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– 4차 산업혁명을 대비한 식품안전의 미래방향 –

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◎ 발표 논문

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- How Do We Take Advantage of the Innovation Accompanying the 4th Industrial Revolution to Improve Food Safety?
  Takahisa Miyamoto, President (Japanese Society of Food Microbiology, Professor / Kyushu University, Japan)
- 식품과학기술 미래전망
  박현진 회장 ((사)한국식품과학회 / 고려대학교)

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  최창순 교수 (중앙대학교)
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· 토 론
좌 장: *박기환 교수 (중앙대학교)*

토론자: *정명섭 교수 (중앙대학교)*
조윤미 대표 (C&I소비자연구소)
김태민 변호사 (새길법률특허사무소)

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좌 장: *경규항 명예교수 (세종대학교)*

토론자: *노봉수 교수 (서울여자대학교)*
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· Food Safety Concerns with the Consumer Demand for a Clean Food Label
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· Development of Optical and Electrochemical Detection System for Food-Borne Pathogens
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· 토 론
좌 장: *하상도 교수 (중앙대학교)*

토론자: *류재기 박사 (농촌진흥청)*
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  좌 장: *하상도 교수 (중앙대학교)*
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- 제3자 인증의 준비절차 및 활용
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  이광원 교수 (고려대학교)
- Determination of Acetaldehyde in Alcoholic Beverages
  김영석 교수 (이화여자대학교)
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  김병희 교수 (숙명여자대학교)

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  서수환 박사 (식품의약품안전평가원)
- Application of database on microbial risk assessment and future challenge
  이종경 교수 (한양여자대학교)

◎ 구두 발표

OP-01 Applied Laboratory Methods

The development of high specific colorimetric LAMP reaction using HRP-like DNA mimic included molecular beacon to detect microorganis

Jeong-Eun Lee[1], Won-Bo Shim[2,3*]

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OP-02 Sanitation & Antimicrobials

Assessment of Bactericidal Activity of Sodium Hypochlorite, Hydrogen Peroxide, and Alkyl Dimethyl Benzyl Ammonium Chloride

So-Jeong Yoon[1,] Min-Jung Cho[1,] Do Hyoung Kim[1,] Shin Young Park[1,] Angela Jiewon Ha[1,] Yong-Soo Kim[2] and Sang-Do Ha[1*]

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OP-03 Sanitation & Antimicrobials

Comparison of the *Aspergillus flavus* reduction in *Doenjang* (Fermented Soybean Paste) with microwave and steam

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OP-04 Sanitation & Antimicrobials

Effects of Different Drying Methods on Decontamination of Microorganisms in Red Pepper

Suin Yang[1,2,] Jisoo Hong[1,] Moran Lee[1,] Dong-oh

Kang[1], Kyu-seok Jung[1], Jae-Gee Ryu[1], Kwang-pyo Kim[2], Eunjung Roh[1*]

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[2]*Food science & Technology, College of Agriculture, Chonbuk National University, Joenju-si, 561-756, Korea*

OP-05 Applied Laboratory Methods

Development of monoclonal antibody for rapid diagnosis of allergen egg whites

Sol-A Kim[1], Jeong-Eun Lee[1], Go-Un Kim[2], Won-Bo Shim[2,3*]

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OP-06 Sanitation & Antimicrobials

Isolation and Identification of *Salmonella* in Poultry Samples, Mississippi, USA

Angela Jie-Won Ha[1,2], Lurdes Siberio[1] Shin Young Park[2] and Tae-Jo Kim[1,*]

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OP-07 Pathogens

Experimental infection of hepatitis E virus in SPF miniature piglets

Soontag Jung[1], Dong Joo Seo[1], Hyunkyung Park[1], Hansaem Shin[1], JinJong Myoung[2], In-Soo Choi[3], Changsun Choi[1*]

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[3]*Department of Infectious Diseases, College of Veterinary Medicine, Konkuk University, Kwangjin-gu, Seoul 143-701, Korea*

OP-08 Education & Epidemiology

Molecular epidemiology of Shiga toxin-producing *Escherichia coli* isolates from retail meats in South Korea

June Bong Lee[1], Seon mi Wi[1], Se Kye Kim[2], and Jang Won Yoon[1,2*]

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OP-09 Sanitation & Antimicrobials

Effects of *Cronobacter sakazakii* bacteriophages on the bacterial growth in tryptic soy broth and infant formula

Hyung-Suk Kim, Soo-Jin jung, Md. Iqbal Hossain, Shamsun Nahar, Jin Hee Kim and Sang-Do Ha[*]

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◎ 포스터 발표

P1-01 A Study on the Improvement of the Realtime-PCR Assay for Foodborne Virus

Jeong Su Lee, Min Hee Jeong, Si Yeon Ju, Yun Hee Song, In Sun Joo, Soon Han Kim and Hyo Sun Kwak

Food Microbiology Division, Food Safety Evaluation Department, National Institute of Food and Drug Safety Evaluation, Osong, Republic of Korea

P1-02 Development of Detection Methods for Noroviruses Conventional RT-PCR

Jeong Su Lee, Si Yeon Ju, Min Hee Jeong, Yun Hee Song, In Sun Joo, Soon Han Kim and Hyo Sun Kwak

Food Microbiology Division, Food Safety Evaluation Department, National Institute of Food and Drug Safety Evaluation, Osong, Republic of Korea

P1-03 An analytical method for florpyrauxifen-benzyl and its metabolite residues in agricultural commodities

Ju Hee Kuk, Yun Mi Chung, Sun Ok Han, Dong Ho Lee* and Soon Young Han

Hazardous Substances Analysis Division, Gwangju Regional Office of Ministry of Food and Drug Safety

P1-04 Microbial contamination in Post-harvest process of fresh produce and pre-treatment method for detecting foodborne bacteria

Moran Lee[1,2], Jihee Kim[1], Jisoo Hong[1], Suin Yang[1], Dong-oh Kang[1], Sanghyun Han[1], Kyu-seok Jung[1], Jae-Gee Ryu[1], Kwang-Pyo Kim[2], Eunjung Roh[1*]

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P1-05 LC-MS/MS를 이용한 패류 중 신경성패독 분석법 확립

윤진홍, 신춘식, 황정윤, 조혜진, 정소영, 강길진*

식품의약품안전평가원 식품위해평가부 오염물질과

P1-06 Determination of Metals of methyl mercury in aquatic foods by Direct Mercury Analyzer

Yongmin Lee, Min Ja Cho, Tae-Hun Kim, Ji Hui Kim, So Young Chung and Gil Jin Kang

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P1-07 Determination of heavy metals in Bean-curds and Starch Jellies: comparison of Inductively Coupled Plasma Mass Spectrometry and Colorimetric method

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P1-08 Establishment of Analytical Method for Aflatoxins and Ochratoxin A in Oat using Dispersed Liquid-Liquid Microextraction and Ultra-High Performance Liquid Chromatography

Chi-Do Wee, Mijeong Lee, Theresa Lee, Sung Kee Hong, Seungdon Lee, and Hyeonheui Ham*

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P1-09 식품 중 다이옥신(PCDD/Fs), 다이옥신유사 폴리염화비페닐(Dioxin-like PCBs) 및 Indicator PCBs 동시 분석법 확립

강영운, 임태숙, 양진성, 이지은, 윤선영, 김신희, 강길진*

식품의약품안전평가원 식품위해평가부 오염물질과

P1-10 Use of pre-treatments to improve the efficiency of rapid detection for *Escherichia coli* in fresh-cut produces by PCR method

Yukyung Choi, Sujung Lee, Yohan Yoon

Department of Food and Nutrition, Sookmyung Women' University

P1-11 Real-time PCR을 이용한 흰점박이꽃무지 유충(*Protaetia brevitarsis*)의 검출법 개발

정슬기, 김미주, 김해영

경희대학교 생명공학원 식품생명공학과

P1-12 Ultra-fast PCR을 활용한 토마토 알레르기 검출법 개발 연구

서승만, 박샛별, 김해영

경희대학교 생명공학원 식품생명공학과

P1-13 Monitoring on effect of plasma refrigerator at cold storage with meat

Jung-Ho Choi, Yoo-Ri Kim, San-Cheong Bae, Jong-Sook Kim and Yon-Soo Cho

Food safety center, Shinsegae Food, Republic of Korea

P1-14 Development of Analytical Method for the Determination of Squalene in Health functional food

Yong Woon Shin, Bo Young Oh, Hee Sun Jeong, Soo Jung Hu, Jae Myoung Oh, Keum Soon Oh*

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P1-15 유전자 분석법을 이용한 창난젓(명태) 진위판별법 개발 및 모니터링

이재황, 홍예원, 김미라, 고영호, 권기성

식품의약품안전처 식품의약품안전평가원 식품위해평가부 신종유해물질팀

P1-16 Analytical Method Validation for Determination of Coenzyme Q10 in Health Functional Foods

Yong Woon Shin, Soo Jung Hu, Jae Myoung Oh, Jin Hee Lee, Hwa Jung Lee and Keum Soon Oh*

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P1-17 식품 중 금속성 이물 시험법 개선방안 연구

이재황, 최종현, 김주신, 고영호, 권기성

식품의약품안전평가원 신종유해물질팀

P1-18 Development of Analytical Method for the Determination of Alliin in Health functional food

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P1-19 Validation of optimized Monier-Williams method for analyzing the residual sulfur dioxide content in wine

Yong Soo Cho, Su-Hyun Chun, Kyeong Yun

Jeon, Hee Joon Yoo and Kwang-Won Lee*

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P1-20 Combination of enrichment and multiplex PCR method for rapid detection of pathogenic *Escherichia coli* in fresh-cut farm produces

Sujung Lee, Yukyung Choi, Yohan Yoon

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P1-21 Selection of optimal conditions for to be heterologously expressed and selected hblack goat rumen metagenome-derived KG51 cellulase in *Bacillus subtilis*

Hye-Bin Kim[1,+], Kyung-Tai Lee[2+], Min-Ju Kim[1], Rini Nur Azizah[1], Jin-Sung Lee[3], and Keun-Sung Kim[1,*]

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[2]*Animal Genomics and Bioinformatics Division, National Institute of Animal Science, Rural Development Administration, Wanju 565-851, South Korea*
[3]*Department of Biological Sciences, Kyonggi University, Suwon 442-760, South Korea*

P1-22 Optimization for heterologous expression of black goat rumen metagenome-derived KG42 xylanase by *Bacillus subtilis*

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P1-23 Identification and functional characterization of a novel xylanase (GH10 family) isolated from the black goat rumen metagenomic library

Hye-Bin Kim[1,+], Kyung-Tai Lee[2+], Min-Ju Kim[1], Rini Nur Azizah[1], Jin-Sung Lee[3] and Keun-Sung Kim[1,*]

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P1-24 Evaluation of Molecular Biological Method for the confirmation of *Clostridium botulinum* and *Vibrio parahaemolyticus*

Chi Yeun Cheung, A-Hyoung Baek, Ah-Ran Jeon, Eun Jeong Heo, Yong Hoon Kim, Soo Hwan Suh, Sun Young, Hwang, Mi-Gyeong Kim, Hyo-Sun Kwak, Jin Hwan Hong

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P1-25 The development of high specific colorimetric LAMP reaction using HRP-like DNA mimic included molecular beacon to detect microorganis

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P1-26 Improvement of modified buffered peptone water with sodium pyruvate (mBPWp) broth by optimization of composition ratio of supplements for rapid detection of *Escherichia coli* O157:H7

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P1-27 Comparative Evaluation of Automated MPN Method (TEMPO) and Traditional Microbiological Plating Method for the Enumeration of Total Viable Count, Total coliform, *Bacillus cereus* and *Staphylococcus aureus* in Processed Food,

Kyung-yoon Kwon, Yeon Joo Kim, Ji Hye Nam

CJ Cheiljedang Quality Safety Center, Korea

P1-28 Development of monoclonal antibody for rapid diagnosis of allergen egg whites

Sol-A Kim[1], Jeong-EunLee[1], Go-UnKim[2], Won-BoShim[2,3*]

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P2-01 Prevalence of *Mycoplasmsa species*, associated with porcine & bovine respiratory diseases in pathologic lung tissues using Polymerase chain reaction method in slaughter houses.

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P2-02 장어류(Unagi)의 형태학적 분류

유응성, 박지인, 신지영, 김현정, 양윤지, 김지은, 양지영*

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P2-03 옥돔(*Branchiostegus japonicus*) 및 옥두어(*Branchiostegus albus*)의 형태학적 분류

신지영, 박지인, 유응성, 김현정, 양윤지, 김지은, 양지영*

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P2-04 수산물 식품 원료 관리 체계의 필요성

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P2-05 새우류(대하, 흰다리새우, 홍다리얼룩새우, 파타고니아새우)의 형태학적 분류

박지인, 신지영, 유응성, 김현정, 양윤지, 김지은, 양지영*

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P2-06 Molecular epidemiology of Shiga toxin-

producing *Escherichia coli* isolates from retail meats in South Korea

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P3-01 Complete genome sequence of Food-Borne Pathogen *Salmonella enterica* subsp. *enterica* serovar Thompson str. isolated from Crab-stick in Korea

Woojung Lee, Sewook Park, Ran Hee Yoo, Min Sun Kim, In-Sun Joo, Soon Han Kim, Hyo Sun Kwak, Jin Hwan Hong

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P3-02 Complete genome sequence of Food-Borne Pathogen *Salmonella enterica* subsp. *enterica* serovar Enteritidis str. isolated from Kimbap in Korea

Woojung Lee, Ran Hee Yoo, Sewook Park, Hyejin Yoo, In-Sun Joo, Soon Han Kim, Hyo Sun Kwak, Jin Hwan Hong

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P3-03 Development of multiplex real-time PCR method for the simultaneous detection and quantification of food-borne pathogen

Song-Yi Gu, Sung-Youn Kim, Min-Ju Kim, Jong-Chan Kim, Ho-Jin Lee, Ji Young Moon

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P3-04 Ability of Rice Brans to Control *Salmonella* Typhimurium in Chicken Ceca and Effects on Cecal Microbiota

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P3-05 Screening of pathogenic *Escherichia Coli*, isolated from imported and domestic Kimchi products in Korea

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P3-06 Impact of Heme and Mn(II) in the biofilm formation of Bacillus cereus food isolates

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P3-07 Prevalence of Pathogenic Bacteria in chinese cabbage soil

Seung-Mi Seo, Hye-Jin Jeon, Eun Jung Roh, Jae Gee Ryu, Won Il Kim, Se Ri Kim, Seung Don Lee, and Kyu Seok Jung

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P3-08 Investigation of microbial contamination of red pepper

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P3-09 Monitoring system research of ground-waterborne norovirus outbreaks in Honam region.

Hwa Yeon Ryu, Oun Ki Chang*, Du Sup Song, Jeong Min Lee, Hyo Mi Han, Dong Ho Lee, Eun Sook An[1], Kyu Heon Kim[2], Soon Young Han

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P3-10 두부와 묵에서 *Bacillus cereus*의 행동특성 비교

권미진, 이윤진, 문혜진, 윤기선

경희대학교 식품영양학과

P3-11 Hurdle approach of Slightly acidic electrolyzed water in combination with Benzalkonium chloride and ultrasonication on Bacillus cereus biofilms

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P3-12 강원도 양양북부 패류생산해역의 육상오염원에 관한 연구

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P3-13 Microbial contamination level in simple processed fish and mollusca from domestic market

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P3-14 강릉 및 동해 해역 어패류의 병원성 *Vibrio* sp. 오염도 조사

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P3-15 수산물 위 · 공판장의 미생물 오염도 조사

이지민[1], 한희선[2], 박권삼[2], 신일식[1]

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P3-16 Fate of antibiotic resistant *Vibrio* spp. in pre-cooked shrimp during frozen storage

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P3-17 조미건어포에서의 *Clostridium perfringens*의 예측 모델 개발 연구

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P3-18 축산물 중 식중독균 민감 검출을 위한 면역자기비드분리법 활용

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농촌진흥청, 국립축산과학원

P3-19 목장형 유가공장 유래 원유 및 환경시료의 미생물 군집분석

박연우, 김종희, 정석근, 오미화*

농촌진흥청, 국립축산과학원

P3-20 Development of Staphylococcus aureus detection technology by color-based PCR and smartphone application analysis in garlic

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P3-21 Ultrasensitive Colorimetric Detection of *Salmonella enterica* Typhimurium on Lettuce Leaves by HRPzyme-Integrated Polymerase Chain Reaction

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P3-22 Determination of thermal inactivation kinetics of foodborne pathogens in laboratory media by isothermal and non-isothermal methods

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P3-23 Experimental infection of hepatitis E virus

in SPF miniature piglets

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P3-24 Persistence of Hepatitis A virus contaminated in oysters

Hyunkyung Park[1], Dong Joo Seo[1], Suntak Jeong[1], Hansaem Shin[1] and Changsun Choi[1]

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P3-25 Molecular genotyping, biofilm formation and antibiotic susceptibility of *Clostridium perfringens* isolated from raw meat

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P3-26 Establishment of culture method for the detection of *Clostridium difficile* in meat samples

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P3-27 Cellular Profiles of *Vibrio parahaemolyticus* in the Viable-but-Nonculturable State upon Exposure to a Prolonged Period of Cold-Starvation Challenge

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P3-28 Evaluation of Resuscitation Methods for Cells of *Vibrio parahaemolyticus* into the Viable-but-Nonculturable State

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P3-29 Effect of grapefruit seed extract combined with layer-by-layer antimicrobial edible coating for shelf-life extemsion of shrimp (*Litopenaeus vannamei*) stored at 4℃

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P3-30 Shelf-Life Extension of Pacific White Shrimp (*Litopenaeus vannamei*) Using Chitosan and ε-Polylysine during Cold Storage

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P3-31 Synergy effect of chitosan coating and UV-C according to UV irradiation time and frequency on the quality of shrimp during refrigerated storage

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P3-32 GadE is responsible for the repression of glutamate decaboxylase A and B in *Escherichia coli* O157:H7 ATCC 43894

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[2]*Institute of Veterinary Science, Kangwon National University, Chuncheon, Gangwon 24341, Republic of Korea*

P3-33 The ppGpp signaling is important for the pathogenesis of enteropathogenic *Escherichia coli* and the bacterial host response

June Bong Lee[1], Seon mi Wi[1], Se Kye Kim[2], and Jang Won Yoon[1,2,*]

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P4-01 Monitoring and Safety Assessment of Pesticide Residues and Sulfur Dioxide on Functional Rice Products

You-Jin Lee[*], Myung-Ki Park, Ki-Yu Kim, Eun-Mi Park, Heung-Gyu Kang, Ji-Hyun Lim, Wook-Hyun Cho, Yoon-Ho Kim, Sun-Young Lee, Kum-Chan Yong and Mi-Hye Yoon

Guri Agro-fishery Products Inspection Center, Gyeonggi-Do Institute of Health and Environment

P4-02 축산물 중 식중독균 민감 검출을 위한 면역자기비드분리법 활용

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P4-03 목장형 유가공장 유래 원유 및 환경시료의 미생물 군집분석

박연우, 김종희, 정석근, 오미화[*]

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P4-04 계란의 안전유통관리를 위한 dynamic 신선도 예측 모델

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P4-05 Development of a high-speed PCR-based method for identifying squid species using mitochondrial DNA sequences

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P4-06 Development and Validation of Real-time Quantitative PCR to Determine *Branchiostegus japonicus* and *B. albus* Species Based on Mitochondiral DNA

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P4-07 국내 유통 식품용 폴리락타이드 기구 및 용기 · 포장의 중금속 이행량 조사

김현욱, 박소연, 조예은, 조경철, 서수진, 우성민, 김미숙, 이호연, 박용춘, 김미혜

경인지방식품의약품안전청 시험분석센터 수입식품분석과

P4-08 The development of growth predictive model for aerobic microorganisms at dynamic time-temperature history (TTH) during sandwich distributions

Da Rae Byeon, Ha Neur Kim, Ga Ram Kim, Myoung Su Park, and Gyung Jin Bahk*

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P4-09 Modelling growth of *Escherichia coli* O157:H7 in fresh organic lettuce by various washing temperature

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P4-10 Identification of moulds isolated from the cheese ripening room of dairy farm milk-processing plants

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P4-11 Survival Kinetics of *Clostridium perfringens* in *Saeng-sik*

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P4-12 Survival Modeling of *Clostridium perfringens* in Red Pepper Powder

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P4-13 국내 미승인 유전자변형작물의 현황과 유전정보 분석

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P4-14 Real-time PCR을 이용한 식용 장수풍뎅이유충의 검출법 개발

김성연, 김미주, 정슬기, 김해영

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P4-15 갈색거저리유충을 이용한 쿠키 제조 및 real-time PCR을 이용한 검출 민감도 측정

김성연, 김미주, 정슬기, 김해영

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P4-16 Development of Predictive Model for *Clostridium perfringens* Survival in Korean Traditional Soy Sauce

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P4-17 Safety Investigation of pathogenic micro-organism from Agricultural Products in Jeonbuk Province

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P4-18 Study on the risk profile and exposure assessment of the natural colors used in foods

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P4-19 국내 소비자의 유전자변형식품에 관한 인식도 및 관련 정보습득 현황

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P4-20 식품 중 지방산유래대사체 분석법 비교 연구

정유경, 서보경, 주정옥, 최장덕, 권기성

식품의약품안전평가원 신종유해물질팀

P4-21 Acute toxicity test of *Codonopsis lanceolata* extract in rats

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P4-22 소스류에서의 *Clostridium perfringens* 생장 예측 모델 개발

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P4-23 Investigation of indicator bacteria during production of dried red pepper

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P4-24 과수 및 약용작물의 생물학적 위해요소 관리기술에 대한 연구 현황 분석

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P4-25 국내 유통 중인 발효 간장의 이화학적 특성 및 미생물학적 품질 연구

이나영[1], 허종원[1], 황지연[1], 손한승[1], 윤요한[2], 허은정[3], 이민석[1]

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P4-26 Quantitative Microbial Risk Assessment of *Clostridium perfringens* in Beef Jerky under Various Processing and Storage Condition

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P4-27 Utilization of deep-seawater on processing meat products for developing new health functional foods

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P4-28 Assessment of Microbiological and Physico-chemical Quality of Sliced-Dried Persimmons Stored at Different Temperatures

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P4-29 Measurement of Protease Activity of Protease-producing Bacteria

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P4-30 Quantitative risk assessment model for Salmonellosis in chicken in South Korea

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P4-31 Heat resistance of *Salmonella* Enteritidis in four different liquid egg products

Il-Byeong Kang[1], Dong-Hyeon Kim[1], Hong-Seok Kim[1], Young-ji Kim[1], Dana Jeong[1], and Kun-Ho Seo[1,*]

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P4-32 Safety evaluation for domestic and imported chocolate products distributed in Seoul area

So-young Jung, Ouk-hee Kim, Kwang-ho Hwang, Nam-hun Kim, Young-ae Park, Ju-yoen Jo, Jin-kyoung Kim, In-sook Hwang and Young-hee Oh

Seoul Metropolitan Government Research Institute of Public Health and Environment

P5-01 Multidrug-resistant *Escherichia coli* producing extended-spectrum β-lactamases isolated from imported meat in South Korea

Jin-San Moon[1], Young-Jo Kim[2], Deog-Hwan Oh[3], Jung-Whan Chon[4], Bo-Ra Song[2] Jong-Su Lim[1], Eun-Jeong Heo[2], Hyun-Jung Park[2], Sung-Hwan Wee,[1] and Kidon Sung[4]

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P5-02 국내 식품산업체 대상 기구등의 살균소독제 현장실태 조사

김은아, 김용민, 민미희, 박정은, 정윤정, 김용수

한국보건산업진흥원

P5-03 Various applications of Bacteriocin and Bacteriophage to prevent spoilage of Fresh-cut Produce

Jisoo Hong, Dong-oh Kang, Moran Lee, Suin Yang, Kyuseok Jung, Jae-Gee Ryu, and Eunjung Roh*

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P5-04 Effects of Different Drying Methods on Decontamination of Microorganisms in Red Pepper

Suin Yang[1,2], Jisoo Hong[1], Moran Lee[1], Dong-oh Kang[1], Kyu-seok Jung[1], Jae-Gee Ryu[1], Kwang-pyo Kim[2], Eunjung Roh[1,*]

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P5-05 Biocontrol of *Staphylococcus aureus* by antimicrobial substances from staphylococci

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P5-06 시중 유통 중인 더치커피의 미생물학적 안전성 평가

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순천시 중앙로 250

P5-07 시중 유통 중인 젓갈의 미생물학적 안전성 평가

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P5-08 Antimicribial resistance patterns of *Listeria monocytogenes* isolated from slaughterhouses

Hyemin OH, Sejeong Kim, Yohan Yoon

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P5-09 Antimicrobial effect of fermented milk added with *Rubus coreanus* extracts using different extraction methods

Bu-Min Kim, Jong-Hui Kim, Jun-sang Ham, Mi-Hwa Oh

National Institute of Animal Science, Rural development Administration

P5-10 Simultaneous analysis of fifteen antibiotics in agricultural products by HPLC and LC-MS/MS methods

Chan Lee, Ju-Hee Park, Bo-Gyu Choi, Young-Woo Kim, Beom-Ha Jo

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P5-11 이산화염소를 이용한 알팔파 종자 중 병원성 *Escherichia coli*와 *Salmonella* spp. 저감기술 개발

박운라, 김명곤[1], Nguyen Bao Hung, 윤보현, 김원일, 김현주, 이승돈, 김세리*

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P5-12 Reducing effect of Pecto-phages on density of soft rot pathogen for practical use in growing stage of vegetables

DaWoon Kim, Boreum Jeong, Jinyoung Choi, Jeong-A Lim, Soyeon Kim, Jinwoo Park, and Jae-Gee Ryu

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P5-13 Development of Biocontrol Agents Using Bacteriophage Against *Bacillus cereus* in Produce

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P5-14 Disinfection with citric acid / hydrogen peroxide as acidic oxidizing agents

Jae Ku Jung[1], Dayoung Lee[2], Hansol Lee[2], Heeseok Woo[2], Gyoyoon Chae[2], Hyeji Kim[2], Jeongdong Kim[2], Hongjoo Min[2], Won-Seok Chae*[,2]

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P5-15 Cell protective and antibacterial effect of Turmeric (*Curcuma longa* L.) as antioxidant

SoHyeon You, Miran Jang, Sukjin Kim, Gun-Hee Kim

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P5-16 Change in Icariin Contents and Antioxidant activity during Ripening Period of Epimedium Wine

Miran Jang, Gun-Hee Kim*

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P5-17 Isolation of Wide Host Range-bacteriophage and Confirmation of Its Bacterial Reduction Effect

Do Hyeon Park, In Young Choi, Kyoung Min Gwak, and Mi-Kyung Park

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P5-18 Immobilization Studies of Bacteriophages for Surface-scanning Detection System

Min-jeong Lee, In Young Choi, Kyoung Min Gwak[1], and Mi-Kyung Park

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P5-19 Antibacterial Effect of 460-470 nm Light Emitting Diodes against *Listeria monocytogenes* and *Pseudomonas fluorescens* at Different Temperatures

Jeong-Eun Hyun and Sun-Young Lee

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P5-20 Characterization of CAU-STP-1 Bacteriophage against *Salmonella enterica* Serovar Typhimurium from Sewage

Soo-Jin Jung, Hyung-Suk Kim, Shin Young Park, Jin Hee Kim, Min-Jung Cho and Sang-Do Ha*

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P5-21 Inhibition of murine norovirus by lactic acid bacteria isolates from Kimchi

Dong Joo Seo, Minho Kim, Hyunkyung Park, Soontag Jung, Hansaem Shin, Day Jung, and Changsun Choi*

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P5-22 Inhibition effects of sodium hypochlorite and peroxyacetic acid against a human norovirus surrogate on fresh cabbage and green onion

Myeong-In Jeong, Mei-ling Rui, Shin Young Park, Ji Yeon Jo, Mi Rae Kim and Sang-Do Ha*

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P5-23 Effects of *Cronobacter sakazakii* bacteriophages on the bacterial growth in tryptic soy broth and infant formula

Hyung-Suk Kim, Soo-Jin jung, Md. Iqbal Hossain, Shamsun Nahar, Jin Hee Kim and Sang-Do Ha*

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P5-24 Comparison of the *Aspergillus flavus* reduction in *Doenjang* (Fermented Soybean Paste) with microwave and steam

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P5-25 Effect of high hydrostatic pressure and electron beam irradiation on the inactivation of norovirus and quality in *Dongchimi*

Mei-ling Rui, Myeong-In Jeong, Ji Yeon Jo, Mi Rae Kim and Sang-Do Ha*

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P5-26 Assessment of Bactericidal Activity of Sodium Hypochlorite, Hydrogen Peroxide, and Alkyl Dimethyl Benzyl Ammonium Chloride

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P5-27 Assessment of cold oxygen plasma technology for the inactivation of major foodborne viruses on stainless steel

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P5-28 Effects of high pressure processing on the norovirus inactivation in fresh sea squirt (Halocynthia roretzi)

Shin Young Park, Kye-Hwan Byun, Myeong-In Jeong, Hyun-Jung Joo, and Sang-Do Ha*

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P5-29 Biofilm and Virulence Gene Profiling of *Listeria monocytogenes* Strains Isolated from Environmental and Clinical Sources in Korea

Hye-Ran Cho, Md. Furkanur Rahaman Mizan, Md. Ashrafudoulla, Heedae Park, Hyun-Jung Joo, Angela Jiewon Ha and Sang-Do Ha*

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P5-30 Isolation and Identification of *Salmonella* in Poultry Samples, Mississippi, USA

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Republic of Korea

P5-31 Antimicrobial Activity of Kefir Against *Cronobacter sakazakii* and its application

Dong-Hyeon Kim, Dana Jeong, Il-Byeong Kang, Kwang-Young Song, Hong-Seok Kim, Young-Ji Kim, Hyun-Woo Lim, Ho-Seok Chang, and Kun-Ho Seo*

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P5-32 Effects of electrical discharged water treatment for the biofilm reduction of strains isolated from tofu manufacturing plant

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[2]Department of Biotechnology, College of Life sciences and Biotechnology, Korea University
[3]University of Science and Technology

P5-33 Presence of *Stenotrophomonas maltophilia* exhibiting high genetic similarity to clinical isolates in final effluents of pig farm wastewater treatment plants

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P5-34 유산균과 브로콜리 추출물을 이용한 고명용 튀김볼의 산패 지연 효과

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P5-35 시가 독소 생성 병원성 대장균의 제어를 위한 박테리오파지의 분리와 특성 분석

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P5-36 Characterization of phages for pathogenic *Escherichia coli* and optimization of processing conditions of virucidal agent for phage amplification

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P5-37 Effects of Queso Blanco cheese containing *Bifidobacterium longum* KACC 91563 on the population of fecal microbiota in healthy companion dogs

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P6-01 Activation of GPR43 by organic acids leads to the inhibition of lipolysis and suppression of free fatty acids secretion in adipocytes

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P6-02 L-serine deficiency mediated by suppression of Phgdh induces fatty liver through regulation of SIRT1 activity

Woo-Cheol Sim[1], Dong-Gwang Kim[1], Wonseok Lee[1], Hyungtai Sim[1], Byung-Hoon Lee[1]

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P6-03 Determination of mycotoxin in cereal based food by LC-MS/MS

Hye-Young Park*, Mi Na Seo, Hye Yeon Kim, Ji Hye Shin, Sheen Hee Kim, Gil Jin Kang

Food Contaminants Division, National Institute of Food & Drug Safety Evaluation, Ministry of Food and Drug Safety, Cheongju-si 28159, Republic of Korea

P6-04 Determination of pyrrolizidine alkaloids in herbal teas by LC-MS/MS

Hye-Young Park*, Seung a Jeong, Jeong Ah Park, Eun A Chong, Sheen Hee Kim, Gil Jin Kang

Food Contaminants Division, National Institute of Food & Drug Safety Evaluation, Ministry of Food and Drug Safety, Cheongju-si 28159, Republic of Korea

P6-05 Nephrotoxicity of ochratoxin A which induces oxidative stress that activate AhR and PXR and Nrf2 signaling pathway in HK-2 cells

Min Cheol Pyo[1], Hye Soo Shin[1], Kyeong Yun Jeon[1], Hyun-Sun Lee[2], Jung Min Bae[2], Young chul Lee[3], Man Sung Park[3], Jae Yoon Han[3], Kwang-Won Lee[1,*]

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[3]R&D Center, Dongwon Homefood Co.

P6-06 The hepatotoxicity caused by ochratoxin A-induced oxidative stress in the HepG2 cells through Phase Ⅰ and phase Ⅱ pathway activated by Nrf2.

Hye Soo Shin[1], Min Cheol Pyo[1], Kyeong Yun Jeon[1], Hyun-Sun Lee[2], Jung Min Bae[2], Young chul Lee[3], Man Sung Park[3], Jae Yoon Han[3], Kwang-Won Lee[1,*]

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P6-07 Advanced glycation end products mediates inflammatory cytokines in kidney cells via upregulaion of NF-kappa B

So-Ra Jeong, Hee-Yeun Kim and Kwang-Won Lee*

Department of Biotechnology, College of Life Sciences and Biotechnology, Korea University

P6-08 Anti-hyperglycemic and hypolipidemic effects of black ginseng in type 2 diabetic db/db mice

Yu-Jin Jeong[1], Moon-Jung Hwang[1], Min Cheol Pyo[1] and Kwang-Won Lee[1,*]

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P6-09 Assessment of international proficiency test for Total aflatoxin in Maize by ELISA

(Enzyme Linked Immuno Sorbent Assay) method

Sang-Mo Kang, Byeong-Keun Kim, Jae-Yeon Lee, Kyung-Suk Ryu, Cheong-Tae Kim

Food Safety Research Team, NONGSHIM CO., Ltd, Korea

P6-10 Effect of pH and sodium chloride on the growth and cytotoxicity of *Bacillus cereus*

Yun-Sun Choi, Yujin Park, Sung-Kwon Moon, and Sun-Young Lee

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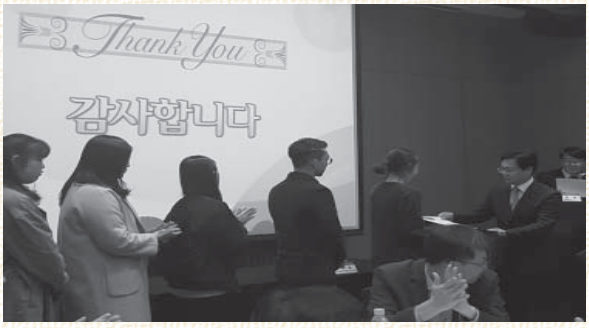
◎ 주요사진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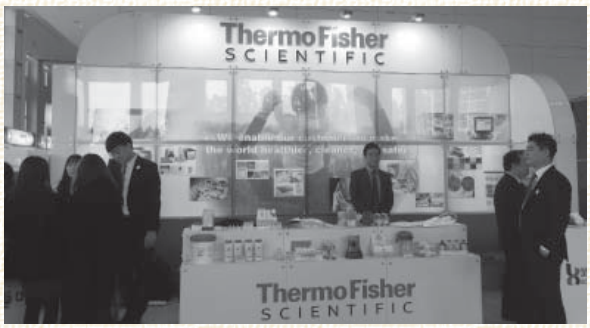
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