAYSAL, A.H.**, Natural antimicrobials for decontamination of pathogen bacteria in meat and poultry. 4th International Congress on Food Technology Accessing Useful Technologies...Optimizing Food Safety and Nutrition, Proceedings, 18-19 February, Athens, Greece, 20-25, (2005). Poster presentation.
53. **BAYSAL, A.H.**, BAYSAL, T. Alternative and rapid methods for microbiological control in the fruit juice industry. 4th International Congress on Food Technology Accessing Useful Technologies...Optimizing Food Safety and Nutrition, Proceedings, 18-19 February, Athens, Greece, 26-36, (2005). Oral presentation.
54. **DİNÇER, A.H.**, ÜNLÜTÜRK, A. Effects of lactic and fumaric acids on the microbiological stability of turkey breast meat. IX European Symposium on the Quality of Eggs and Egg Products & XV European Symposium on the quality of Poultry Meat, September, Kuşadası, Turkey, 269-277, (2001). Poster presentation.
55. **DİNÇER, A.H.**, ÜNLÜTÜRK, A., Thermal resistance of *Bacillus coagulans* in phosphate buffer and tomato juice, 4th International Conference on Agro and Food Physics, May, İstanbul, 81, (2000). Poster presentation.

#### **7.4. Yazılan uluslararası kitaplar veya kitaplarda bölümler**

1. **BAYSAL, A.H.** Short-Wave Ultraviolet Light Inactivation of Pathogens in Fruit Juices (pp. 463-510). In: *Fruit Juices: Extraction, Composition, Quality and Analysis* (910 p.) ISBN:978-0-12-802230-6, Academic Press, Elsevier Inc. (2018).

#### **7.5. Ulusal hakemli dergilerde yayınlanan makaleler**

1. ÜNLÜTÜRK, S., **BAYSAL, A.H.**, ATILGAN, M.R. "UV-C Uygulamasının Sıvı Yumurta Beyazının Mikrobiyolojik Kalitesi Üzerine Etkisi," *Gıda*, 35(5):363-369 (2010).
2. **DİNÇER, A.H.**, TURANTAŞ, F., ÜNLÜTÜRK, A. *Alicyclobacillus*: özellikleri, izolasyonu, sayıım yöntemleri ve meyve suyu sanayiinde önemi" (*Alicyclobacillus: properties, isolation, counting methods and importance in fruit juice industry*) *Gıda (Food)*, 6:73-79. (2001).

#### **7.6. Ulusal bilimsel toplantılarında sunulan ve bildiri kitabında basılan bildiriler**

1. **BAYSAL, A.H.**, GUNGOR, S., ÖZEN, B. *Alternaria* Türlerinin Tanımlanmasında Polimeraz Zincir Reaksiyonu (PCR) ve Fourier Dönüşüm Kızılıötesi (FTIR) Spektroskopisinin Uygulanması ve Karşılaştırması. 10. Gıda Mühendisliği Kongresi, Antalya 9-11 Kasım (2017).
2. **BAYSAL, A.H.**, MOLVA Ç. Meyve Sularında Bozulma Etmeni *Alicyclobacillus*'un Kontrolü için Alternatif İşleme Teknolojileri. TGDF Gıda Kongresi 2013, Antalya 12-14 Kasım (2013).
3. **BAYSAL, A.H.**, 'ÖZCAN D., KARSLI, G.S. "Hurma" Zeytininden İzole Edilen *Aspergillus* ve *Penicillium* Türleri. TGDF Gıda Kongresi 2013, Antalya 12-14 Kasım (2013).
4. **BAYSAL, A.H.** Floresanlı Yerinde Hibritleme (FISH) Yöntemi ile Gıdalarda Mikroorganizmaların Saptanması, s. 217-223. Türkiye 6. Gıda Mühendisliği Kongresi, Antalya, 6-9 Kasım (2009).
5. **BAYSAL, A.H.** Floresanlı Yerinde Hibritleme (FISH) Yöntemi ile İzmir'de *Escherichia coli* ve *Salmonella* Varlığının Kıyamada Saptanması, s. 209-215. Türkiye 6. Gıda Mühendisliği Kongresi, Antalya, 6-9 Kasım (2009).
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7. **BAYSAL, A.H.** Otellerde *Legionella* Kontaminasyonu, Ulusal Turizm Sempozyumu, Ege Üniversitesi, Turizm ve Otelcililik Yüksekokulu, Çeşme, 21-23 Kasım (2007).
8. **BAYSAL, A.H.** Çok az işlenmiş ve taze kesilmiş meyve ve sebzelerde patojen bakterilerin canlı kalması ve gelişmesi, Türkiye 9. Gıda Kongresi, Bolu, 24-26 Mayıs (2006).
9. **BAYSAL, A.H.** Alternative and rapid methods for microbiological control in the food industry, Food Congress2005, Ege University, Fac. of Eng. Food Eng. Dep., pp.305-308, İzmir, April (2005).
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#### **7.7. Diğer yayınlar**

1. **BAYSAL A.H.** Geleneksel, İmmünolojik, Moleküler ve Biyoalgılayıcı Temelli Saptama Yöntemleri. Sayfa: 331-382. Temel Gıda Mikrobiyolojisi. Editör: Prof.Dr. Dilek Heperkan ISBN:978-605-320-543-2, Nobel Akademik Yayıncılık Eğitim Danışmanlık Tic.Ltd.Şti. Basım sayısı:1, Sayfa Sayısı 610, Türkçe (Kitap Tercümesi) (2016). (TÜRKÇE KİTAP BÖLÜMÜ)
2. BİRİR M., **BAYSAL A.H.** Gıdalarda Mikrobiyal Bozulma İndikatörleri. Temel Gıda Mikrobiyolojisi. Editör: Prof.Dr. Dilek Heperkan ISBN:978-605-320-543-2, Nobel Akademik Yayıncılık Eğitim Danışmanlık Tic.Ltd.Şti. Basım sayısı:1, Sayfa Sayısı 610, Türkçe (Kitap Tercümesi) (2016). (TÜRKÇE KİTAP BÖLÜMÜ)
3. **BAYSAL A.H.** Yöntemlerin Birlikte Kullanımı ile Kontrol (Engel Kavramı). Temel Gıda Mikrobiyolojisi. Editör: Prof.Dr. Dilek Heperkan ISBN:978-605-320-543-2, Nobel Akademik Yayıncılık Eğitim Danışmanlık Tic.Ltd.Şti. Basım sayısı:1, Sayfa Sayısı 610, Türkçe (Kitap Tercümesi) (2016). (TÜRKÇE KİTAP BÖLÜMÜ)
4. **BAYSAL A.H.** Mikroorganizma Kaynaklı Enzimlerle Gıdaların Bozulması. Temel Gıda Mikrobiyolojisi. Editör: Prof.Dr. Dilek Heperkan ISBN:978-605-320-543-2, Nobel Akademik Yayıncılık Eğitim Danışmanlık Tic.Ltd.Şti. Basım sayısı:1, Sayfa Sayısı 610, Türkçe (Kitap Tercümesi) (2016). (TÜRKÇE KİTAP BÖLÜMÜ)
5. **BAYSAL, A.H.**. Probiyotik Meyve Suyu Üretilimi. Drink İçecek ve Teknolojileri Dergisi(110), 68-71 (2017).
6. MOLVA, C, **BAYSAL, A.H.**. Meyve Sularında Bozulma Etmeni *Alicyclobacillus acidoterrestris*'in Kontrolü için Alternatif Yöntemler. Gıda Teknolojisi(20), 66-69 (2016).
7. **BAYSAL A.H.** Elektrolize Yükseltgen Su. Bölüm 13. Sayfa: 331-382. Gıda Mühendisliğinde Isıl Olmayan Teknolojiler. Editörler: BAYSAL, T., İÇİER F. (2012). (TÜRKÇE KİTAP BÖLÜMÜ)
8. BAYSAL, T., İÇİER F., **BAYSAL, A.H.** Güncel Elektriksel Isıtma Yöntemleri, © SİDAS Medya, ISBN 978-605-87976-6-6 (2011). (TÜRKÇE KİTAP)

9. **BAYSAL, A.H., GENNARIS, S., LIKAR, P., PETERKA, D., POPESCU, O., VESKUS, T.** Risk Management in Production of Egg-Pasta. In Risk management by hygienic design and efficient sanitation programs, Edited by G. WIRTANEN & S. SALO VTT Symposium 261 VTT Technical Research Centre of Finland (2009) ISBN 978-951-38-7587-9 (soft back ed.) Copyright © VTT Technical Research Centre of Finland (2009) Pp.177-200.
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11. ROASTO, M., REINMULLER B., VOKK, R., **BAYSAL, A.H.D., POLANC, J., VESKUS, T., JUHKAM, K., TERENTIEVA, M., MAĆKIV, E.** Bacterial Foodborne Pathogens of Concern. Edited by G. WIRTANEN & S. SALO SYMP.248 VTT Technical Research Centre of Finland (2007) VTT (2007) Pp. 116-128.

## **8. Projeler**

### **YÜRÜTÜCÜ OLDUĞU PROJELER**

Projenin Adı: Bazı bitki ekstraktlarının antimikrobiyal ve antioksidan özelliklerinin belirlenmesi

Projenin Yürütücü: *Yrd.Doç. Dr. A.Handan BAYSAL*

Projenin Dönemi: 2012-2013

Destekleyen Kuruluş: İYTE-BAP

Proje No: 2012-07

Projenin Mevcut Durumu: Tamamlandı

Projenin Adı: Floresanlı Yerinde Hibritleme Yöntemi ile Bazı İndikatör ve Patojen Bakterilerin Çığ Kanatlı Etlerinde ve Kiyamada Saptanması (Detection of some indicator and pathogen bacteria in fresh poultry meat and ground beef by flurescent in situ hybridization method)

Projenin Yürütücü: *Dr. A.Handan BAYSAL (Uzman)*

Projenin Dönemi: 01/03/2008-01/03/2010

Destekleyen Kuruluş: *TÜBİTAK-TOVAG-3501*

Proje No: 107O690

Projenin Mevcut Durumu: Tamamlandı

Projenin Adı: Ohmik ısıtmanın bazı meyve suları ve konsantrelerinde *Alicyclobacillus acidoterrestris* üzerine etkisi (Effects of ohmic heating on *Alicyclobacillus acidoterrestris* in various fruit juices and concentrates)

Projenin Yürütücü: *Dr. A.Handan BAYSAL (Uzman)*

Projenin Dönemi: 2006-2007

Destekleyen Kuruluş: *TÜBİTAK-TOVAG1002*

Proje No: 106O240

Projenin Mevcut Durumu: Tamamlandı

Projenin Adı: UV-C Işın uygulamasının bazı meyve sularında *Alicyclobacillus acidoterrestris* üzerine etkisi (Effects of UV-C light on *Alicyclobacillus acidoterrestris* in some fruit juices )

Projenin Yürütücü: *Dr. A.Handan BAYSAL (Uzman)*

Projenin Dönemi: 2006-2008

Destekleyen Kuruluş: İYTE-BAP

Proje No: 2006-34

Projenin Mevcut Durumu: Tamamlandı

### **ARAŞTIRICI OLDUĞU PROJELER**

Projenin Adı: Peynir Altı Suyu (Pas) Proteini Hemiselüoz Kompleksine *Lactobacillus pentosus*'un Mikroenkapsülasyonu ve Sofralık Zeytine Empregnasyonu

Projenin Yürütücü: *Prof.Dr. H. Şebnem HARSA*

Projenin Dönemi: 27/08/2018-2019

Destekleyen Kuruluş: *TÜBİTAK-TOVAG-1002*

Proje No: 118 O 555

Projenin Mevcut Durumu: Tamamlandı

Projenin Adı: Berrak Meyve Sularının Isıll Olmayan Pastörizasyonuna Yönelik Düşük Voltajlı Elektrik Alan ile Desteklenmiş Yüksek Yoğunluklu Vurgulu Işık ve Antimikrobiyal Maddelerin Kombine Kullanımının İncelenmesi

Projenin Yürütücü: *Prof.Dr. Taner BAYSAL*

Projenin Dönemi: 01/03/2017-2019

Destekleyen Kuruluş: *TÜBİTAK-TOVAG-1001*

Proje No: 116 O 557

Projenin Mevcut Durumu: Tamamlandı

Projenin Adı: Karaburun Yarımadası'nda Zeytin Meyvesinin Acılığının Ağaç Üzerindeyen Kaybolmasını Etkileyen İklimsel Faktörlerin ve Meyve Bileşenlerinin Belirlenmesi (Doktora Tezi)

Projenin Yürüttürücüsü: Dr. Erkan SUSAMCI

Projenin Dönemi: 01/01/2014-2019

Destekleyen Kuruluş: TAGEM

Proje No: TAGEM/HSGYAD/14/A05/P02/59

Projenin Mevcut Durumu: Devam Ediyor

Projenin Adı: Karaburun Yarımadasında Yetişen 'Hurma' Zeytininin Bazı Kimyasal ve Mikrobiyolojik Özelliklerinin Karakterizasyonu

Projenin Yürüttürücüsü: Doç. Dr. Banu ÖZEN

Projenin Dönemi: 01/06/2011-01/06/2013

Destekleyen Kuruluş: TÜBİTAK-TOVAG-1001

Projenin Mevcut Durumu: Tamamlandı

Projenin Adı: Turistik Tesis Mutfaklarının ve Kullanım Suyunun Gıda Hijyenin Açısından Uygunluğunun Araştırılması

Projenin Yürüttürücüsü: Doç. Dr. Nejat ALTINIĞNE

Projenin Dönemi: 15/06/2007-15/12/2008

Destekleyen Kuruluş: Ege Üniversitesi-BAP

Projenin Mevcut Durumu: Tamamlandı

Projenin Adı: Aureobasidium pullulans ile pullulan üretiminin optimizasyonu ve kimyasal koruyucu (antioksidan) ve antimikroiyal içeren pullulan filmin orta nemli gıdaların raf ömrüne etkileri

Projenin Yürüttürücüsü: Doç. Dr. Yekta GÖKSUNGUR

Projenin Dönemi: 1/2005-1/2008

Destekleyen Kuruluş: TÜBİTAK-TOVAG-1001

Proje No: 104 O 155

Projenin Mevcut Durumu: Tamamlandı

Projenin Adı: Ultra viyole (UV) ışık ile dezenfekte edilen sıvı yumurta ürünlerinin mikrobiyolojik kalite kontrolü

Projenin Yürüttürücüsü: Yrd. Doç. Dr. Sevcan ÜNLÜTÜRK

Projenin Dönemi: 3/2005-3/2007

Destekleyen Kuruluş: İYTE-BAP

Proje No: 2005-25

Projenin Mevcut Durumu: Tamamlandı

## 9. İdari Görevler

İYTE Mühendislik Fakültesi, Fakülte Kurulu seçilmiş Doçent temsilcisi (2016 – 2019)

## 10. Bilimsel ve Mesleki Kuruluşlara Üyelikler

1. International Union of Microbiological Societies (IUMS)
2. World's Poultry Science Association (WPSA) (Turkey Branch)
3. International Association of Food Protection (IAFP)
4. Turkish Society of Microbiology

## Son iki yılda verdiği lisans ve lisansüstü dersler

### Lisans Dersleri (Undergraduate Courses)

FE206	Gıda Mikrobiyolojisi (Food Microbiology)	(3+2)
FE313	Gıda Katkı Maddeleri (Food Additives)	(3+0)
FE405	Mikrobiyolojik Kalite Kontrol (Microbiological Quality Control)	(2+2)
FE420	Mezuniyet Tezi (Graduation Project)	
CHE213	Mikrobiyoloji (Microbiology) (İYTE, Kimya Mühendisliği)	(3+0)

### Lisansüstü Dersler (Graduate Courses)

FE500	Tez (Thesis)	(0+1)
FE503	İleri Gıda Mikrobiyolojisi (Advanced Food Microbiology)	(3+0)
FE515	Gıda Katkı Maddeleri, Kontaminantlar ve Toksikolojisi (Food Additives, Contaminants and Toxicology)	(3+0)
FE539	Gıda Güvenliği Uygulamaları İçin Moleküler Metotlar (Molecular Methods for Food Safety Applications)	(3+0)
FE540	Bacterial Foodborne Pathogens (Gıda Kaynaklı Bakteriyel Patojenler)	(3+0)
FE542	Mikoloji: Gıda ve İç ortamındaki Funguslar (Mycology: Food and Indoor Fungi)	(3+0)