

## Poster Presentation (3F Lobby)

### ■ 포스터발표 분야별 접수현황: 총 1,055편

1. 식품화학	P01-01 ~ 65	6. 영양소대사/영양생리/임상영양	P06-01 ~ 46
2. 식품분석/품질	P02-01 ~ 159	7. 식생활 및 영양실태조사	P07-01 ~ 42
3. 식품가공/공학/물성	P03-01 ~ 141	8. 식품기능성/생리활성	P08-01 ~ 431
4. 식품저장/포장	P04-01 ~ 06	9. 감각소비자과학	P09-01 ~ 15
5. 식품미생물/발효/효소	P05-01 ~ 128	10. 외식경영/기타	P10-01 ~ 22

### ■ 포스터발표 시간 안내

구 분	발표일시	발표번호	
Poster Session I (263편)	10.19(수), 14:30-17:30 질의응답, 17:00-17:30	P02-01 ~ P02-80 P08-01 ~ P08-100 P10-01 ~ P10-22	P06-01 ~ P06-46 P09-01 ~ P09-15
Poster Session II (264편)	10.20(목), 09:00-12:00 질의응답, 11:30-12:00	P02-81 ~ P02-159 P08-101 ~ P08-215	P03-01 ~ P03-70
Poster Session III (264편)	10.20(목), 14:00-17:00 질의응답, 15:40-16:10	P01-01 ~ P01-30 P05-01 ~ P05-60	P03-71 ~ P03-141 P08-216 ~ P08-318
Poster Session IV (264편)	10.21(금), 09:00-12:00 질의응답, 11:00-11:30	P01-31 ~ P01-65 P05-61 ~ P05-128 P08-319 ~ P08-431	P04-01 ~ P04-06 P07-01 ~ P07-42

### ■ KFN STAR Session

- 구두발표:** 10월 21일(금) 세션 I 09시 ~ 11시 (402A), 세션 II 09시 ~ 10시 (402B), 세션 III 11시 ~ 13시 (402A)
- 포스터 게시:** 포스터발표 일정에 맞춰 해당 발표번호에 포스터 게시

## STAR Session I (Room 402A)

시 간	No.	발표제목	발표자(소속)
09:00- 09:10	<b>P07-03</b>	Changes in the health-related quality of life of critically ill patients before and during the COVID-19 pandemic in Korea	Yeeun Park (Yeungnam University)
09:10- 09:20	<b>P07-42</b>	Comparison of nutrient intakes among Koreans by the consumption of fish and shellfish	Young Hee Suk (Yonsei University)
09:20- 09:30	<b>P08-51</b>	Aloe-derived nanovesicles attenuates acute colonic inflammation in mice and enhances tight junction proteins in intestinal epithelial cells	Sang-Hun Choi (Andong National University)
09:30- 09:40	<b>P08-147</b>	Ethanol Extract of <i>Phlomis umbrosa</i> Turcz. Attenuates Simple Steatosis and Oxidative Stress in High Fat Diet-Induced C57BL/6 Mice	Suhyun Hwang (Chonnam National University)
09:40- 09:50	<b>P08-245</b>	Combination Therapy of Probiotics with Anti-PD-1 Treatment Improves Anti-Tumor Efficacy and Immune-Related Adverse Events in Breast Cancer	Hyeyoon Kim (Sookmyung Women's University)
09:50 10:00	<b>P08-336</b>	Prohibitin 1 affects cell cycle signaling associated with hydrogen peroxide oxidative stress	Hyunseo Go (Ewha Womans University)
10:00- 10:10	<b>P08-406</b>	The Intestinal Function and Constipation Improvement Effect of Kombucha Added with Purun Concentrate	Da-Bin Lee (Andong National University)
10:10- 10:20	<b>P08-425</b>	Green Tea Extract Exhibits Antidiabetic Effects Partly Through Regulating Dipeptidyl Peptidase-4 Expression in Adipose Tissue	Cheoljun Choi (Seoul National University)
10:20- 10:30	<b>P08-426</b>	Fermented Sorghum Improves Type 2 Diabetes Remission by Modulating Gut Microbiota and their Related Metabolites	Fred Kwame Ofose (Kangwon National University)
10:30- 10:40	<b>P08-427</b>	Quality Characteristics of Citrus Peel Jelly for Improving Women's Health	Jin Ju Baek (Eulji University)
10:40 10:50	<b>P08-428</b>	3-Bromo-4,5-dihydroxybenzaldehyde isolated from <i>Polysiphonia morrowii</i> attenuates inflammation and skin barrier deterioration in TNF- $\alpha$ /IFN- $\gamma$ -stimulated HaCaT keratinocytes	Arachchige Maheshika (Chonnam National University)
10:50- 11:00	<b>P08-430</b>	Ethanol Extract of <i>Sargassum Macrocarpum</i> Alters Transcriptome and Secretome Profile toward Reducing Inflammatory Cytokines and Chemokines in LPS-Stimulated Macrophages	Heeyeon Ryu (Pukyong National University)

## STAR Session II (Room 402B)

시 간	No.	발표제목	발표자(소속)
09:00- 09:10	<b>P02-158</b>	Sensory Properties and Flavor Profiles of Onion Seasonings Prepared by Different Extraction Methods	Yunjin Choi (Pukyong National University)
09:10- 09:20	<b>P02-159</b>	Investigation of plant-based material and analysis of modulator mechanism for salty taste enhancement	Yeong Mi Byeon (Konkuk University)
09:20- 09:30	<b>P03-101</b>	Applicability of phytosterol-based oleogel as a 3D printing material in physico-mechanical properties	Bonbeen Koo (Ewha Womans University)
09:30- 09:40	<b>P03-125</b>	Effect of Hot-Air Drying on Quality and Physicochemical Properties of Lettuce and Nappa Cabbage	Seung-Hee Lee (Konkuk University)
09:40- 09:50	<b>P09-14</b>	Sensory profiling method with superior product discrimination: a two-step rating-based ‘double-faced’ applicability (DFA) test with quantitative output measure ( $d'_{\Delta}$ )	Ye-Jin Lee (Ewha Womans University)

## STAR Session III (Room 402A)

시 간	No.	발표제목	발표자(소속)
11:00-11:10	P01-22	Validation and Development Study for the Quantification of Enzymatically Modified Steviol Glycosides	Sojeong Yoon (Gyeongsang National University)
11:10-11:20	P02-155	Dental Caries Associated Biofilms Exposure to Electrolyzed Water: Metagenomic and Metatranscriptomic Analysis	Xiuqin Chen (Kangwon National University)
11:20-11:30	P02-156	효소적 포접 방법을 이용한 quercetin의 수용성 및 안정성 향상	이예림 (한림대학교)
11:30-11:40	P02-157	시니어를 위한 면역기능 및 항산화 강화 동충하초 양갱의 품질 특성	박은빈 (울지대학교)
11:40-11:50	P03-88	Antioxidative Capacities and Physicochemical Properties of Yanggaeng Treated <i>Corni Fructus</i> Powder	Hyunsoo Jang (Dankook University)
11:50-12:00	P03-126	Monitoring and optimization of roasting conditions of lime ( <i>Citrus aurantifolia</i> ) peel for flavonoid recovery and anticancer activity	Dong Min Kim (Pukyong National University)
12:00-12:10	P05-03	Production, identification of caffeic acid glucoside using <i>Leuconostoc</i> dextransucrase and its functional characterization	Hyeon Jun Seong (Chonnam National University)
12:10-12:20	P05-67	Characteristics of potential probiotic <i>Weissella confusa</i> MKHW1 and <i>Weissella cibaria</i> MKHW33	Heewon Moon (Dankook University)
12:20-12:30	P05-128	Structural Insights on Novel Antibiofilm Mechanism of SAEW Combined Preheating Technology against Multi-resistant <i>Staphylococcus aureus</i> Biofilm	Pianpian Yan (Kangwon National University)
12:30-12:40	P08-356	Probiotic bacteria를 이용한 와송 ( <i>Orostachys japonica</i> A. Berger) 추출물 발효의 항산화 및 미백 효과	배연지 (경북대학교)
12:40-12:50	P08-429	Antioxidant effects of polysaccharide from <i>Gelidium amansii</i> against hydrogen peroxide induced oxidative stress	김정현 (한국식품연구원)
12:50-13:00	P09-11	Correlating Volatile Aroma Compounds Identified in Traditional <i>Doenjang</i> Produced in Gyeonggi Region to its Sensory Characteristics	In-Seo Hwang (Jeonbuk National University)

\* 붉은색 발표번호는 KFN STAR 세션 발표 논문임

- P01-01 **Analysis of the Fragmentation Patterns and Structures of Nootropic Compounds Potentially Adulterated in the Dietary Supplements using LC-QTOF-MS**  
 Nam Sook Kim, Hwan Seong Choi\*, Sol A Yeon, Hyungil Kim, Sun Young Baek. Center for Advanced Analysis, National Institute of Food and Drug Safety Evaluation
- P01-02 **Optimization of Preparation Conditions for Analysis of 13 Nootropic Substances in Solid and Liquid Types of Dietary Supplements**  
 Nam Sook Kim, Hwan Seong Choi\*, Sol A Yeon, Hyungil Kim, Sun Young Baek. Center for Advanced Analysis, National Institute of Food and Drug Safety Evaluation
- P01-03 ***Morus alba* L. root Reduces Melanin Synthesis via the S1P-S1PR-ERK Signaling Pathway in B16F10 Cells**  
 So-Yeon Lee\*, Yulong Zheng, Yeji Lee, Il-Jun Kang. Department of Food Science and Nutrition & the Korean Institute of Nutrition, Hallym University
- P01-04 **The Geographical Origin Examination Method of Korean Cabbage Kimchi Using FT-NIRS; Inter-Laboratory Validation**  
 Jae-Min An\*, Ji-Hye Lee, Yong-Sik Youn, Ji-Won Kim, Ho-Jin Kim. Experiment Research Institute, National Agricultural Products Quality Management Service
- P01-05 **Effects of Pre-cropping with Rice (*Oryza sativa* L.) Alternative Crops on Grain Yield and Flour Quality of Winter Wheat (*Triticum aestivum* L. 'Jokyoung') on the Paddy Fields**  
 Seo Young Oh\*, Jong Ho Seo, Jisu Choi, Taehee Kim, Seong Hwan Oh. Paddy Crop Research Division, Department of Southern Area Crop Science, National Institute of Crop Science
- P01-06 **Effects of Pre-cropping with Rice Alternative Crops on Flour Quality and Baking Applicability of Winter Wheat (*Triticum aestivum* L.) under Paddy Field**  
 Seo Young Oh\*, Jong Ho Seo, Jisu Choi, Taehee Kim, Seong Hwan Oh. Paddy Crop Research Division, Department of Southern Area Crop Science, National Institute of Crop Science
- P01-07 **Analysis of Physicochemical Propertis and Antioxidant Activities of Commonly Consumed *Tteokbokki* Sauce in Korea**  
 Geon Oh<sup>1\*</sup>, Sun-Il Choi<sup>1,2</sup>, Xinggao Han<sup>1</sup>, Xiao Men<sup>1</sup>, Se-Jeong Lee<sup>1</sup>, Sang Mi Jung<sup>3</sup>, Moon Jin Ra<sup>3</sup>, Ok-Hwan Lee<sup>1,2</sup>. <sup>1</sup>Department of Food Biotechnology and Environmental Science, Kangwon National University, <sup>2</sup>Agricultural and Life Sciences Research Institute, Kangwon National University, <sup>3</sup>Hongcheon Institute of Medicinal Herb
- P01-08 **Inter-Laboratory Verification of the Geographical Origin Examination Method of Korean Cabbage Kimchi Using ED-XRF**  
 Yong-Sik Youn\*, Jae-Min An, Ji-Hye Lee, Ho-Jin Kim, Seong-Hun Lee. Experiment Research Institute, National Agricultural Products Quality Management Service
- P01-09 **Effects of chlorogenic acid on the formations of furan, acrylamide, and dicarbonyls in canned coffee model system**  
 Dasom Nam<sup>1\*</sup>, Hyeon-Hee Park<sup>1</sup>, Ji-Yoon Lee<sup>1</sup>, Hyeyoung Lee<sup>2</sup>, Mun Yhung Jung<sup>3</sup>, Young-Suk Kim<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Ewha Womans University, <sup>2</sup>Division of Applied Bioengineering, Dong-eui University, <sup>3</sup>Department of Food Science and Culinary Arts, Woosuk University
- P01-10 **Concentration of ω-3 Fatty Acids Via *Candida rugosa* Lipase-catalyzed Esterification with Phytosterol And Fatty Acid from Anchovy Oil**  
 Jeanne Kang<sup>1,2\*</sup>, In-Hwan Kim<sup>1,2</sup>. <sup>1</sup>Department of Integrated Biomedical and Life Sciences, Graduate School, Korea University, <sup>2</sup>BK21FOUR R&E Center for Learning Health Systems, Korea University
- P01-11 **Lipozyme TL IM-Catalyzed Synthesis of γ-Linolenic Acid Rich Triacylglycerol**  
 Hui Su Yoon<sup>1,2\*</sup>, In-Hwan Kim<sup>1,2</sup>. <sup>1</sup>Department of Integrated Biomedical and Life Sciences, Graduate School, Korea University, <sup>2</sup>BK21FOUR R&E Center for Learning Health Systems, Korea University
- P01-12 **Preparation of Pinolenic Acid-Enriched Triacylglycerol from Pine Nut Oil by a Two-Step Consecutive Enzyme Reaction**  
 Mi Soon Park<sup>1,2\*</sup>, Yu Jin Lee<sup>1,2</sup>, In-Hwan Kim<sup>1,2</sup>. <sup>1</sup>Department of Integrated Biomedical and Life Sciences, Korea University, <sup>2</sup>BK21FOUR R&E Center for Learning Health Systems, Korea University
- P01-13 **Lipase-catalyzed Synthesis of 2-Ethylhexyl Fatty Esters using Stepwise Addition of 2-Ethylhexyl Alcohol**  
 Ahyun Kang<sup>1,2\*</sup>, Jeanne Kang<sup>1,2</sup>, Dong-Min Shin<sup>1,2</sup>, In-Hwan Kim<sup>1,2</sup>. <sup>1</sup>Department of Integrated Biomedical and Life Sciences, Korea University, <sup>2</sup>BK21FOUR R&E Center for Learning Health Systems, Korea University

- P01-14 **가수분해 효소처리를 이용한 미선나무 잎의 항산화성분 및 활성 변화**  
장다빈, 한기정, 배경아, 김채영, 주가영, 인병호, 이경행\*. 한국교통대학교 식품영양학 전공
- P01-15 ***Morus alba* L. Root Reduced MIFT Expression by Inhibiting Cell Melanin Accumulation in B16F10 Cells.**  
Yeji Lee\*, So-Yeon Lee, Yulong Zheng, Il-Jun Kang. Department of Food Science and Nutrition & the Korean Institute of Nutrition, Hallym University
- P01-16 **Dual Roles of Riboflavin and Its Isoalloxazine Derivatives as a Pro- and Anti-oxidant under Light-stimulated Conditions**  
Selim Kim\*, Jungil Hong. Department of Food Science and Technology, College of Natural Science, Seoul Women's University
- P01-17 **Evaluation of sugar contents in Korean traditional soybean fermented foods**  
Jinsoo Jeon<sup>1\*</sup>, Younghyeon Jang<sup>1</sup>, Yubin Shin<sup>1</sup>, Jayeon Moon<sup>1</sup>, Sang Hoon Lee<sup>2</sup>, Young Min Choi<sup>2</sup>, Myoung-Gun Choung<sup>1</sup>. <sup>1</sup>Dept. of Herbal Medicine Resource, Kangwon National University, <sup>2</sup>Dept. Agro-food Resources, National Academy of Agricultural Sciences, Rural Development Administration
- P01-18 **미세조류(microalgae)로부터 유래된 DHA ethylester의 solvent fractionation에 의한 DHA 함량 농축 연구**  
안태용, 강동환, 신정아\*. 국립강릉원주대학교, 식품가공유통학과
- P01-19 **K-농식품자원에서 인지질 함량 정량 분석을 위한 HPLC-ELSD 분석법 확립 및 검증**  
김정섭<sup>1</sup>, 안태용<sup>1</sup>, 민경현<sup>1</sup>, 이기택<sup>2</sup>, 신정아<sup>1\*</sup>. <sup>1</sup>국립강릉원주대학교 식품가공유통학과, <sup>2</sup>충남대학교 식품공학과
- P01-20 **Investigation of Volatile Compounds in Commercially available Domestic- and International-Dog Foods**  
Hyangyeon Jeong\*, Moon Yeon Youn, Sojeong Yoon, Seong Jun Hong, Seong Min Jo, Eui-Cheol Shin. Department of GreenBio Science/Food Science and Technology, Gyeongsang National University
- P01-21 **Evaluation of the Chemosensory Properties of Commercially available Dog Foods using Electronic Sensors**  
Moon Yeon Youn\*, Hyangyeon Jeong, Sojeong Yoon, Seong Jun Hong, Seong Min Jo, Eui-Cheol Shin. Department of GreenBio Science/Agri-Food Bio Convergence Institute, Gyeongsang National University
- P01-22 **Validation and Development Study for the Quantification of Enzymatically Modified Steviol Glycosides**  
Sojeong Yoon\*, Seong Jun Hong, Seong Min Jo, Hyangyeon Jeong, Eui-Cheol Shin. Department of GreenBio Science/Food Science and Technology, Gyeongsang National University
- P01-23 **Inhalation of fennel (*Foeniculum vulgare* Mill) essential oil improves lipids dysfunction and cardiovascular disorders in high-fat diet-fed obese rats**  
Seong Jun Hong\*, Seong Min Jo, Hyangyeon Jeong, Sojeong Yoon, Moon Yeon Youn, Eui-Cheol Shin. Department of GreenBio Science/Agri-Food Bio Convergence Institute, Gyeongsang National University
- P01-24 **Effect of pH condition when graft palatinose to myofibrillar protein**  
Tae-Kyung Kim\*, Ji Yoon Cha, Yeaji Kim, Jake Kim, Jae-Hoon Lee, Min-Cheol Kang, Yun-Sang Choi. Research Group of Food Processing, Korea Food Research Institute
- P01-25 **Characterization of New Steroidal Saponins from Korean Oat Cultivars by UPLC-DAD-QTOF/MS**  
Ryeong Ha Kwon\*, Suji Lee, Hyemin Na, Ju Hyung Kim, So Ah Kim, Ha-Neul Jeong, Heon-Woong Kim, Chi-Do Wee. Department of Agro-Food Resources, National Institute of Agricultural Sciences, Rural Development Administration
- P01-26 **Simultaneous Enzymatic Preparation of Palm-Based Fatty Acids and Glycerol**  
Seohyun Hong<sup>1\*</sup>, In-Hwan Kim<sup>2</sup>, Byung Hee Kim<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Sookmyung Women's University, <sup>2</sup>Department of Integrated Biomedical and Life Science, Graduate School, Korea University
- P01-27 **Phase Transitions and Critical Phenomena of Mung Bean Protein Isolate and Carboxymethyl Cellulose in Aqueous Solution**  
Young Gon Ju<sup>1</sup>, Jaesik Ahn<sup>1</sup>, Md. Abdur Razzak<sup>1,2\*</sup>, Seong-Jun Cho<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Biotechnology, College of Agriculture and Life Sciences, Kangwon National University, <sup>2</sup>Kangwon Institute of Inclusive Technology
- P01-28 **식품에 함유된 주요 리그난 6종의 동시분석법 개발**  
김윤정\*, 편지예, 김영화. 경성대학교 식품생명공학과
- P01-29 **Gastrointestinal Digestion of Microalgae *Tetraselmis chuii* after Physical and Chemical Treatment**  
Ju Hyeon Park<sup>1\*</sup>, Seong-Jun Cho<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Biotechnology, College of Agriculture and Life Sciences, Kangwon National University, <sup>2</sup>Kangwon Institute of Inclusive Technology, Kangwon National University

- P01-30 **Evaluating the Antioxidant Capabilities of Edible Insects after *in vitro* Gastrointestinal Digestion**  
Heui-Seon Shin<sup>1\*</sup>, Ji-Woo Lee<sup>1</sup>, Seong-Jun Cho<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Biotechnology, College of Agriculture and Life Sciences, Kangwon National University, <sup>2</sup>Kangwon Institute of Inclusive Technology, Kangwon National University
- P01-31 **Anthocyanin Compositions and Contents in Black Adzuki Bean Germplasm Grown in Korea**  
Jungyoon Yi<sup>1\*</sup>, Kebede Taye Desta<sup>1,2</sup>, Hyemyeong Yoon<sup>1</sup>, Yumi Choi<sup>1</sup>, Myoungjae Shin<sup>1</sup>, Sukyeung Lee<sup>1</sup>, Wang Xiaohan<sup>1</sup>. <sup>1</sup>National Agrobiodiversity Center, National Institute of Agricultural Sciences, Rural Development Administration, <sup>2</sup>Department of Applied Chemistry, Adama Science and Technology University, Ethiopia
- P01-32 **Preparation of Curcumin loaded Pickering Emulsion using TEMPO-mediated oxidized Cellulose Nanocrystals**  
Ji Hyeon Hwang<sup>1\*</sup>, Se Mi Kim<sup>1</sup>, Jun Tae Kim<sup>2</sup>, Gye Hwa Shin<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Kunsan National University, <sup>2</sup>Department of Food and Nutrition, BioNanocomposite Research Center, Kyung Hee University
- P01-33 **Mechanistic insights into human estrogen receptor-mediated endocrine-disrupting potential of Metiram**  
Jiwon Kim<sup>1\*</sup>, Da-Hyun Jeong<sup>2</sup>, Hee-Seok Lee<sup>1,2</sup>. <sup>1</sup>Department of Food Safety and Regulatory Science, Chung-Ang University, <sup>2</sup>Department of Food Science and Biotechnology, Chung-Ang University
- P01-34 **Physicochemical and textural properties of muffin and noodle enriched with thermally treated sweet pumpkin flour**  
Ha-Eun Han<sup>1\*</sup>, So-Won Lee<sup>1</sup>, Sangmyeong Jun<sup>2</sup>, Hyun-Jung Chung<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Chonnam National University, <sup>2</sup>Haenam Agricultural Technology Center
- P01-35 **Development and characteristics of layered energy bar with pre-treated rice bran**  
Bit-Ha-Neul Choi<sup>\*</sup>, Hyo-Bin Park, Hyun-Jung Chung. Division of Food and Nutrition, Chonnam National University
- P01-36 **로스팅 가지의 용매별 항산화 활성 및 에탄올 자극에 대한 간세포 보호 효과**  
김지환\*, 한지수, 김세정, 송효진, 최여진, 라이선, 이재현, 진민근, 신희운, 김영화. 경성대학교 식품생명공학과
- P01-37 **Comparative Untargeted Metabolomic Analyses of the Commercial Soybean Seeds (*Glycine max* L.)**  
Oh Suk Yu, Seon-Woo Oh, Sang-Gu Lee, Soo-Yun Park, Hyoun-Min Park, Yun-Young Kang, Myeong Ji Kim, Eun-Ha Kim\*. Biosafety Division, National Institute of Agricultural Science
- P01-38 **MAPK Signal Pathway-mediated Anti-inflammatory Effect of Sonchifolactone F Isolated from *Crepidiastrum sonchifolium***  
Ho Yeol Jang\*, Kyung-Yun Kang, Beom-Gyun Jeong, Jeong-Ho Kim, Jun-Ki Park, Yun-Seo Oh, Kyung-Wuk Park. Suncheon Research Center for Bio Health Care
- P01-39 **Comparative Analyses of Transgenic Soybean Seeds with Higher Linolenic Acid Using Untargeted Metabolite Profiles Based on LC-MS**  
Eun-Ha Kim\*, Sang-Gu Lee, Hyun-Min Park, Soo-Yun Park, Oh Suk Yu, Yun-Young Kang, Myeong Ji Kim, Seon-Woo Oh. Biosafety Division, National Institute of Agricultural Science
- P01-40 **제주도산 브로콜리 품종별 상품화 연구**  
쌍잔턴\*, 영첩, 장유빈, 박성수. 제주대학교 식품영양학과
- P01-41 **Physicochemical analysis and enzyme activity analysis of traditional in Gyeonggi region**  
Yu Jin Lee\*, Mina K. Kim. Department of Food Science and Human Nutrition, and K-Food Research Center, Jeonbuk National University
- P01-42 **Monosaccharide Composition of Pectic Polysaccharides from Apple by Extraction Methods**  
Jeong Jin Hong\*, So Hee Gu, Jin Hyang Son, Hyun Soo Kim, Ju Youl Oh, Eun Ho Jeong. Apple Utilization Research Institute, Gyeongsangnam-Do Agricultural Research and Extension Services
- P01-43 **Physicochemical and Sensory Characteristics of traditional *Doenjang* produced in Jeju region**  
Hyejin Cho\*, In-Seo Hwang, Mina K. Kim. Department of Food Science and Human Nutrition, and K-Food Research Center, Jeonbuk National University
- P01-44 **Monitoring of 510 Pesticide Residues in Agricultural Products by QuEChERS method**  
Ji-Yeon Bae\*, Da-Young Yun, Ha Na Song, Min Ji Kim, Gui Hyun Jang, Guiim Moon, Won-Jo Choe. Pesticide and Veterinary Drug Residues Division, Food Safety Evaluation Department, National Institute of Food and Drug Safety Evaluation, Ministry of Food and Drug Safety
- P01-45 **LC-MS/MS를 이용한 농산물 중 생물 유래 유기농자재(pyrethrin) 시험법 검증**  
송하나\*, 배지연, 윤다영, 장귀현, 문귀임, 최원조. 식품의약품안전처 식품의약품안전평가원 식품위해평가부 잔류물질과
- P01-46 ***In vitro* Antioxidant Activities of Five Different Seaweeds from Jeju**  
Sosoh Kim\*, Jiyeon Kim, Nahyeon Yang, Jaehong Shin, Hyun Jung Kim. Department of Food



- Bioengineering, Jeju National University
- P01-47 **Chemical Properties and Oxidative Stability of Jeju Camellia Oil During Storage**  
Dong Eon Kim\*, Jaehong Shin, Hyun Jung Kim. Department of Food Bioengineering, Jeju National University
- P01-48 **우리나라의 곡류 및 두류 가공품 biotin 함량**  
편지예\*, 진민근, 신희운, 김영화. 경성대학교 식품생명공학과
- P01-49 **Analysis of Mutagenicity of Quercetin and Its Derivatives Using *in vitro* and QSAR(Quantitative Structure Analysis Relationship)**  
Jin-Young Lee\*, Hyun-Joo Kim, Min-Jung Koo, Yu-Young Lee, Mi-Hyang Kim, Na-Rae Han, Moon-Suk Kang. Department of Central area Crop Science, National Institute of Crop Science, Rural Development Administration
- P01-50 **Inhibitory Activity and Inhibitory Mode of Flavonoid Aglycone on  $\alpha$ -glucosidase**  
Jin-Young Lee\*, Min-Jung Ku, Yu-Young Lee, Mi-Hyang Kim, Hyun-Joo Kim, Na-Rae Han, Moon-Suk Kang. Department of Central area Crop Science, National Institute of Crop Science, Rural Development Administration
- P01-51 **Comparison of physicochemical properties and oxidative stability of rice bran oil and rice flours from 2 different rice varieties including 'Samkwang' and 'Baromi2'**  
Seung-Hyun Oh<sup>1\*</sup>, Hyeon-Ho Hwang<sup>1</sup>, Ye-Jin Song<sup>1</sup>, Hoe-Bin Kim<sup>1</sup>, Hyung-Seok Choi<sup>1</sup>, Won-Young Oh<sup>1</sup>, Ju-Dong Yeo<sup>2</sup>, Ji-Eun Kwak<sup>3</sup>, Jeong-Heul Lee<sup>3</sup>, Jae-Hwan Lee<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Sungkyunkwan University, <sup>2</sup>Department of Food Science and Biotechnology of Animal Resources, Konkuk University, <sup>3</sup>Department of Central Area Crop Science, National Institute of Crop Science, RDA
- P01-52 **Metabolomic analysis of *Citrus unshiu* cultivated under different cultivation conditions**  
Seong-Man Jeong<sup>1\*</sup>, Seong-Ho Jo<sup>1</sup>, Ji-Hyun An<sup>1</sup>, Dong-Shin Kim<sup>2</sup>, Sang-Suk Kim<sup>3</sup>, Hyun-Jin Kim<sup>1,2</sup>. <sup>1</sup>Division of Applied Life Science (BK21 four), and Institute of Agricultural and Life Science, Gyeongsang National University, <sup>2</sup>Institute of Animal Medicine Gyeongsang National University, <sup>3</sup>Citrus Research Institute, National Institute of Horticultural and Herbal Science, Rural Development Administration
- P01-53 **Identification of Phytochemical Constituents from Polar Fractions of *Filipendula glaberrima***  
Chang-Dae Lee<sup>1\*</sup>, Hyejin Cho<sup>1</sup>, Hak-Dong Lee<sup>1,2</sup>, Gia Han Tran<sup>1</sup>, Yunji Lee<sup>3</sup>, Ki-Young Kim<sup>4</sup>, Hangeun Kim<sup>5</sup>, Sanghyun Lee<sup>1,2</sup>. <sup>1</sup>Department of Plant Science and Technology, Chung-Ang University, <sup>2</sup>Natural Product Institute of Science and Technology, <sup>3</sup>Department of Herbal Crop Research, National Institute of Horticultural and Herbal Science, <sup>4</sup>Graduate School of Biotechnology, Kyung Hee University, <sup>5</sup>Research and Development Center, Skin Biotechnology Center Inc.
- P01-54 **Effect of Surfactant and Cellulose Microcrystalline on Oleogels Formation Using Various Biopolymers**  
So Ri Lee<sup>1\*</sup>, Jun Tae Kim<sup>2</sup>, Gye Hwa Shin<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Kunsan National University, <sup>2</sup>Department of Food and Nutrition, BioNanocomposite Research Center, Kyung Hee University
- P01-55 **Optimization and bioactivity of Aroase AP-10 hydrolysates prepared from roe protein concentrate of skipjack Tuna *Katsuwonus pelamis***  
In Sang Kwon<sup>1\*</sup>, In Seong Yoon<sup>2</sup>, Jae Hee An<sup>1</sup>, Min Kyo Kim<sup>1</sup>, Dayeon Lee<sup>1</sup>, Min Soo Heu<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition/Institute of Marine Industry, Gyeongsang National University, <sup>2</sup>Department of Seafood Science & Technology/Institute of Marine Industry, Gyeongsang National University
- P01-56 **Effect of Transglutaminase Treatment on Rheological and Gelation Properties of Mung Bean Protein**  
Soo Hyun-Moon\*, Min-Soo Jeong, Seong-Jun Cho. Department of Food Science and Biotechnology, College of Agriculture and Life Sciences, Kangwon National University
- P01-57 **Characterization of phenolic compounds from *Chrysanthemum zawadskii* using UPLC-DAD-QToF/MS**  
Ju Hyung Kim\*, Heon-Woong Kim, Suji Lee, Ryeong Ha Kwon, Ha-Neul Jeong, So Ah Kim, Hyemin Na, Seon Mi Yoo, Chi-Do Wee. Department of Agro-Food Resources, National Academy of Agricultural Sciences, Rural Development Administration
- P01-58 **Identification and quantification of isoflavones from roots of *Astragalus membranaceus* using UPLC-DAD-QToF/MS**  
Heon-Woong Kim\*, Suji Lee, Ryeong Ha Kwon, Ju Hyung Kim, Ha-Neul Jeong, So Ah Kim, Hyemin Na, Seon Mi Yoo, Chi-Do Wee. Department of Agro-Food Resources, National Academy of Agricultural Sciences, Rural Development Administration
- P01-59 **Antioxidant Activity of Lyophilized Red Cabbage (*Brassica oleracea* L. var. *capitata* f. *rubra*) Water Soluble Extracts Treated by Various Carbohydrase Enzymes**  
Ji Won Park\*, Koo Bok Chin. Department of Animal Science, Chonnam National University



- P01-60 **Manufacture of cation/anion adsorption gel-based microneedle patch for skin application**  
Soo-Cheol Choi\*, In-Ah Lee. Department of Chemistry, Kunsan National University
- P01-61 **Characterization of Stilbene and Prenylated flavonoid derivatives from the Root barks of *Morus alba* L. (Mori Cortex) by UPLC-DAD-QToF/MS**  
So Ah Kim\*, Suji Lee, Ryeong Ha Kwon, Ju Hyung Kim, Ha-Neul Jeong, Hyemin Na, Chi-Do Wee, Heon-Woong Kim. Department of Agro-Food Resources, National Institute of Agricultural Sciences, Rural Development Administration
- P01-62 **Characterization and quantification of flavonoids in *Raphanus sativus* L. Cultivated from Korea by UPLC-DAD-QToF/MS**  
Hyemin Na\*, Ryeong Ha Kwon, Suji Lee, Ju Hyung Kim, Ha-Neul Jeong, So Ah Kim, Seon Mi Yoo, Chi-Do Wee, Heon-Woong Kim. Department of Agro-Food Resources, National Institute of Agricultural Sciences, Rural Development Administration
- P01-63 **Quantification of galactose in agricultural products for galactosemia patients using by Gas chromatography with flame ionization detector**  
Ha-Neul Jeong\*, Ryeong Ha Kwon, Jin Ju Park, Chi-Do Wee. Department of Agro-Food Resource, National Institute of Agricultural Science, Rural Development Administration
- P01-64 **Effects of mixed supplementation on *Protaetia brevitarsis seulensis* larvae extracts and Ginseng, red ginseng extracts on hangover curves**  
Sung Mo Kang<sup>1\*</sup>, Sang Youn Lee<sup>1</sup>, Beom Goo Kang<sup>2</sup>, Eun Jun Jeong<sup>1</sup>, Soo Kyeong Lee<sup>1,3</sup>, Ji Won Choi<sup>1</sup>, Zhaoyang Wu<sup>1</sup>, Saba Noreen<sup>1</sup>, Soon Sung Lim<sup>1,3</sup>. <sup>1</sup>Department of Food Science and Nutrition, Hallym University, <sup>2</sup>Department of Biochemistry, College of Medicine, Hallym University, <sup>3</sup>Institute of Korean Nutrition, Hallym University
- P01-65 **Textural quality of Korean cooked rice is controlled by compositional and starch structural characteristics of its leachate**  
Min-Gyo Ha<sup>\*</sup>, Duyeon Jeong<sup>2</sup>, Hyun-Jung Chung<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Chonnam National University, <sup>2</sup>Department of Food and Food Service Industry, Kyungpook National University

## Food Analysis / Quality Control

- P02-01 **Monitoring of Vitamin D Content in Domestic Foods**  
Chang Wan Lim<sup>1</sup>, Jun Yeop Lee<sup>1</sup>, Kwang Eun Jung<sup>1</sup>, Jong Eun Won<sup>1</sup>, Byung-Man Kwak<sup>1\*</sup>, Ki Woong Lee<sup>1</sup>, Jin Ju Park<sup>2</sup>, Sang Hoon Lee<sup>2</sup>. <sup>1</sup>Food Analysis Department, R&D Institute, Namyang Dairy Products Co., Ltd., <sup>2</sup>Food & Nutrition Division, Department of Agrofood Resources, National Institute of Agricultural Sciences, Rural Development Administration
- P02-02 **복분자의 가공 적성을 위한 식초제조 및 기능성분 분석**  
정소희\*, 송지영, 박희진. (재)베리엔바이오식품연구소
- P02-03 **Correlation between individual metabolites and health beneficial effect in fruits- A metabolomics study**  
June Song\*, Jisue Lee, Young-Shick Hong. Department of Food and Nutrition, Chonnam National University
- P02-04 **Analytical Method Development and Validation of Agricultural Antibiotics in Lettuce by Modified QuPpe Method and LC-MS/MS**  
Jonghwan Im, Sunmyeong Joung, Ukwon Ha, Hanyeol Bang\*. Gyeongnam Provincial Office, National Agricultural Products Quality Management Service
- P02-05 **Evaluation of nutritional value in plant-based canned tuna products**  
Chankyu Lee\*, Dongwoo Kim, Jiwon Song, Yeseul Lee, Bongkyun Kim, Jinhyun Kim, Seunghyeon Jung. Food Safety Center, Ottogi Corporation
- P02-06 **The Comparative analysis of food quality parameters of commercial sesame and perilla oil**  
Dong-Woo Kim\*, Ye-Seul Lee, Bong-Kyun Kim, Jin-Hyun Kim, Seung-Hyeon Jung. Food Safety Center, Ottogi Corporation
- P02-07 **Evaluation of Multi-residue Analysis Method for Pesticide in Fishery Products using Liquid Chromatography-Tandem Mass Spectrometry**  
Hyo Jeong Kim\*, Da Hee Lee, Kyung Yoal Ryu, Ji Young Song, Ki Mi No, Ji-Hye Lee, Goeun Yun, So-Hee Choi, Eun Young Jang, Soo Kyung Suh. Hazardous Substances Analysis Division, Gyeongin Regional Office of Food and Drug Safety
- P02-08 **Change of quality characteristics of Korean three potato cultivars under different storage condition**

- Eunyeong Sim<sup>1\*</sup>, Hong-Sik Kim<sup>1</sup>, Kyu-Suk Han<sup>2</sup>, Hye-Young Park<sup>1</sup>, Hye-Sun Choi<sup>1</sup>. <sup>1</sup>Crop Post-Harvest Technology Division, Department of Central Area Crop Science National Institute of Crop Science, Rural Development Administration, <sup>2</sup>Potato Research Institute, Gangwon Ares
- P02-09 **Quality Analysis of  $\alpha$ -carotene,  $\beta$ -carotene, and  $\beta$ -cryptoxanthin in Commonly Consumed Agricultural Products in Korea**  
Hyun-Ju Eom<sup>1\*</sup>, Hye Jin Park<sup>1</sup>, Hye Jeong Kang<sup>1</sup>, In Jae Kim<sup>1</sup>, Ju-Hyoung Kim<sup>1</sup>, Jinju Park<sup>2</sup>. <sup>1</sup>Chungcheongbukdo Agricultural Research and Extension Services, <sup>2</sup>Department of Agro-food Resources, NAAS, RDA
- P02-10 **Quality characteristics of *Byeolmijang* prepared with corn and starter**  
Hyun-Ju Eom<sup>1\*</sup>, Tae-Hoon Lee<sup>2</sup>, Hye Jin Park<sup>1</sup>, Hye Jeong Kang<sup>1</sup>, In Jae Kim<sup>1</sup>, Ju-Hyoung Kim<sup>1</sup>, So-Young Kim<sup>3</sup>. <sup>1</sup>Chungcheongbukdo Agricultural Research and Extension Services, <sup>2</sup>Goesan Agricultural Technology and Extension Center, <sup>3</sup>Department of Agro-food Resources, NAAS, RDA
- P02-11 **Quality characteristics of *Byeolmijang* added with different *Bacillus* starter**  
Hyun-Ju Eom<sup>1\*</sup>, Hye Jin Park<sup>1</sup>, Do-Kyun An<sup>1</sup>, Hye Jeong Kang<sup>1</sup>, Ju-Hyoung Kim<sup>1</sup>, So-Young Kim<sup>2</sup>. <sup>1</sup>Chungcheongbukdo Agricultural Research and Extension Services, <sup>2</sup>Department of Agro-food Resources, NAAS, RDA
- P02-12 **Quality characteristics of *Byeolmijang* Added "*Salicho*" Pepper Leaves**  
Hyun-Ju Eom<sup>1\*</sup>, Hye Jin Park<sup>1</sup>, Hye Jin Park<sup>2</sup>, Do-Kyun An<sup>1</sup>, Hye Jeong Kang<sup>1</sup>, Ju-Hyoung Kim<sup>1</sup>, So-Young Kim<sup>3</sup>. <sup>1</sup>Chungcheongbukdo Agricultural Research and Extension Services, <sup>2</sup>R&D Unit, Pepper & Breeding Institute, Republic of Korea, <sup>3</sup>Department of Agro-food Resources, NAAS, RDA
- P02-13 **Analysis of Ginsenosides in fermented Red Ginseng added various Lactic acid bacteria Starter**  
Hyun-Ju Eom<sup>\*</sup>, Hye Jin Park, Do-Kyun An, Hye Jeong Kang, Ju-Hyoung Kim. Chungcheongbukdo Agricultural Research and Extension Services
- P02-14 **Bioactive Compounds and Physiological Activities of Several Soybeans by Pretreatment**  
Hye Jin Park<sup>\*</sup>, Hyun-Ju Eom, Nu Ri Gwon, Hye Jeong Kang, Ju-Hyoung Kim. Chungcheongbukdo Agricultural Research and Extension Services
- P02-15 **Aroma and Quality Characteristics of Distilled Liquor by Solid-State Fermentation Using Sorghum and Corn**  
Hye Jin Park<sup>\*</sup>, Hyun-Ju Eom, Nu Ri Gwon, Hye Jeong Kang, Ju-Hyoung Kim. Chungcheongbukdo Agricultural Research and Extension Services
- P02-16 **Quality Characteristics of Korean Traditional Wines with Different Amounts of Sorghum and Corn**  
Hye Jin Park<sup>\*</sup>, Hyun-Ju Eom, Nu Ri Gwon, Hye Jeong Kang, Ju-Hyoung Kim. Chungcheongbukdo Agricultural Research and Extension Services
- P02-17 **몇 가지 소재를 첨가하여 제조한 고구마 리큐르의 품질 특성**  
박혜진<sup>\*</sup>, 엄현주, 권누리, 강혜정, 김주형. 충청북도농업기술원
- P02-18 **프로바이오틱스 유산균으로 발효한 대추추출액을 첨가하여 제조한 컵케이크 및 브라우니의 품질 특성**  
박혜진<sup>\*</sup>, 엄현주, 권누리, 강혜정, 김주형. 충청북도농업기술원
- P02-19 **Nutrition and Antioxidant Activity of Four Edible Plants that Grown Naturally in Gageodo**  
Seul Lee, Yeon Kyoung Kim<sup>\*</sup>, Ah Hyun Kim, Eun Hee Kim, Ho Chul Yang, Sook Park, Yang Joon An, Doo Young Jeon. Jeollanam-do Institute of Health & Environment
- P02-20 **Nutritional Components and Antioxidant Activities of Solvent Extract from 'White' and 'Brown' *Flammulina veputipes***  
Hyung-Seok Hong<sup>1\*</sup>, Nae-Kyoung Kang<sup>1</sup>, Jong-Hun Lee<sup>1</sup>, Yong-Min Choi<sup>2</sup>, Jin-Sik Nam<sup>3</sup>. <sup>1</sup>Food Analysis Research Center, Suwon Women's University, <sup>2</sup>Department of Agrofood Resources, National Institute of Agricultural Sciences, RDA, <sup>3</sup>Department of Food and Nutrition, Suwon Women's University
- P02-21 **Antioxidant Constituents and Antioxidant Activities of Eighteen Korean Tomato Cultivars**  
Dong-Min Kang<sup>1</sup>, Ji-Min Kwon<sup>1</sup>, Woo-Jin Jeong<sup>1</sup>, Yu Jin Jung<sup>2,3</sup>, Kwon Kyoo Kang<sup>2,3</sup>, Mi-Jeong Ahn<sup>1\*</sup>. <sup>1</sup>College of Pharmacy and Research Institute of Pharmaceutical Sciences, Gyeongsang National University, <sup>2</sup>Division of Horticultural Biotechnology, Hankyong National University, <sup>3</sup>Institute of Genetic Engineering, Hankyong National University
- P02-22 **Quality characteristics in the storage of vacuum packed oyster mushrooms for meal kits**  
Jeong-Eon Lee<sup>1\*</sup>, Eun-Jin Lee<sup>2</sup>, Seung-Ju Choi<sup>1</sup>, Yong-Jun Cha<sup>1</sup>, Hye-Kyung Moon<sup>1,2</sup>. <sup>1</sup>Department of Food and Nutrition, Changwon National University, <sup>2</sup>Department of Interdisciplinary Program in Senior Human Ecology(Food and Nutrition), Changwon National University
- P02-23 **작물성분 DB 데이터 활용을 통한 통계적 상관성 분석 기술 개발**  
오선우<sup>\*</sup>, 김은하, 박수윤, 이상구, 박현민, 유오숙, 강윤녕, 김명지. 농촌진흥청 국립농업과학원 생물안전성과
- P02-24 **Comparison of nutrient composition of High-Yield(HY) GM soybean and non-GM soybean by using chemometric analysis**

- Yun-Young Kang, Eun-Ha Kim, Soo-Yun Park, Sang-Gu Lee, Hyoun-Min Park, Oh-Suk Yu, Myeong-Ji Kim, Seon-Woo Oh\*. Biosafety Division, National Institute of Agricultural Sciences, RDA
- P02-25 Development of Nondestructive Wheat Protein Prediction Model Using FT-NIR and Chemometrics**  
Youngwook Seo<sup>1\*</sup>, Hoi-Man Park<sup>1</sup>, Kyeong-Min Kim<sup>2</sup>, Kyeong-Hoon Kim<sup>2</sup>. <sup>1</sup>National Institute of Agricultural Sciences, <sup>2</sup>National Institute of Crop Science
- P02-26 Relating volatile and sensory data using partial least squares regression analysis in commercial Korean distilled liquor, soju**  
Seung-Joo Lee\*. Sejong University
- P02-27 Contents of Chlorogenic Acids in Cold Brew Extracts from India Coffee Bean by Roasting Intensity**  
Eon Gyeong Kim\*, Yun Hur, Ji Won Park, Ha Yeon Moon, Keung Min Yong, Ji Su Hong, Eun Ju Kang, Ha Eun Lee, Sun Yup Shim, Kap Seong Choi. Department of Food Science and Biotechnology, Sunchon National University
- P02-28 Analytical Method Validation of Five Mycotoxins in Edible Oil using Liquid Chromatography-Tandem Mass Spectrometry**  
Bogyoung Choi<sup>1\*</sup>, Eun-Hye Choi<sup>1</sup>, Jiyoung Mun<sup>1</sup>, Mi-Jung Ji<sup>1</sup>, Haejin Kwon<sup>1</sup>, Youkyoung Kim<sup>1</sup>, Sung-Ok Kwon<sup>2</sup>, Jee-Yeon Lee<sup>3,4</sup>, Cho-Il Kim<sup>2</sup>, Hyun-Mee Park<sup>1</sup>. <sup>1</sup>Advanced Analysis and Data Center, Korea Institute of Science and Technology, <sup>2</sup>Department of Food and Nutrition, Seoul National University, <sup>3</sup>Department of Health Administration, Kongju National University, Graduate School, <sup>4</sup>Department of Senior-friendly Industry Team, Korea Health Industry Development Institute
- P02-29 Analytical Method Validation of Four Mycotoxins in Soy Sauce using Ultra High-performance Liquid Chromatography-Tandem Mass Spectrometry**  
Eun-Hye Choi<sup>1\*</sup>, Bogyoung Choi<sup>1</sup>, Jiyoung Mun<sup>1</sup>, Sukyoun Son<sup>1</sup>, Kisoo Lee<sup>1</sup>, Sung-Ok Kwon<sup>2</sup>, Jee-Yeon Lee<sup>3</sup>, Cho-Il Kim<sup>2</sup>, Hyun-Mee Park<sup>1</sup>. <sup>1</sup>Advanced Analysis Data Center, Korea Institute of Science and Technology, <sup>2</sup>Department of Food and Nutrition, Seoul National University, <sup>3</sup>Nutrition Policy & Promotion Team, Korea Health Industry Development Institute
- P02-30 Adsorptive Removal of Unpleasant Odors from *Gastrodia elata* Blume Using Polystyrene-divinylbenzene Copolymer Resin MN102**  
Jehun Choi\*, Byung Ju Lee, Yongrae Cho, Myoung Jin Kim, Gwi Yeong Jang, Su Ji Choi. Industrial Crop Utilization Division, NIHHS, RDA
- P02-31 Development of an analysis method for perfluorinated compounds in rice matrix using QuEChERS and LC-MS/MS**  
Sun Hye Hwang\*, Soo Ji Kang, So Young Kim. Korea Food Research Institute
- P02-32 Nutritional Composition and Physicochemical Properties of Korean Hemp Seed depending on Variety**  
Hee-Young Hwang<sup>1,2\*</sup>, Mee-Jeoung Kim<sup>1</sup>, Hye-Mee Shim<sup>1</sup>, Woo-Sik Jeong<sup>2</sup>. <sup>1</sup>GyeongSangbukdo Government Public Institute of Health & Environment, <sup>2</sup>School of Food Science and Biotechnology, Kyungpook National University
- P02-33 Polyunsaturated Fatty Acids(PUFAs) Content and Oxidation State of Marine Omega-3 Supplements in Chungcheongnam-do**  
Doe-Kyoung Kwon\*, Seung-Soon Yeo, Nam-Woo Kim, Heun-Kag Kang. Food and Drug Examination Team, Chungcheongnam-do Institute of Health & Environmental Research
- P02-34 Effect of Baking Conditions on Flaxseed Peptides (Linusorbs) Content and Quality**  
Youn Young Shim<sup>1,2\*</sup>, Martin J. T. Reaney<sup>1</sup>. <sup>1</sup>Department of Food and Bioproduct Sciences, University of Saskatchewan, Canada, <sup>2</sup>Department of Integrative Biotechnology, Biomedical Institute for Convergence at SKKU, Sungkyunkwan University
- P02-35 Comparison of lipid components in wheat bran by supercritical carbon dioxide extraction conditions**  
Hyun-Joo Kim<sup>1\*</sup>, Kyeong-Hoon Kim<sup>2</sup>, Jin Hee Park<sup>2</sup>, Byung-Soo Chun<sup>3</sup>, You-Geun Oh<sup>1</sup>, Hong-Sik Kim<sup>1</sup>, Mihyang Kim<sup>1</sup>, Yu-Young Lee<sup>1</sup>, Jin Young Lee<sup>1</sup>, Moon Seok Kang<sup>1</sup>. <sup>1</sup>Department of Central Area Crop Science, National Institute of Crop Science, Rural Development Administration, <sup>2</sup>Wheat Research Team, National Institute of Crop Science, Rural Development Administration, <sup>3</sup>Department of Food Science and Biotechnology, Pukyong National University
- P02-36 Simultaneous Analysis of 510 Pesticide Residues in Agricultural Products by LC-MS/MS and GC-MS/MS**  
Chan Woong Park\*, Hyo In Kim, Si Woo Park, Seon Hwa Lee, Chang Hee Lee, Woo Seong Kim. Busan Regional Office of Food and Drug Safety
- P02-37 Changes in Useful Ingredients according to Laver Heat Processing**

- Seul Lee\*, Won Kim, Yeon-Ju Lee, Hyo-Jeong Kang, Jin-Young Kim, Ki-Bok Yoon, Ho-Chul Yang, Yang-Joon An, Doo-Young Jeon. Jeollanam-do Institute of Health & Environment
- P02-38 **Investigation of Mineral (Na, Ca, Mg, Zn and Fe) Contents in Snacks and Drinks for Infants and Toddlers**  
Jaerin Lee\*, Gyungri Gang, Keunyoung Ryu, Hyemin Park, Suyeon Choi, Baesik Cho, Jinhee Kim. Health and Environment Research Institute of Gwangju Metropolitan City
- P02-39 **가열 전처리에 의한 블루베리와인의 이화학적 특성**  
윤동규\*, 박의광, 최성열, 신혜림, 윤향식. 충북농업기술원 와인연구소
- P02-40 **침용기간에 따른 화이트와인의 품질특성 비교**  
윤동규\*, 박의광, 최성열, 신혜림, 윤향식. 충북농업기술원 와인연구소
- P02-41 **국내 다소비 식품의 레티놀 함량 분석**  
전예솔<sup>1\*</sup>, 최용민<sup>2</sup>, 김만수<sup>1</sup>, 김세영<sup>1</sup>, 이준수<sup>1</sup>. <sup>1</sup>충북대학교 식품생명공학과, <sup>2</sup>농촌진흥청 농식품자원부
- P02-42 **국내산 및 수입산 밀의 도정 분획별 기능성 성분 비교**  
허희진<sup>1\*</sup>, 김민준<sup>1</sup>, 김민지<sup>1</sup>, 박진희<sup>2</sup>, 김경훈<sup>2</sup>, 이준수<sup>1</sup>. <sup>1</sup>충북대학교 식품생명공학과, <sup>2</sup>국립식량과학원 밀연구팀
- P02-43 **틸라피아 콜라겐의 순도와 용해도를 높이는 전처리 방법**  
신은성\*, 손선아, 김신혜, 마아영, 신태선. 전남대학교 식품영양학과
- P02-44 **Determination of 39 Food Colorants in Drink using UPLC&PDA**  
Juhee Park\*, Seunghye Choi, Ji Yeon Choi. Food Analysis Research Center, Food Industry Research Division, Korea Food Research Institute, Republic of Korea
- P02-45 **HPLC를 이용한 다시마 유래 활성물질의 분리·정제**  
마아영\*, 신은성, 김신혜, 신태선. 전남대학교 식품영양학과
- P02-46 **Determination of pyridoxine content with different cuts and cooking methods in chicken**  
Younghyeon Jang\*, Jinsoo Jeon, Yubin Shin, Jayeon Moon, Myoung-Gun Choung. Dept. of Herbal Medicine Resource, Kangwon National University
- P02-47 **Determination of isoflavone contents on the fermented soybean processed foods in various Korean provinces**  
Younghyeon Jang<sup>1\*</sup>, Jinsoo Jeon<sup>1</sup>, Yubin Shin<sup>1</sup>, Jayeon Moon<sup>1</sup>, Sang Hoon Lee<sup>2</sup>, Young Min Choi<sup>2</sup>, Myoung-Gun Choung<sup>1</sup>. <sup>1</sup>Dept. of Herbal Medicine Resource, Kangwon National University, <sup>2</sup>Dept. Agrofood Resources, National Academy of Agricultural Sciences, Rural Development Administration
- P02-48 **Contents of thiamine, riboflavin, and niacin in sprouted vegetables**  
Jinsoo Jeon<sup>1\*</sup>, Younghyeon Jang<sup>1</sup>, Yubin Shin<sup>1</sup>, Yubin Shin<sup>1</sup>, Sang Hoon Lee<sup>2</sup>, Young Min Choi<sup>2</sup>, Myoung-Gun Choung<sup>1</sup>. <sup>1</sup>Dept. of Herbal Medicine Resource, Kangwon National University, <sup>2</sup>Dept. Agrofood Resources, National Academy of Agricultural Sciences, Rural Development Administration
- P02-49 **Determination of thiamine and niacin contents in meat processed foods**  
Yubin Shin<sup>1\*</sup>, Younghyeon Jang<sup>1</sup>, Jinsoo Jeon<sup>1</sup>, Jayeon Moon<sup>1</sup>, Sang Hoon Lee<sup>2</sup>, Young Min Choi<sup>2</sup>, Myoung-Gun Choung<sup>1</sup>. <sup>1</sup>Dept. of Herbal Medicine Resource, Kangwon National University, <sup>2</sup>Dept. Agrofood Resources, National Academy of Agricultural Sciences, Rural Development Administration
- P02-50 **Determination of riboflavin contents on the meat processed foods consumed in Korea**  
Yubin Shin<sup>1\*</sup>, Younghyeon Jang<sup>1</sup>, Jinsoo Jeon<sup>1</sup>, Jayeon Moon<sup>1</sup>, Sang Hoon Lee<sup>2</sup>, Young Min Choi<sup>2</sup>, Myoung-Gun Choung<sup>1</sup>. <sup>1</sup>Dept. of Herbal Medicine Resource, Kangwon National University, <sup>2</sup>Dept. Agrofood Resources, National Academy of Agricultural Sciences, Rural Development Administration
- P02-51 **Variation of riboflavin contents in Corn(*Zea mays*)according to heat-treatment**  
Jayeon Moon<sup>1\*</sup>, Younghyeon Jang<sup>1</sup>, Jinsoo Jeon<sup>1</sup>, Yubin Shin<sup>1</sup>, Sang Hoon Lee<sup>2</sup>, Young Min Choi<sup>2</sup>, Myoung-Gun Choung<sup>1</sup>. <sup>1</sup>Dept. of Herbal Medicine Resource, Kangwon National University, <sup>2</sup>Dept. Agrofood Resources, National Academy of Agricultural Sciences, Rural Development Administration
- P02-52 **Comparison of Agricultural Traits and Physicochemical Properties in Three Types of Jerusalem Artichoke (*Helianthus tuberosus* L.)**  
Eom-Ji Hwang<sup>1\*</sup>, Yeong-Hoon Lee<sup>2</sup>, Tea-Joung Ha<sup>1</sup>, Jea-Hee Jung<sup>1</sup>, Yu-Jin Park<sup>1</sup>. <sup>1</sup>Bioenergy Crop Research Institute, NICS, RDA, Muan 58545, Korea, <sup>2</sup>National Institute of Crop Science, RDA
- P02-53 **Analysis of the Quality Characteristics of Salt treated Sesame Using Random forest Method**  
Yu-Chan Choi\*, Hyeon-Jin Park, Yu-Geun Oh. Department of Central Area Crop Science, National Institute of Crop Science
- P02-54 **정향과 블랙커민시드 추출물의 항산화와 항염증 활성분석을 통한 활용성 탐색**  
김연지<sup>1\*</sup>, 김수현<sup>1</sup>, 김수민<sup>1</sup>, 하주현<sup>1</sup>, 배경미<sup>1</sup>, 김태완<sup>2</sup>. <sup>1</sup>안동대학교 Hugar 바이오혁신아카데미사업단, <sup>2</sup>안동대학교
- P02-55 **고추냉이 추출물과 유산균의 항산화와 항염증 활성분석 및 요거트제품 개발 탐색**  
정규진<sup>1\*</sup>, 강수현<sup>1</sup>, 마혜정<sup>1</sup>, 이승연<sup>1</sup>, 조민지<sup>1</sup>, 배경미<sup>1</sup>, 김태완<sup>2</sup>. <sup>1</sup>안동대학교 Hugar 바이오혁신아카데미사업단, <sup>2</sup>안동대학교
- P02-56 **새싹인삼과 땅콩새싹 추출물의 항산화, 항염증, 간세포보호효과 분석 및 숙취해소제품개발 탐색**

- 조영훈<sup>1\*</sup>, 김영호<sup>1</sup>, 사민<sup>1</sup>, 장윤정<sup>1</sup>, 조인혜<sup>1</sup>, 배경미<sup>1</sup>, 김태완<sup>2</sup>. <sup>1</sup>안동대학교 Hustar 바이오혁신아카데미사업단, <sup>2</sup>안동대학교
- P02-57 **개똥썩과 톳 추출물의 항산화와 항염증 및 간암세포 활성 분석을 통한 활용성 탐색**  
고희정<sup>1\*</sup>, 장예지<sup>1</sup>, 최소현<sup>1</sup>, 김원민<sup>1</sup>, 김현수<sup>1</sup>, 배경미<sup>1</sup>, 김태완<sup>2</sup>. <sup>1</sup>안동대학교 Hustar 바이오혁신아카데미사업단, <sup>2</sup>안동대학교
- P02-58 **Construction of a Data set for Machine Learning for Risk Assessment using Artificial Intelligence**  
Seok-Hee Lee<sup>1\*</sup>, Da-Hyun Jeong<sup>2</sup>, Hee-Seok Lee<sup>2,3</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Dongguk University, <sup>2</sup>Department of Food Science and Technology, Chung-Ang University, <sup>3</sup>Department of Food Safety and Regulatory Science, Chung-Ang University
- P02-59 **감귤류 미성숙과와 정향 추출물의 항산화, 항균활성평가, 항염증 활성분석을 통한 활용성 탐색**  
신민석<sup>1\*</sup>, 김규태<sup>1</sup>, 김영찬<sup>1</sup>, 안지현<sup>1</sup>, 배경미<sup>1</sup>, 김태완<sup>2</sup>. <sup>1</sup>안동대학교 Hustar 바이오혁신아카데미사업단, <sup>2</sup>안동대학교
- P02-60 **Comparative analysis between types and areas of maize carotenoids**  
Myeong-Ji Kim\*, Yun-Young Kang, Oh Suk Yu, Eun-Ha Kim, Sang-Gu Lee, Soo-Yun Park, Seon-Woo Oh, Hyoun-Min Park. Biosafety Division, National Institute of Agricultural Science, Rural Development Administrative
- P02-61 **Evaluation of Quality Characteristics of Cold-pressed Oil from Rapeseed Varieties in Republic of Korea**  
Da-Hee An\*, Kwang-Soo Kim, Ji-Eun Lee, Young-Lok Cha, Dong-Chil Chang. Bioenergy Crop Research Institute, National Institute of Crop Science, RDA
- P02-62 **Standardization of BLH001 as a functional food for respiratory improvement**  
Ji Won Choi, Kyung Hyun Im, Myeong Kuk Shim\*. BL-Healthcare Co., Ltd.
- P02-63 **Analysis of Phthalate Content of Liquid Food Distributed in Jeju Using GC-MS**  
Hyun Jeong Oh\*, Do-Seung Lee, Jung-Hwa Byun, Mi-Kyung Kim, Chan-Ok Ko. Department of Food Analysis Division, Institute of Health and Environment
- P02-64 **Influence of processing conditions on sulforaphane content in cruciferous vegetables**  
Keup-Rae Kim\*, Yejin Kim, Myeongbin Park, Keono Kim, Jeehye Sung. Department of Food Science and Biotechnology, Andong National University
- P02-65 **Examination of Bisphenol A Content in Children's Canned Drink Products in Jeju Markets**  
Do Seung Lee\*, Hyun-Jeong Oh, Mi-Kyung Kim, Jung-Hwa Byun, Chan-Ok Ko. Department of Food Analysis Division, Institute of Health and Environment
- P02-66 **Validation and Application of Static Headspace Analysis for Measuring 1,4-Dioxane in Choline Bitartrate and Choline Chloride**  
Su-Yeon Park<sup>1\*</sup>, Yeong-In Kim<sup>1</sup>, Hyo-Been Bang<sup>1</sup>, Sueng-Mok Cho<sup>1</sup>, Eui-Cheol Shin<sup>2</sup>, Yang-Bong Lee<sup>1</sup>. <sup>1</sup>Department of Food Science and Technology, Pukyong National University, <sup>2</sup>Department of Greenbio Science/Food Science and Technology, Gyeongsang National University
- P02-67 **Analysis of vitamin E contents of carbohydrate-rich foods commonly consumed in Korea**  
Jaehong Shin\*, Dong Eon Kim, Hyo Jin Kim, Hyun Jung Kim. Department of Food Bioengineering, Jeju National University
- P02-68 **Method Validation and Applications for Quantification of Sodium Saccharin in the Food Additives by HPLC**  
Subin Park<sup>1\*</sup>, Gibeom Choi<sup>1</sup>, Yang-Bong Lee<sup>1</sup>, Eui-Cheol Shin<sup>2</sup>, Suengmok Cho<sup>1</sup>. <sup>1</sup>Department of Food Science And Technology, Institute of Food Science, Pukyong National University, <sup>2</sup>Department of Greenbio Science Food Science and Technology, Gyeongsang National University
- P02-69 **Quality characteristics of garnache with black garlic extract**  
Ji Hyun Min\*, Jae Hyun Jeong, Jong Woo Han, Seung Ju Lee, Taek-Gu Jeong. Garlic and Onion Research Institute, Chungcheongbuk-do Agricultural Research and Extension Services
- P02-70 **Quality characteristics of arginine beverage with black garlic extract**  
Ji Hyun Min\*, Jae Hyun Jeong, Jong Woo Han, Seung Ju Lee, Taek-Gu Jeong. Garlic and Onion Research Institute, Chungcheongbuk-do Agricultural Research and Extension Services
- P02-71 **Method validation for the simultaneous analysis of pesticide residues in fishery products using LC-MS/MS**  
Min Ju Bae\*, Su-Nyeong Jang, Jun Young Kim, Su Jin Kim, Sheen-Hee Kim, Yong Eui Koo. Food Standard Analysis Division Busan Regional Office of Food and Drug Safety
- P02-72 **Monitoring of residual veterinary durgs for Cultured Fishery Products Circulated in Daecheon Port fish market**  
Jisu Han\*, Kangbum Lee, Hyeonchae Cho, Hyelin Kim, Sukbum Jin, Youngsoo Yoo, Hyeonjeung Kim. Chungcheongnam do Health and Environmental Research Institute

- P02-73 **Evaluation of Veterinary Ivermectin Residue in Milk to Ensure Food Safety**  
Jeong-Hun Jang\*, Ji-Soo Jeong, Da-Young Jung, Jeong-Won Kim, Jin-Hwa Kim, Chang-Yeop Kim, Je-Won Ko, Tae-Won Kim. College of Veterinary Medicine and BK21 FOUR program, Chungnam National University
- P02-74 **Monitoring of Naturally Occurring Benzoic Acid, Sorbic Acid, and Propionic Acid in Vegetable Raw Materials**  
Soo Bin Lee\*, Ji Sun So, Geum Jae Jeong, Hye Seon Nam, Soon Ho Lee. National Institute of Food and Drug Safety Evaluation
- P02-75 **Effects of *Gryllus bimaculatus* powder on the quality characteristics of gluten-free chocolate cookies made using 3D Food Printer**  
Woonseo Baik, Giho Kim\*, Yujin Jeong, Daeun Kim, Soa Lee, Juhee Kim, Gyeonghye Yoon, Youngseung Lee. Department of Food Science and Nutrition, Dankook university
- P02-76 **Comparison of Analytical Techniques of 1,4-Dioxane in Polyethylene Glycol 200**  
Yu-Kyeong Kim<sup>1\*</sup>, Seo-Yeon Kwon<sup>1</sup>, Hyo-Rim Kim<sup>1</sup>, Sueng-Mok Cho<sup>1</sup>, Eui-Cheol Shin<sup>2</sup>, Yang-Bong Lee<sup>1</sup>. <sup>1</sup>Department of Food Science and Technology, Pukyong National University, <sup>2</sup>Department of Greenbio Science/Food Science and Technology, Gyeongsang National University
- P02-77 **Monitoring of Acrylamide Contents in Various Home-Cooking Air-fried Foods**  
Hee Won Lee\*, Chung Hun Baek, Mun Yhung Jung. Department of Food and Biotechnology, Graduate School, Woosuk University
- P02-78 **Zearalenone Analysis Method in Infant Foods Using HPLC-FID**  
Ji Young Jeong\*, In Min Hwang. Fermentation Regulation Research Group, World Institute of Kimchi
- P02-79 **국내에서 소비되는 식품의 비타민 E 함량 분석**  
구민주<sup>1\*</sup>, 최용민<sup>2</sup>, 허희진<sup>1</sup>, 김민준<sup>1</sup>, 이준수<sup>1</sup>. <sup>1</sup>충북대학교 식품생명공학과, <sup>2</sup>농촌진흥청 농식품자원부
- P02-80 **Analysis of anthocyanin, free sugar, and vitamin C contents in Mulberry(*Morus alba* L.) according to farmhouse**  
Jisu Ha\*, Hwan-Hee Jang, Hyun-Jeong Kim, Su-Yeon Cho, In-Guk Hwang. Functional Food and Nutrition Division, Department of Ago-food Resources, National Institute of Agricultural Sciences, Rural Development Administration
- P02-81 **Quality characteristics and antioxidant activities of onion(*Allium cepa* L.) peels extracts by extraction methods**  
Hyeon-Young Kim\*, Bong-Sin Kim, Yeo-Ok Park, Gi-Jeong Ha, Jae-Hyeok Choi, Young-Gwang Kim. Gyeongnam Agricultural Research and Extension Services
- P02-82 **Method Validation of Caffeic acid in Asparagus(*Asparagus Officinalis* L.) Root Extract**  
Hae Ju Kang<sup>1\*</sup>, Jae Hee Lee<sup>2</sup>, Tae-Hyung Kwon<sup>3</sup>, Hyeon-Ju Lee<sup>3</sup>, Kyung-A Hwang<sup>1</sup>, Jisu Ha<sup>1</sup>. <sup>1</sup>Functional Food and Nutrition Division, Department of Ago-food Resources, National Institute of Agricultural Sciences, Rural Development Administration, <sup>2</sup>Agro-Food Research Institute, Gangwondo Agricultural Research and Extension services, <sup>3</sup>Department of Research and Development, Chuncheon Bioindustry Foundation
- P02-83 **국내 시판 조리 가공식품의 단백질, 식이섬유 분석**  
하기정\*, 박여옥, 김현영, 김봉신, 최재혁, 김영광. 경상남도농업기술원
- P02-84 **국내 채소류 및 해조류의 가열처리에 따른 식이섬유 함량 비교**  
하기정\*, 박여옥, 김현영, 김봉신, 최재혁, 김영광. 경상남도농업기술원
- P02-85 **반응표면분석법을 이용한 땅콩의 phytosterol 추출조건 최적화**  
홍미래<sup>1\*</sup>, 위치도<sup>2</sup>, 김병희<sup>3</sup>, 이승준<sup>1</sup>, 허희진<sup>1</sup>, 이준수<sup>1</sup>. <sup>1</sup>충북대학교 식품생명공학과, <sup>2</sup>농촌진흥청 농식품자원부, <sup>3</sup>숙명여자대학교 식품영양학과
- P02-86 **Standardization of avenanthramides from germinated oat extracts by validated analytical method**  
Jeong-Eun Kim<sup>1\*</sup>, So-Yeon Jo<sup>1</sup>, Hyung Wook Kim<sup>2</sup>, Yeon Jeong Jeon<sup>3</sup>, Han Sung Cho<sup>3</sup>, Sang Hyun Park<sup>3</sup>, Soon-Mi Shim<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Sejong University, <sup>2</sup>Department of Biological Science and Technology, Sejong University, <sup>3</sup>Daygen, Inc.
- P02-87 **A Safety Survey of Pesticide Residues in Quality Certified Products of Jinan Red Ginseng**  
Han Eul Yang\*, Ji Won Lee, Soo Chang Na, Da Eun Lee, Jong Hee Yoo, Seung Mi Hwang, Tae-Young Kim. Institute of Jinan Red Ginseng
- P02-88 **K-농식품자원 기능성분 DB 구축을 위한 메추리알의 부위별 인지질 함량 분석 (2022)**  
박은아<sup>1\*</sup>, 신정아<sup>2</sup>, 이기택<sup>1</sup>. <sup>1</sup>충남대학교 식품공학과, <sup>2</sup>강릉원주대학교 식품가공유통학과
- P02-89 **Improvement for analysis of Disodium E.D.T.A and Calcium disodium E.D.T.A in foods using HPLC**  
Jae Myoung Oh\*, Sang Jin Lee, Euna Choi, Hye Seon Nam, Soon Ho Lee. Food Additives and Packaging Division, National Institute of Food and Drug Safety Evaluation
- P02-90 **국가식품성분표 작성을 위한 시중에 판매되는 김(Seaweed products) 6종의 콜레스테롤 분석연구**

(2022)

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- P02-91 **Individual quantification of phospholipid content in five types of egg yolks using phosphorus-31 nuclear magnetic resonance**  
Ye-Lim Park<sup>1\*</sup>, Hae-Se Lee<sup>1</sup>, Jung-Ah Shin<sup>2</sup>, Ki-Teak Lee<sup>1</sup>. <sup>1</sup>Department of Food Science and Technology, Chungnam National University, <sup>2</sup>Department of Food Processing and Distribution, Gangneung-Wonju National University
- P02-92 **Quantitative Analysis of Carotenoid Content in Different Types of Marine Algae (2022)**  
Beibei Duan<sup>1\*</sup>, Jung-Ah Shin<sup>2</sup>, Ki-Teak Lee<sup>1</sup>. <sup>1</sup>Department of Food Science and Technology, Chungnam National University, <sup>2</sup>Department of Food Processing and Distribution, Gangneung-Wonju National University
- P02-93 **Comparison of Ursolic Acid and Oleanolic Acid Contents of Loquat Leaves by Harvest Time**  
Kyeong Won Bang<sup>\*</sup>, Kyung-A Hwang. Department of Agrofood Resources, National Institute of Agricultural Science, Rural Development Administration
- P02-94 **국가표준식품성분 DB 데이터 보안을 위한 한국인 상용채소의 비타민 C 함량 분석**  
김아현<sup>\*</sup>, 박진주, 박은지, 박수희, 장하나, 한혜경, 최용민. 국립농업과학원 식생활영양과
- P02-95 **국내에서 소비되는 면류의 조리 전후 판토텐산 함량 및 동일 부피의 중량 비교**  
박아린<sup>\*</sup>, 최용민, 박수희, 정하늘, 박진주. 국립농업과학원 농식품자원부 식생활영양과
- P02-96 **Determination of macro and micro mineral contents by processing methods in vegetables using ICP-OES and ICP-MS**  
Junyoung Lee<sup>\*</sup>, So Young Kim, Suhyun Koh, Jisu Park, Dongwon Seo. Food Analysis Research Center, Korea Food Research Institute
- P02-97 **Isolation of potential malate dehydrogenase inhibitor from *Ilex rotunda* extract by combining ultrafiltration-liquid chromatography and high-speed countercurrent chromatography**  
Soo Kyeong Lee<sup>1,3\*</sup>, Beom Goo Kang<sup>2</sup>, Kyoung Hwa Shin<sup>3</sup>, Soon Sung Lim<sup>1,3</sup>. <sup>1</sup>Department of Food Science and Nutrition, Hallym University, <sup>2</sup>Department of Biochemistry, College of Medicine, Hallym University, <sup>3</sup>Institute of Korean Nutrition, Hallym University
- P02-98 **Specific marker for beet sugar syrup (SMB) for the detection of honey adulteration using a liquid chromatography-tandem mass spectrometry (LC-MS/MS)**  
Jimin Yoon<sup>\*</sup>, Dasom Shin, Jeongeun Kwon, Hui-Seung Kang, Gunyoung Lee, Eunju Lee. New Hazardous Substances Division, National Institute of Food and Drug Safety Evaluation, Ministry of Food and Drug Safety
- P02-99 **건조 과채류의 비타민 B<sub>5</sub>, 회분 함량 비교**  
박진주<sup>\*</sup>, 박은지, 장하나, 한혜경, 황효정. 국립농업과학원 농식품자원부 식생활영양과
- P02-100 **Application of a liquid chromatography quadrupole time-of-flight mass spectrometry (LC-Q-ToF/MS) to discriminate adulterated honey**  
Jeongeun Kwon<sup>\*</sup>, Dasom Shin, Jimin Yoon, Hui-Seung Kang, Gunyoung Lee, Eunju Lee. New Hazardous Substances Division, National Institute of Food and Drug Safety Evaluation, Ministry of Food and Drug Safety
- P02-101 **국내 다소비 과채류의 회분, 비타민 B<sub>5</sub> 함량 및 폐기율 비교**  
박진주<sup>\*</sup>, 박아린, 박수희, 정하늘, 최용민. 국립농업과학원 농식품자원부 식생활영양과
- P02-102 **국내 다소비 채소류의 비타민 B<sub>5</sub> 함량 비교**  
박진주<sup>\*</sup>, 박아린, 박수희, 정하늘, 최용민. 국립농업과학원 농식품자원부 식생활영양과
- P02-103 **시판 김 제품의 엽산함량 비교**  
박은지<sup>\*</sup>, 박진주, 박수희, 장하나, 한혜경, 최용민. 국립농업과학원 농식품자원부 식생활영양과
- P02-104 **식단의 영양 정보 산출을 위한 음식 레시피 정보 확대 구축**  
박은지<sup>\*</sup>, 박진주, 박수희, 최용민, 황효정, 이상훈. 국립농업과학원 농식품자원부 식생활영양과
- P02-105 **국내 다소비 두류 및 채소류의 조리에 따른 회분 함량 변화 비교**  
황효정<sup>\*</sup>, 박은지, 장하나, 한혜경, 박진주. 국립농업과학원 농식품자원부 식생활영양과
- P02-106 **Optimization of Analysis of Withanolide Glycosides in *Withania somnifera* and the Effects on Muscle Atrophy**  
Ji-Soo Choi<sup>\*</sup>, Hee-Yeon Kwon, Soo-Jin Kim, Eun-Min Kim, Ji-Hyun Uhm, Bo-Kyung Kim, Yi-Ji Kim, Jae-Yeon Lee. NSTBIO. Co., Ltd
- P02-107 **LC/MS-Based Metabolomic Analysis of *Glycyrrhiza uralensis***  
Hee-Won Lee<sup>1\*</sup>, Seul-Ki Park<sup>1</sup>, Sung-Hyen Lee<sup>2</sup>, Bo-Ram Park<sup>1</sup>, Chan-Soon Park<sup>1</sup>, Shin-Young Park<sup>1</sup>. <sup>1</sup>Fermented Processing Food Science Division, National Institute of Agricultural Sciences, RDA, <sup>2</sup>Functional Food Division, National Institute of Agricultural Sciences, RDA
- P02-108 **식품자원의 비타민 D 함량분석**  
이삼빈<sup>1,2\*</sup>, 최지연<sup>2</sup>, 임종순<sup>2</sup>, 김지은<sup>2</sup>, 김현정<sup>2</sup>, 최용민<sup>3</sup>. <sup>1</sup>계명대학교 식품가공학과, <sup>2</sup>계명대학교 전통미생물자



- 원개발 및 산업화연구센터, <sup>3</sup>농촌진흥청 국립농업과학원 농식품자원부 식생활영양과
- P02-109 **농식품자원류에 대한 비타민 D 함량 분석 비교**  
이삼빈<sup>1,2\*</sup>, 임종순<sup>2</sup>, 최지연<sup>2</sup>, 김지은<sup>2</sup>, 김현정<sup>2</sup>, 최용민<sup>3</sup>. <sup>1</sup>계명대학교 식품가공학과, <sup>2</sup>계명대학교 전통미생물자원개발 및 산업화연구센터, <sup>3</sup>농촌진흥청 국립농업과학원 농식품자원부 식생활영양과
- P02-110 **Development and validation of analytic method for determination of aflatoxins analysis in fermented food**  
Sam-Pin Lee<sup>1,2\*</sup>, Hyun-Jeong Kim<sup>2</sup>, Jung-Woo Chae<sup>2</sup>, Ji-Eun Kim<sup>2</sup>. <sup>1</sup>Department of Food Science and Technology, Keimyung University, <sup>2</sup>The Center for Traditional Microorganism Resource, Keimyung University
- P02-111 **Changes of Quality Characteristics and Acrylamide Content in Red Pepper Oil by Cooking Conditions**  
Jiyun Lee<sup>1\*</sup>, Seunghee Choi<sup>1</sup>, Hyo Kyoung Song<sup>1</sup>, Sanghyeon Lee<sup>1</sup>, Hee Won Lee<sup>2</sup>, Mun Yhung Jung<sup>2</sup>, Suna Kim<sup>3</sup>, Bokyung Moon<sup>1</sup>. <sup>1</sup>Chung-Ang University, <sup>2</sup>Woosuk University, <sup>3</sup>Korea National Open University
- P02-112 **Comparison of Nutritional Content in Loquat Fruits by Cultivar**  
Kyeong Won Bang<sup>\*</sup>, Kyung-A Hwang. Department of Agrofood Resources, National Institute of Agricultural Science, Rural Development Administration
- P02-113 **Investigation of Microbial Contamination and Tar Dyes Used in Macarons**  
Jaeun Lee<sup>\*</sup>, Hyemee Shim, Donggyu Park, Jiyoung Park, Heeyoung Hwang, Hyekeun Yun, Hyejin Yu, Jun Seo, Meejeoung Kim. Gyeongsangbuk-do Government Public Institute of Health & Environment
- P02-114 **Evaluation of the biogenic amines in commercial low-salt shrimp pastes**  
Baozhu Shi<sup>\*</sup>, Wanting Zhao, Siwoo Kim, Bokyung Moon. Chung-Ang University
- P02-115 **Analysis of Mineral Contents in Food for Revision of the Korean Food Composition Table**  
Su In Lee<sup>\*</sup>, Yun Su Baek, Jae Bong Choi, Da Seul Kim, Joong Ki Lee, Ju Hyun Park, Ki Hwa Kim, Seong Ran Kang. Technical Assistance Department, The Food Industry Promotional Agency of Korea
- P02-116 **Analysis of Amino acid Contents in Food for Revision of the Korean Food Composition Table**  
Jae Bong Choi<sup>\*</sup>, Yun Su Baek, Su In Lee, Da Seul Kim, Joong Ki Lee, Ju Hyun Park, Ki Hwa Kim, Seong Ran Kang. Technical Assistance Department, The Food Industry Promotional Agency of Korea
- P02-117 **Validation of a Simultaneous Analysis Method for the Determination of 463 Pesticides in Using Liquid and Gas Chromatography-tandem Mass Spectrometry**  
Haeun Joo<sup>\*</sup>, Seoyeon Lee, Minhui Oh, Sojung Kim. Marine Industry Research institute for East sea rim
- P02-118 **Physicochemical characteristics of koji made with different raw materials**  
Yu Jin Lee<sup>\*</sup>, Mina K. Kim. Department of Food Science and Human Nutrition, and K-Food Research Center, Jeonbuk National University
- P02-119 **국내 다소비 식품의 비타민 K 함량**  
홍미래<sup>\*</sup>, 김민하<sup>1</sup>, 성지혜<sup>2</sup>, 이준수<sup>1</sup>. <sup>1</sup>충북대학교 식품생명공학과, <sup>2</sup>안동대학교 식품생명공학과
- P02-120 **Evaluation Contents of Resistant Starch According to Heat Treatment(boiling or steaming) of Three Grains: Dodam Rice, Black Rice, Nonglutinous Millet**  
Yong-Ju Lee<sup>\*</sup>, Mi-Kyoung Seo, Kyeong-A Jang, Haeng-Ran Kim, Min-Sook Kang. Department of Agrofood Resources, National Institute of Agricultural Sciences, RDA
- P02-121 **Comparison of the Nutrient and Metabolic Profiles in Insect-Resistant Rice (*Oryza sativa* L.) and Conventional Rice**  
Ji Eun Sim<sup>1\*</sup>, Ye Jin Kim<sup>1</sup>, Sung-Dug Oh<sup>2</sup>, Soo-Yun Park<sup>2</sup>, Soon Ki Park<sup>3</sup>, Jae Kwang Kim<sup>1</sup>. <sup>1</sup>Division of Life Sciences, Incheon National University, <sup>2</sup>National Institute of Agricultural Sciences, Rural Development Administration, <sup>3</sup>School of Applied Biosciences, Kyungpook National University
- P02-122 **Validation and Stability Study Using Internal Standard of Mixture of *Agrimonia pilosa Ledeb.* and *Salvia miltiorrhiza Bunge.* Extracts**  
Sang Youn Lee<sup>1\*</sup>, Beom Goo Kang<sup>2</sup>, Eun Jun Jeong<sup>1</sup>, Soo Kyeong Lee<sup>1,3</sup>, Sung Mo Kang<sup>1</sup>, Ji Won Choi<sup>1</sup>, Zhaoyang Wu<sup>1</sup>, Saba Noreen<sup>1</sup>, Soon Sung Lim<sup>1,3</sup>. <sup>1</sup>Department of Food Science and Nutrition, Hallym University, <sup>2</sup>Department of Biochemistry, College of Medicine, Hallym University, <sup>3</sup>Institute of Korean Nutrition, Hallym University
- P02-123 **와인 첨가량에 따른 식빵의 품질 특성**  
최성열<sup>\*</sup>, 신혜림, 황온빛, 박의광, 윤동규, 윤향식. 충청북도농업기술원 와인연구소
- P02-124 **어린이 기호식품 품질인증제도 인식 및 만족도에 대한 연구**  
정다은<sup>1</sup>, 서영창<sup>1\*</sup>, 양성범<sup>1</sup>, 권성희<sup>2</sup>, 조상구<sup>2</sup>, 조승용<sup>2</sup>, 김지영<sup>2</sup>. <sup>1</sup>단국대학교 환경자원경제학과, <sup>2</sup>식품안전정보원
- P02-125 **Optimization of High Protein blueberry Care Food Jelly Manufacturing Conditions Using Response Surface Methodology (RSM)**  
Joohee Lee<sup>1\*</sup>, Hyeongyeong Kim<sup>1</sup>, Hayoung Jang<sup>1</sup>, Juyeon Park<sup>2</sup>, Soyoun Joo<sup>1,2</sup>, Jieun Oh<sup>3</sup>, Mi Sook Cho<sup>1</sup>. <sup>1</sup>Department of Nutritional Science and Food Management, Ewha Womans University, <sup>2</sup>Hyundai Green

- Food Co., <sup>3</sup>College of Science and Industry Convergence, Ewha Womans University
- P02-126 Active ingredient analysis and Stability evaluation of Raw and Dried Deer Antler (*Cervus elaphus* L.) extracts**  
Min-Ju Kim\*, Ramakrishna Chilakala, Hyeonjoeng Moon, Kangho Ko, Jinsol Ra, Seongheon Jeong, Yeji Cheon, Sun Hee Cheong. Department of Marine Bio Food Science, College of Fisheries and Ocean Science, Chonnam National University
- P02-127 Development of a new diagnostic method for Brucella**  
Bo-Min Kim<sup>1</sup>, Ju-Hong Oh<sup>1</sup>, Suk Kim<sup>2</sup>, Won-Bo Shim<sup>3</sup>, Hyun-Jin Kim<sup>1,3\*</sup>. <sup>1</sup>EZmass, Corp., <sup>2</sup>College of Veterinary Medicine, Gyeongsang National University, <sup>3</sup>Department of Food Science and Technology & Division of Applied Life Sciences (BK21 Four), Gyeongsang National University
- P02-128 Influence of boiling and acid treatment on removal of arsenic and sodium of green algae, *Codium fragile***  
Yunjin Lim<sup>1\*</sup>, Joon Ho Hong<sup>1</sup>, Mi Jin Lee<sup>1</sup>, Seul Hee Han<sup>2</sup>, Seul Ah Lee<sup>2</sup>, Chun Sung Kim<sup>2,3</sup>. <sup>1</sup>Nano-Bio Research Center, Jeonnam Bioindustry Foundation, <sup>2</sup>Marine Healthcare Research & Evaluation Center, Chosun University, <sup>3</sup>Department of Oral Biochemistry, College of Dentistry, Chosun University
- P02-129 Comparison of components of total phytochemicals of Korean seaweed extracts**  
Yunjin Lim<sup>1\*</sup>, Joon Ho Hong<sup>1</sup>, Mi Jin Lee<sup>1</sup>, Seul Ah Lee<sup>2</sup>, Chun Sung Kim<sup>2,3</sup>. <sup>1</sup>Nano-Bio Research Center, Jeonnam Bioindustry Foundation, <sup>2</sup>Marine Healthcare Research & Evaluation Center, Chosun University, <sup>3</sup>Department of Oral Biochemistry, College of Dentistry, Chosun University
- P02-130 A study on the arsenic removal of brown algae, *Sargassum fusiforme* using boil-cooking and acid treatment**  
Mi Jin Lee, Yunjin Lim, Daun Kim, Joon Ho Hong\*. Nano-Bio Research Center, Jeonnam Bioindustry Foundation
- P02-131 Quality characterization of wine jelly using various mixed gelling agents**  
Seo-Yeon Choi<sup>1\*</sup>, Jong-Won Lee<sup>2</sup>, Seung-Seok Yoo<sup>1</sup>. <sup>1</sup>Department of Culinary & Food Service Management, Sejong University, <sup>2</sup>Department of Food Science and Biotechnology and Carbohydrate Bioproduct Research Center, Sejong University
- P02-132 QuEChERS 잔류농약 다성분 동시분석법을 이용한 국내산 해조류의 잔류농약 모니터링**  
김다운<sup>1</sup>, 홍준호<sup>1\*</sup>, 이미진<sup>1</sup>, 임윤진<sup>1</sup>, 이슬아<sup>2</sup>, 김춘성<sup>2,3</sup>. <sup>1</sup>(재)전남바이오산업진흥원 나노바이오연구센터, <sup>2</sup>조선대학교 해양헬스케어유효성실증지원센터, <sup>3</sup>조선대학교 치의예과
- P02-133 Galbitang characteristics according to the amount of licorice powder added**  
Jong-Won Lee<sup>1\*</sup>, Ya-Chan Kim<sup>2</sup>. <sup>1</sup>Department of Food Science and Biotechnology and Carbohydrate Bioproduct Research Center, Sejong University, <sup>2</sup>Department of Culinary & Food Service Management, Sejong University
- P02-134 Physicochemical Characteristics of Three Varieties of Barley Grown in the Cultivated Area or the Cultivation Limit Area**  
Jihye Song<sup>1\*</sup>, Hakyoung Oh<sup>1</sup>, Dae-Wook Kim<sup>2</sup>, Jong-Tak Yoon<sup>2</sup>, Kwang-Yeol Yang<sup>1</sup>. <sup>1</sup>Department of Applied Biology, College of Agriculture and Life Science, Chonnam National University, <sup>2</sup>Crop Production and Physiology Division, National Institute of Crop Science, RDA
- P02-135 Pre-column derivatization HPLC를 이용한 국내산 해조류 유래 다당류의 단량체 구성 및 조성에 관한 연구**  
홍준호<sup>1\*</sup>, 임윤진<sup>1</sup>, 이미진<sup>1</sup>, 이슬아<sup>2</sup>, 김춘성<sup>2,3</sup>. <sup>1</sup>(재)전남바이오산업진흥원 나노바이오연구센터, <sup>2</sup>조선대학교 해양헬스케어유효성실증지원센터, <sup>3</sup>조선대학교 치의예과
- P02-136 Biogenic Amines in Agricultural, Livestock, Marine Products in Korea: Approaches of Total Diet Study with the consideration of food processing**  
Ki Won Lee<sup>1\*</sup>, Jin Song Shin<sup>1</sup>, Ji In You<sup>2</sup>, Jun Hyuk Choi<sup>2</sup>, Young Hun Jin<sup>1</sup>, Jong Hyoung Hong<sup>1</sup>, Sohyeon Kim<sup>1</sup>, Dabin Kim<sup>1</sup>, Jae-Hyung Mah<sup>1</sup>, Jo-Won Lee<sup>3</sup>, Bokyung Moon<sup>3</sup>, Myung-Sub Chung<sup>4</sup>, Tae Jin Cho<sup>1</sup>. <sup>1</sup>Department of Food and Biotechnology, College of Science and Technology, Korea University, <sup>2</sup>Department of Biotechnology, College of Life Sciences & Biotechnology, Korea University, <sup>3</sup>Department of Food and Nutrition, Chung-Ang University, <sup>4</sup>Department of Food Science and Technology, Chung-Ang University
- P02-137 Effective follow-up management method through comparative analysis of HACCP systems of domestic and foreign countries**  
Han Sol Park<sup>1\*</sup>, Jin Song Shin<sup>1</sup>, Chan Min Lee<sup>2</sup>, Young Hoon Lee<sup>2</sup>, Tae Jin Cho<sup>1,2</sup>. <sup>1</sup>Department of Food Regulatory Science, College of Science and Technology, Korea University, <sup>2</sup>Department of Food and Biotechnology, College of Science and Technology, Korea University
- P02-138 사과 재배지에 따른 품종별 과피 물리적 특성 비교**  
구소희\*, 홍정진, 손진향, 김현수, 오주열, 정은호. 경상남도농업기술원 사과이용연구소
- P02-139 생육시기별 흰점박이꽃무지 유충의 인돌알칼로이드 함량 비교**  
배성문\*, 박주완, 김현주, 장다현, 이슬비, 김중원, 정경희, 이영한, 김영광. 경상남도농업기술원 유용곤충연구소

- P02-140 **생육시기별 흰점박이꽃무지 유충의 지방산 조성 비교**  
배성문\*, 박주완, 김현주, 장다현, 이슬비, 김중원, 정경희, 이영한, 김영광. 경상남도농업기술원 유용곤충연구소
- P02-141 **Application of colorimetric method for qualitative analysis of lactate in the food additives**  
Gibeom Choi<sup>1\*</sup>, Subin Park<sup>1</sup>, Yang-Bong Lee<sup>1</sup>, Eui-Cheol Shin<sup>2</sup>, Suengmok Cho<sup>1</sup>. <sup>1</sup>Department of Food Science and Technology/Institute of Food Science, Pukyong National University, <sup>2</sup>Department of Greenbio Science Food Science and Technology, Gyeongsang National University
- P02-142 **Comparison of Amino Acids and Crude Protein by Representative Dietary Sulfide Agricultural Products**  
Minju Kim\*, Jiwon Ha, Minhi Oh, Haeun Joo, Seoyeon Lee, Sojung Kim. Marine Industry Research institute for East sea rim
- P02-143 **초음파 추출을 활용한 스카치 보넷에 있는 capsaicin 추출의 동역학 모델링: 추출 용매 비교**  
박광덕<sup>1\*</sup>, 박혜란<sup>1</sup>, 안효준<sup>1</sup>, 이정훈<sup>1</sup>, 김정현<sup>1</sup>, 안신정<sup>1</sup>, 이원영<sup>1,2</sup>. <sup>1</sup>경북대학교 식품응용공학과, <sup>2</sup>경북대학교 특수식품공학연구소
- P02-144 **Development of monoclonal antibodies against coat protein of Soybean yellow mottle mosaic virus**  
Hyuck Jin Kwon<sup>1\*</sup>, Jinyoung Kim<sup>1</sup>, Gyeseo Park<sup>2</sup>, Myung-Hee Kwon<sup>2</sup>, Mi-Gi Lee<sup>2</sup>. <sup>1</sup>Biocenter, Gyeonggido Business & Science Accelerator, <sup>2</sup>Department of Biomedical Sciences, Ajou University
- P02-145 **맛 인식 시스템과 HPLC를 이용한 강릉커피전문점 에스프레소 커피의 맛과 성분 비교**  
박상아<sup>1\*</sup>, 노예진<sup>1,2</sup>, 엄병현<sup>1</sup>. <sup>1</sup>한국과학기술연구원, <sup>2</sup>서울과학기술대학교
- P02-146 **Analysis of components in the fraction layer of purple corn husk**  
Ki Yeon Lee<sup>1</sup>, Song Mun Kim<sup>2</sup>, Kyung Dae Kim<sup>1</sup>, Jae Hee Lee<sup>1</sup>, Eun Ha Jang<sup>1</sup>, Jin Kwan Ham<sup>1</sup>, Jae Geel Lim<sup>1\*</sup>. <sup>1</sup>Agro-food research institute, Gangwon Agricultural Research and Extension services, <sup>2</sup>School of Natural Resources and Environmental Science, Kangwon National University
- P02-147 **자색옥수수 포엽 추출물의 안전성 확보를 위한 유해물질 분석**  
이기연, 김경대, 박지선, 임재길\*, 이재희, 장은하, 함진관. 강원도농업기술원 농식품연구소
- P02-148 **Quality Characteristics and Sensory Evaluation of Protein Fortified Stir-Fried Spicy Pork Mousse Formula Added with Gelling Agent**  
Hyeongyeong Kim<sup>1\*</sup>, Joohee Lee<sup>1</sup>, Seiyong Ahn<sup>1</sup>, Juyeon Park<sup>2</sup>, Soyoung Joo<sup>1,2</sup>, Jieun Oh<sup>3</sup>, Mi Sook Cho<sup>1</sup>. <sup>1</sup>Department of Nutritional Science and Food Management, Ewha Womans University, <sup>2</sup>Hyundai Green Food Co., <sup>3</sup>College of Science and Industry Convergence, Ewha Womans University
- P02-149 **Identification of major indicators useful for monitoring of the quality and safety of commercial salted shrimp**  
Sunhyun Park<sup>1,2\*</sup>, Heeyoung Lee<sup>1</sup>, Mi Jang<sup>1</sup>, Jiyoun Jeong<sup>1</sup>, Hyung-Yoon Choi<sup>1</sup>, Jong-Chan Kim<sup>1</sup>. <sup>1</sup>Korea Food Research Institute, Food Standard Research Center, <sup>2</sup>Department of Food Science and Technology, Chungnam National University
- P02-150 **발아메밀 추출물을 첨가한 쪄유의 개발 및 품질평가**  
남강미\*, 우송이, 박연화, 박다정, 강석원, 양지영. 부경대학교
- P02-151 **Comparison of Major Nutrients between Commercial and Non-commercial Tomatoes**  
Jun-Ho Yu<sup>1,2\*</sup>, Seon-Joo Park<sup>2,3</sup>, Hae-Jeung Lee<sup>2,3</sup>. <sup>1</sup>Department of Food Science and Biotechnology, College of BioNano Technology, Gachon University, <sup>2</sup>Institute for Aging and Clinical Nutrition Research, Gachon University, <sup>3</sup>Department of Food and Nutrition, College of BioNano Technology, Gachon University
- P02-152 **The Monitoring of Pesticide Residues in Peel and Pulp of Fruit**  
Jae-Yeong Yu\*, Tae-Man Ha, Ji-Yun Jeon, Gyu-Yeon Oh, Su-Jeong Choi, Uk-Hyeon Seo, Ho-Chul Yang, Mi-Yeong Shin. Jeollanam-do Institute of Health & Environment
- P02-153 **Effect of Gender on the Meat Quality Characteristics of Ten Primal Cuts from Korean Black Goat Crossbreed**  
Jeong Ah Lee<sup>1\*</sup>, Suk Han Jung<sup>1</sup>, Kwan-Woo Kim<sup>2</sup>, Hyun Wook Kim<sup>1</sup>, Soohyun Cho<sup>1</sup>, Sun Moon Kang<sup>1</sup>. <sup>1</sup>Animal Products Utilization Division, National Institute of Animal Science, Rural Development Administration, <sup>2</sup>Animal Genetic Resources Research Center, National Institute of Animal Science, Rural Development Administration
- P02-154 **Comparison of the Meat Quality Characteristics of Castrated Pig with Carcass Chilling Temperature**  
Suk Han Jung<sup>1\*</sup>, Jeong Ah Lee<sup>1</sup>, Hyun Wook Kim<sup>1</sup>, Soohyun Cho<sup>1</sup>, Kuk-Hwan Seol<sup>2</sup>, Sun Moon Kang<sup>1</sup>. <sup>1</sup>Animal Products Utilization Division, National Institute of Animal Science, Rural Development Administration, <sup>2</sup>Animal Genetic Resources Research Center, National Institute of Animal Science, Rural Development Administration
- P02-155 **Dental Caries Associated Biofilms Exposure to Electrolyzed Water: Metagenomic and Metatranscriptomic Analysis**  
Xiuqin Chen\*, Deog-Hwan Oh. Department of Food Science and Biotechnology, College of Agriculture

and Life Sciences, Kangwon National University

**P02-156 효소적 포집 방법을 이용한 quercetin의 수용성 및 안정성 향상**

이예림\*, 정현모, 김은아, 이은형, 심재훈. 한림대학교 식품영양학과 및 한국영양연구소

**P02-157 시니어를 위한 면역기능 및 항산화 강화 동충하초 양갱의 품질 특성**

박은빈<sup>1\*</sup>, 유수인<sup>2</sup>, 이민호<sup>3</sup>, 백진경<sup>1</sup>. <sup>1</sup>울지대학교 식품영양학과, <sup>2</sup>성남식품연구개발지원센터, <sup>3</sup>울지대학교 식품산업외식학과

**P02-158 Sensory Properties and Flavor Profiles of Onion Seasonings Prepared by Different Extraction Methods**

Yunjin Choi<sup>1\*</sup>, Eui-Cheol Shin<sup>2</sup>, Suengmok Cho<sup>1</sup>. <sup>1</sup>Department of Food Science and Technology/Institute of Food Science, Pukyong National University, <sup>2</sup>Department of Green Science/Food Science, Gyeongsang National University

**P02-159 Investigation of plant-based material and analysis of modulator mechanism for salty taste enhancement**

Yeong Mi Byeon\*, Jiseon Lee, Mi-Jung Choi. Department of Food Science and Biotechnology of Animal Resources, Konkuk University

## Food Processing / Engineering / Rheology

**P03-01 Production of Isoflavone Extracts and BCAAs Enriched Products and Their Characterization of Estrogen-like Activity**

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**P03-02 Production and Physicochemical Properties of Tablets for Women's Menopause with Soybean Extracted Isoflavones**

Hyo Min Jin<sup>1\*</sup>, Hana Jeong<sup>2</sup>, Seungyeon Hwang<sup>3</sup>, Kwang-Yeol Yang<sup>4</sup>, Seung-Hee Nam<sup>1,2</sup>. <sup>1</sup>Department of integrative food, bioscience and biotechnology, Chonnam National University, <sup>2</sup>Department of integrative food, bioscience and biotechnology & Institute of Agricultural and Life Science Technology, Chonnam National University, <sup>3</sup>R&D Center, Natural Korea Corporation, <sup>4</sup>Department of Applied Biology, College of Agriculture and Life Science, Chonnam National University

**P03-03 Quality Characteristics of Nurungji using Brown Rice of Mirchal by the Processing Conditions**

Gi-Un Seong\*, Ju-Won Kang, Young-Ho Kwon, So-Myeong Lee, Sais-Beul Lee, Hyunggon Mang, Dongjin Shin, Dong-Soo Park, Ji-Yoon Lee. Department of Southern Area Crop Science, National Institute of Crop Science

**P03-04 Quality Characteristics of Rice-based Home Meal Replacement Products by Microwave Cooking**

Gi-Un Seong<sup>1\*</sup>, Yu Mi Kim<sup>2</sup>, Jun-Hyeon Cho<sup>3</sup>, Ji-Yoon Lee<sup>1</sup>, Sais-Beul Lee<sup>1</sup>, Hyunggon Mang<sup>1</sup>, Dongjin Shin<sup>1</sup>, Dong-Soo Park<sup>1</sup>, Kwang-Sup Youn<sup>2</sup>, Ju-Won Kang<sup>1</sup>. <sup>1</sup>Department of Southern Area Crop Science, National Institute of Crop Science, <sup>2</sup>Department of Food Science and Technology, Daegu Catholic University, <sup>3</sup>Sangju Substation, National Institute of Crop Science

**P03-05 Digital HACCP Management System for Small Noodle Factories**

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**P03-06 Changes in Lipid Extraction Yield and Fat-soluble Antioxidant Components of Oat according to Supercritical Extraction Conditions**

Yu Young Lee\*, Yurim Son, Hyun-Joo Kim, Mihyang Kim, Jin Young Lee, Narae Han, Moon Seok Kang. Crop Post-harvest Technology Division, National Institute of Crop Science, Rural Development Administration

**P03-07 Preparation of Avenanthramide from Daeyang Oat using Smart Farming System**

Yu Young Lee<sup>1\*</sup>, Hwa-Jung Kim<sup>2</sup>, Yurim Son<sup>1</sup>, Hyun-Joo Kim<sup>1</sup>, Mihyang Kim<sup>1</sup>, Jin Young Lee<sup>1</sup>, Narae Han<sup>1</sup>, Moon Seok Kang<sup>1</sup>. <sup>1</sup>Crop Post-harvest Technology Division, National Institute of Crop Science, Rural Development Administration, <sup>2</sup>Atomy R&D center

**P03-08 Effect of Various Types of Starters on Dry-Cured Pork Ham**

Sun-Gyeom Kim\*, Hack-Youn Kim. Department of Animal Resources Science, Kongju National University

**P03-09 Physicochemical Properties of Lyophilized Wet- and Dry-aged Beef Powder**

Sin-Young Park\*, Hack-Youn Kim. Department of Animal Resources Science, Kongju National University

**P03-10 교당도 구기자 '청감'을 이용한 주스 제조 방법**

- P03-11 이정\*, 이종국, 조윤정, 주정일. 충남농업기술원 농식품가공팀  
**제조 방법에 따른 생강 전분의 이화학적 특성**
- P03-12 이정\*, 이종국, 조윤정, 주정일. 충남농업기술원 농식품가공팀  
**시판 식물성 콩단백 소시지와 돈육 소시지의 조직감 특성 차이 분석**
- P03-13 정우영\*, 최원석. 국립 한국교통대학교 식품공학전공  
**신안산 김 분말 첨가 머핀의 품질특성**
- P03-14 윤진아<sup>1\*</sup>, 이주희<sup>2</sup>, 정지오<sup>3</sup>. <sup>1</sup>강서대학교 식품영양학과, <sup>2</sup>강서대학교 식품영양학과, <sup>3</sup>강서대학교 식품영양학과  
**감귤 껍질 첨가 마들렌의 품질특성**
- P03-15 이주희<sup>1\*</sup>, 정지오<sup>2</sup>, 윤진아<sup>3</sup>. <sup>1</sup>강서대학교 식품영양학과, <sup>2</sup>강서대학교 식품영양학과, <sup>3</sup>강서대학교 식품영양학과  
**Effect of onion powder on quality characteristics and oxidative stability of mayonnaise prepared with perilla oil**
- Kyo-Yeon Lee<sup>1\*</sup>, Sung-Gil Choi<sup>1,2</sup>. <sup>1</sup>Institute of Agriculture & Life Science, Gyeongsang National University, <sup>2</sup>Devison of Applied Life Science (BK21), Gyeongsang National University
- P03-16 Kyo-Yeon Lee<sup>1\*</sup>, Sung-Gil Choi<sup>1,2</sup>. <sup>1</sup>Institute of Agriculture & Life Science, Gyeongsang National University, <sup>2</sup>Devison of Applied Life Science (BK21), Gyeongsang National University  
**Degradation kinetics of phenolic content and antioxidant activity of onion (*Allium cepa* L.) puree at different storage temperatures**
- P03-17 정재은<sup>1\*</sup>, 이선미<sup>1</sup>, 김영민<sup>1</sup>, 안광환<sup>1</sup>, 김영광<sup>2</sup>. <sup>1</sup>경상남도농업기술원단감연구소, <sup>2</sup>경상남도농업기술원연구개발국  
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- P03-18 정재은\*, 이선미, 김태엽, 김은경, 안광환. 경상남도농업기술원단감연구소  
**단감을 활용한 스파클링 와인 제조 방법 및 그 특성**
- P03-19 Bo-Gyeong Kim\*, Min-Cheol Kang, Bum-Kuen Kim, Min-Cheol Lim, Hee-Don Choi, Yun-Sang Choi, Min Kyung Park. Research Group of Food Processing, Korea Food Research Institute  
**Study on the Release of Beef-like Flavor Compounds in Plant-based Meat**
- P03-20 이상엽\*, 김승태, 박세진, 김윤현, 이원종, 김성훈. 보타노스  
**미강추출박을 이용한 고식이섭유 곡류효소의 제조**
- P03-21 Eun-Hyeong Lee\*, Hyun-Mo Jeong, Ye-Rim Lee, Eun-A Kim, Jae-Hoon Shim. Department of Food Science and Nutrition, and the Korean Institute of Nutrition, Hallym University  
**Antistaling Effect of *garaetok* with Water-soluble Extract of Rice by-product**
- P03-22 이미진\*, 손지영, 민병규, 문진성, 하인중. 경상남도 농업기술원 양파연구소  
**효소 종류와 농도에 따른 양파 추출액의 품질 특성**
- P03-23 이미진\*, 손지영, 민병규, 백주희, 박미정, 하인중. 경상남도 농업기술원 양파연구소  
**고품질 양파 조청 개발을 위한 엿기름 비율 및 효소 효과 구명**
- P03-24 Yun Jeong Kim<sup>1,2\*</sup>, Min Hyeock Lee<sup>3</sup>, In Young Lee<sup>1</sup>, Tae-Eun Kim<sup>1</sup>, Jae Hoon Lee<sup>1</sup>, Yong Gi Chun<sup>1</sup>, Dong-Min Shin<sup>1</sup>, Bum-Keun Kim<sup>1,2</sup>. <sup>1</sup>Korea Food Research Institute, <sup>2</sup>Department of Food Biotechnology, University of Science and Technology, <sup>3</sup>Department of Food Science and Biotechnology, Kyung Hee University  
**Enhancing thermal stability and turbidimetric properties of oil-in-water emulsions for food applications**
- P03-25 Yulim Jeong, Wonjae Lee\*, Byoungseung Yoo. Department of Food Science and Biotechnology, Dongguk University  
**Effect of fluidized-bed agglomeration on the structure modification of milk protein isolate-gum mixture powders**
- P03-26 Hyunwoo Lee\*, Byoungseung Yoo. Department of Food Science and Biotechnology, Dongguk University  
**Effect of maltodextrin binder concentration on physical and reconstitution properties of corn starch powder in fluidized-bed agglomeration**
- P03-27 Gyutae Park\*, Jungseok Choi. Dept. Animal Science, Chungbuk National University  
**Effects of Fructooligosaccharides and Dietary Fibers in Physicochemical and Sensory Properties of Chicken Patties**
- P03-28 최은지\*, 성정민, 우승혜, 박지운, 박종대. 한국식품연구원  
**물성개량제 첨가에 따른 보리국수의 품질특성**
- P03-29 Daeun Kim\*, Juhee Kim, Giho Kim, Yoojin Jeong, Soa Lee, Woonseo Baik, Gyeonghye Yoon, Youngseung Lee. Department of Food Science and Nutrition, Dankook University  
**Effects of NaCl on the Physical Properties of Corn Starch-Methyl Cellulose Mixtures in Model System and Pastes Produced using a 3D food printer**
- P03-30 Hee Won Lee\*, Chung Hun Baek, Mun Yhung Jung. Department of Food and Biotechnology, Graduate School, Woosuk University  
**Sweet Potato Syrup Production by Saccharification of Sweet Potato With Malt**
- P03-31 축산플 유래 근원섭유 단백질 함유 스낵의 품질특성 및 저장안정성

- 박혜미\*, 채호용, 김현호, 이대훈. 오복누리 기업부설연구소
- P03-32 **Identification of physical hazards in agriculture products during processes based on hyper-spectral imaging**  
Jun-Seo Lee<sup>1\*</sup>, Jeong-Eun Lee<sup>2</sup>, Moochang Kook<sup>3</sup>, Soon-Mi Shim<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Sejong University, <sup>2</sup>Department of Food & Nutrition, Baewha Women's University, <sup>3</sup>Department of Alternative Medicine, Kyonggi University
- P03-33 **갈색거저리 유충 분말 첨가비율을 달리하여 제조한 두부의 품질 특성 비교**  
김봉신\*, 김현영, 박여옥, 하기정, 배성문, 최재혁, 김영광. 경상남도농업기술원
- P03-34 **갈색거저리 유충 분말 첨가비율을 달리하여 제조한 소시지의 품질 특성 비교**  
김봉신\*, 김현영, 박여옥, 하기정, 배성문, 최재혁, 김영광. 경상남도농업기술원
- P03-35 **흰점박이꽃무지 유충 이취저감 분말 제조 방법**  
하기정\*, 박여옥, 김현영, 김봉신, 최재혁, 김영광. 경상남도농업기술원
- P03-36 **아로니아 쌀맥주의 품질특성**  
박여옥\*, 제희정, 하기정, 김봉신, 김현영, 최재혁, 김영광. 경상남도농업기술원
- P03-37 **발아 조건에 따른 '얇은키밀'의 수분, 단백질, 회분 함량 변화**  
박여옥\*, 하기정, 김현영, 김봉신, 최재혁, 김영광. 경상남도농업기술원
- P03-38 **Emulsification of Functional Components Extracted from Ginger for Solubility Enhancement**  
Ji Yeong Kim\*, Mi Jin Kim, Dong-Geon Nam, Jeong-Sook Choe, Ae-Jin Choi. Department of Agrofood Resources, National Institute of Agricultural Sciences, Rural Development Administration
- P03-39 **Solubilization of Functional Components by Enzyme Treatment from *Salvia plebeia* R. Br.**  
Mi Jin Kim\*, Ji Yeong Kim, Jeong-Sook Choe, Ae-Jin Choi. Functional Food & Nutrition Division, National Academy of Agricultural Science, Rural Development Administration
- P03-40 **Effect of Addition of *Allomyrina dichotoma* on Physicochemical Properties of Cooked Cured Pork Loin**  
Hyun-Jung Yun\*, Tae-Kyung Kim, Jae Hoon Lee, Ji Yoon Cha, Yeaji Kim, Jake Kim, Jun Young Ahn, Yun-Sang Choi. Research Group of Food Processing, Korea Food Research Institute
- P03-41 **Quality Characteristics of Ginger and Ginger Juice Pomace Hot Water Extracts**  
Yun Jeong Jo\*, Jeong Lee, Jong-Kug Lee, Jung-Il Ju. Chungcheongnam-do Agricultural Research and Extension Services
- P03-42 **Gum powder assisted agglomeration of soy protein isolate: Effect of particle modification**  
Woobin Lim, Subin An\*, Byoungseung Yoo. Department of Food Science and Biotechnology, Dongguk University
- P03-43 **Particle surface modification of whey protein isolate powder**  
Soobin An\*, Byoungseung Yoo. Department of Food Science and Biotechnology, Dongguk University
- P03-44 **The Physical and Sensory Characteristics of Chicken Broth Gels Enclosing Food Cubes and Their Stability During Cold Storage**  
Yang-Ju Son<sup>1\*</sup>, Su Hyeon Pyo<sup>1</sup>, So Won Park<sup>1</sup>, Chae Ryun Moon<sup>1</sup>, Ji Yu Choi<sup>2</sup>. <sup>1</sup>Department of Food and Nutrition, College of Biotechnology and Natural Resources, Chung-Ang University, <sup>2</sup>Department of Culinary Arts, College of Hotel and Culinary Arts, Woosong University
- P03-45 **Physicochemical Properties of Heat-Induced Duck Blood Gel: Freeze-dried Induced Interaction with Konjac Glucomannan**  
Jake Kim<sup>1\*</sup>, Su-Kyung Ku<sup>1</sup>, Tae-Kyung Kim<sup>1</sup>, Ji Yoon Cha<sup>1</sup>, Yea Ji Kim<sup>1</sup>, Samooel Jung<sup>2</sup>, Yun-Sang Choi<sup>1</sup>. <sup>1</sup>Korea Food Research Institute, Research Group of Food Processing, <sup>2</sup>Chungnam National University, Division of Animal and Dairy Science
- P03-46 **Effects of turmeric powder on quality characteristics and oxidation stability in perilla oil mayonnaise manufacturing**  
Chae Yeon Han<sup>1\*</sup>, Sung-Gil Choi<sup>1,2</sup>. <sup>1</sup>Division of Applied Life Science (BK21), Gyeongsang National University, <sup>2</sup>Division of Food Science and Technology, Gyeongsang National University
- P03-47 **Combination of nanoparticles and gelatin-genipin hydrogel enhances the antioxidant activity, stability, and release properties of curcumin**  
Seong Hwan Yu<sup>1</sup>, Do-Yeong Kim<sup>2</sup>, Youjin Baek<sup>1</sup>, Mihwa Hwang<sup>1</sup>, Hyeon Gyu Lee<sup>1\*</sup>. <sup>1</sup>Department of Food and Nutrition, Hanyang University, <sup>2</sup>Department of Food Science and Biotechnology, Dongguk University
- P03-48 **Preparation, antioxidant activity, stability, and rheological properties of gelatin hydrogel incorporated with nanoencapsulated quercetin and isoquercetin**  
Min-Je Kang<sup>1</sup>, Do-Yeong Kim<sup>2</sup>, Youjin Baek<sup>1</sup>, Mihwa Hwang<sup>1</sup>, Hyeon Gyu Lee<sup>1\*</sup>. <sup>1</sup>Department of Food and Nutrition, Hanyang University, <sup>2</sup>Department of Food Science and Biotechnology, Dongguk University
- P03-49 **Diversification of fermentation conditions to improve the quality of gluten-free sourdough**  
Seung-Hye Woo\*, Jiwoon Park, Eun-Ji Choi, Jung-Min Sung, Jong-Dae Park. Korea Food Research Institute

- P03-50 **Comparison of Rheological Properties of Dough and Quality of Breads with Commercial Bread Improving Agents**  
A-Reum Ryu\*, Ha Ram Kim, Yuri Kim, Jung Sun Hong, Hee-Don Choi. Korea Food Research Institute
- P03-51 **Thermodynamical and Rheological Properties of Wheat Flour Dough Depending on Salt Level**  
Ha Ram Kim\*, A-Reum Ryu, Ji-Eun Bae, Ah Leum Kim, Jung Sun Hong, Hee-Don Choi. Korea Food Research Institute
- P03-52 **A study on the quality characteristics of domestic radish leaves**  
Young Ran Son\*, Chae Wan Baek, Hyun Wook Jang, Gwi Jung Han, Yong Sik Cho. Department of Agrofood Resources, National Institute of Agricultural Sciences, Rural Development Administration
- P03-53 **Quality Characteristics of Sausage Manufactured by Different Soybean Cultivar**  
Ho Jun Sung<sup>1\*</sup>, Yun Jo Jung<sup>1</sup>, Gi Tak Lee<sup>1</sup>, Yeon Jae Jo<sup>1</sup>, Ji Eun Kwak<sup>2</sup>, Heon Sang Jeong<sup>1</sup>. <sup>1</sup>Department of Food Science & Biotechnology, Chungbuk National University, <sup>2</sup>National Institute of Crop Science, Rural Development Administration
- P03-54 **Quality Characteristics of Bread Made with Spring Sown Wheat Flour**  
So Yoon Lee<sup>1\*</sup>, Hyun Min Cho<sup>1</sup>, Jang Keun Son<sup>1</sup>, Ji Eun Kwak<sup>2</sup>, Tae Su Kang<sup>3</sup>, Heon Sang Jeong<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Chungbuk National University, <sup>2</sup>National Institute of Crop Science, Rural Development Administration, <sup>3</sup>Department of Culinary and Baking, Chungbuk Provincial Collage of Science & Technology
- P03-55 **Physicochemical Properties of Different Part of Super Sweet Corn by Harvesting Period**  
Ji Hyeon Yu\*, Hye Won Lee, Hyun Min Cho, Heon Sang Jeong. Department of Food Science and Biotechnology, Chungbuk National University
- P03-56 **Quality Characteristics of Sulgidduk Made with Special Rice and High-yielding Rice Cultivar**  
Hyun Min Cho<sup>1\*</sup>, Gi Tak Lee<sup>1</sup>, Ho Jun Sung<sup>1</sup>, Yeon Jae Jo<sup>1</sup>, Ji Eun Kwak<sup>2</sup>, Heon Sang Jeong<sup>1</sup>. <sup>1</sup>Department of Food Science And Biotechnology, Chungbuk National University, <sup>2</sup>National Institute of Crop Science, Rural Development Administration
- P03-57 **Anti-wrinkle activity of High temperature and pressure treated rutin**  
Yeon Jae Jo<sup>1\*</sup>, Hyun Min Cho<sup>1</sup>, Ji Hyeon Yu<sup>1</sup>, Tae Su Kang<sup>2</sup>, Heon Sang Jeong<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Chungbuk National University, <sup>2</sup>Department of Culinary and Baking, Chungbuk Provincial Collage of Science & Technology
- P03-58 **Quality Characteristics and Antioxidant activity of Saccharified Concentrate Prepared by Colored Sweet Potato**  
Hye Won Lee<sup>1\*</sup>, So Yoon Lee<sup>1</sup>, Yun Jo Jung<sup>1</sup>, Yeon Jae Jo<sup>1</sup>, Mi Nam Chung<sup>2</sup>, Heon Sang Jeong<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Chungbuk National University, <sup>2</sup>Bioenergy Crop Research Institute, Rural Development Administration
- P03-59 **Quality Characteristics of Sikhye Made with Glutinous Rice Cultivated in Korea**  
Yun Jo Jung<sup>1\*</sup>, Yeon Jae Jo<sup>1</sup>, So Yoon Lee<sup>1</sup>, Jang Keun Son<sup>1</sup>, Ji Eun Kwak<sup>2</sup>, Heon Sang Jeong<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Chungbuk National University, <sup>2</sup>National Institute of Crop Science, Rural Development Administration
- P03-60 **Physicochemical Properties of Several Wheat Flour Sown In Spring**  
Jang Keun Son<sup>1\*</sup>, Ho Jun Sung<sup>1</sup>, Hye Won Lee<sup>1</sup>, Yeon Jae Jo<sup>1</sup>, Ji Eun Kwak<sup>2</sup>, Heon Sang Jeong<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Chungbuk National University, <sup>2</sup>National Institute of Crop Science, Rural Development Administration
- P03-61 **Quality Characteristics of Reconstituted Dried Purple Sweet Potato**  
Gi Tak Lee\*, Ji Hyeon Yu, Yeon Jae Jo, Heon Sang Jeong. Department of Food Science and Biotechnology, Chungbuk National University
- P03-62 **Comparison of the solubility, stability, and antioxidant activity between propolis extract-loaded nanoparticles and nanoliposomes**  
Do Hee Kim, Eun Woo Jeong, Ji Hyun Kim, Hyeon Gyu Lee\*. Department of Food and Nutrition, Hanyang University
- P03-63 **Effect of Agriculture and Livestock By-product on Growth Performance, Physicochemical Properties, and Antioxidant Activity of Black Soldier Fly Larva**  
Jung-Hyun Nam\*, Ji-Yong Hyun, Ji-Yeon Chun. Department of Food Bioengineering, Jeju National University
- P03-64 **Effects of Black Solider Fly Larvae (*Hermetia illucens* L.) Powder adding to Emulsion-Type Chicken Breast Sausages on Quality Properties**  
Hun-Seok Kang\*, Jun-Hyuk Boo, Ji-Yeon Chun. Department of Food Bioengineering, Jeju National University
- P03-65 **Physicochemical Properties, Textural Properties, and Anitioxidant Activity of Chicken Breast Sausages with *Protaetia brevitarsis* larvae Powder**



- Ji-Yong Hyun\*, Jung-Hyun Nam, Du-Ri Kim, Ji-Yeon Chun. Department of Food Bioengineering, Jeju National University
- P03-66 **Effect of Jeju Lava Seawater Hardness on Low Methoxyl Pectin Gelation**  
Ji-Hyun Im\*, Hye-Yoon Yi, Ji-Yeon Chun. Department of Food Bioengineering, Jeju National University
- P03-67 **Characterization and Stability Assessment of *Sargassum horneri* Extracts Loaded Nanostructured Lipid Carriers: Effects of pH, Ionic Strength, and *In Vitro* Digestion**  
Hye-Yoon Yi\*, Ji-Yeon Chun. Department of Food Bioengineering, Jeju National University
- P03-68 **Quality characteristics of extruded meat analog from different soy protein sources supplemented with oyster mushroom and mealworm**  
Sunyoung Jung\*, Boram Park, Shinyoung Park, Jiho Choi, Chansoon Park. Fermented Processing Food Science Division, National Institute of Agricultural Sciences, RDA
- P03-69 **Edible Coating of *Aloe Vera* Gel on Guava for Microbe's Activity Inhibition and Increase of Shelf Life**  
Saba Noreen<sup>1\*</sup>, Zareena Mushtaq<sup>2</sup>, Soon Sung Lim<sup>1</sup>. <sup>1</sup>Department of Food Science and Nutrition, Hallym University, <sup>2</sup>Government College University, Faisalabad Pakistan
- P03-70 **Gelatinization temperature modifies the 3D printability and textural properties of pectin added potato starch gel**  
Nishala Erandi Wedamulla<sup>1,2,3,4\*</sup>, Meiqi Fan<sup>5</sup>, Young-Jin Choi<sup>1,2,3</sup>, Zhang Qun<sup>1,3</sup>, Eun-Kyung Kim<sup>1,2,3,6</sup>. <sup>1</sup>Department of Food Science and Nutrition, College of Health Science, Dong-A University, <sup>2</sup>Center for Silver-targeted Biomaterials, Brain Busan 21 Plus program, Dong-A University, <sup>3</sup>Department of Health Sciences, the Graduate School of Dong-A University, <sup>4</sup>Department of Export Agriculture, Faculty of Animal Science and Export Agriculture, Uva Wellassa University, Sri Lanka, <sup>5</sup>Division of Food Bioscience, College of Biomedical and Health Sciences, Konkuk University, <sup>6</sup>Center for Food & Bio Innovation, Dong-A University
- P03-71 **Optimization of Manufacturing Conditions of Seasoning Sauce using Anchovy Sauce Residue by Reaction Flavor Technology through Response Surface Methodology**  
Eunsong Cha\*, Jin Hyeon Kim, Changheon Lee, Seungmin Moon, Gyeongtae Jeong, Daeung Yu. Interdisciplinary Program in Senior Human-Ecology, Major in Food and Nutrition, Changwon National University
- P03-72 **Physicochemical properties of mixed grain *sunsik* according to heat treatments**  
Jin-Young Lee\*, Hyun-Joo Kim, Min-Jung Koo, Yu-Young Lee, Mi-Hyang Kim, Na-Rae Han, Moon-Suk Kang. Department of Central area Crop Science, National Institute of Crop Science, Rural Development Administration
- P03-73 **The changes in antioxidant activities of adzuki bean (*Vigna angularis var. nipponensis*) with various heat treatments**  
Seon-Min Oh\*, You-Geun Oh, Jieun Kwak, Yu-Chan Choi, Hyun-Jin Park, Jeong-Heui Lee, Jeom-Sig Lee. Department of Central Area Crop Science, National Institute of Crop Science, Rural Development Administration
- P03-74 **Applicability of silkworm powder-corn starch blends to 3D food printer: Effect of particle size on viscoelastic behavior and structural properties of 3D-printed foods**  
Meiqi Fan<sup>1</sup>, Young-Jin Choi<sup>2,3,4</sup>, Nishala Erandi Wedamulla<sup>2,3,4,5</sup>, Qun Zhang<sup>2,3</sup>, Eun-Kyung Kim<sup>2,3,4,6\*</sup>. <sup>1</sup>Division of Food Bioscience, College of Biomedical and Health Sciences, Konkuk University, <sup>2</sup>Department of Food Science and Nutrition, College of Health Science, Dong-A University, <sup>3</sup>Center for Silver-Targeted Biomaterials, Brain Busan 21 Plus Program, Dong-A University, <sup>4</sup>Department of Health Sciences, The Graduate School of Dong-A University, <sup>5</sup>Department of Export Agriculture, Faculty of Animal Science and Export Agriculture, Uva Wellassa University, Sri Lanka, <sup>6</sup>Center for Food & Bio Innovation, Dong-A University
- P03-75 **Evaluation of quality characteristics of reduced-salt, low-fat pork sausages with faba bean protein isolate and microbial transglutaminase**  
Geon Ho Kim\*, Koo Bok Chin. Department of Animal Science, Chonnam National University
- P03-76 **Antioxidative capacities and physicochemical properties of cissus treated yanggaeng**  
Jihye Lee\*, Jisu Lee, Hyunsoo Jang, Yoonhwa Jeong, Youngseung Lee, Misook Kim, Jung-Heun Ha. Department of Food Science and Nutrition, Dankook University
- P03-77 **Effects of full-fat soy content on extruded low- and high-moisture meat analogs**  
Yung-Hee Jeon\*, Nam-Ki Hwang, Hyunwoo Choi, Yoseob Han, Joo-Won Kim, Bon-Jae Gu, Gi-Hyung Ryu. Department of Food Science and Technology, Food and Feed Extrusion Research Center, Kongju National University
- P03-78 **Optimization of process parameters for low-moisture meat analog produced by isolated mung bean protein**  
Namki Hwang\*, Yung-Hee Jeon, Hyunwoo Choi, Seongcheon Hong, Jeongmin Kim, Bon-Jae Gu,

Gi-Hyung Ryu. Department of Food Science and Technology and Food and Feed Extrusion Research Center, Kongju National University

- P03-79 **Effects of process parameters on the physicochemical properties and cooking stability of low-moisture extruded meat analogs added isolated pea protein**  
Hyunwoo Choi\*, Joo-Won Kim, Yunju Lee, Yung-Hee Jeon, Namki Hwang, Bon-Jae Gu, Gi-Hyung Ryu. Department of Food Science and Technology and Food and Feed Extrusion Research Center, Kongju National University
- P03-80 **Senior friendly jelly made from *Coccinia grandis* fruit puree with IDDSI level measurement**  
Yeo Wool Kang, In Young Lee\*, Nami Joo. Sookmyung women's University
- P03-81 **Development of Prototypes of Processed Food using Materials Derived from *Sargassum horneri***  
Min-Ju Kim\*, Ramakrishna Chilakala, Hyeonjoeng Moon, Kangho Ko, Jinsol Ra, Seongheon Jeong, Yeji Cheon, Sun Hee Cheong. Department of Marine Bio Food Science, College of Fisheries and Ocean Science, Chonnam National University
- P03-82 **홍화씨 분말 첨가량에 따른 머핀의 품질특성**  
박인재<sup>1\*</sup>, 엄희섭<sup>2</sup>, 이경미<sup>1</sup>, 신정규<sup>2</sup>. <sup>1</sup>전주대학교 조리식품산업학과, <sup>2</sup>전주대학교 한식조리학과
- P03-83 **A Study on the Freshness Prediction Model of White Rice**  
Hoon Kim, Oui-Woong Kim, Hong-Sik Kim, Ah-Na Kim, Ho-Rim Jang\*. Korea Food Research Institute
- P03-84 **Dough Characteristics of Korean Wheat Flour according to the Drying Temperature**  
Hoon Kim<sup>1</sup>, Oui-Woong Kim<sup>1</sup>, Hong-Sik Kim<sup>1</sup>, Ah-Na Kim<sup>1</sup>, Ho-Rim Jang<sup>1</sup>, Jae-Woong Han<sup>2</sup>, Dong-Gwan Shin<sup>2</sup>, Su-Hyeon Park<sup>1\*</sup>. <sup>1</sup>Korea Food Research Institute, <sup>2</sup>Kongju National University
- P03-85 **Effects of the addition of isolated mung bean protein on the physicochemical characteristics of low-moisture extruded meat analogs**  
Ji-Hui Sin<sup>1\*</sup>, Min-Sol Park<sup>1</sup>, Nam-Soon Oh<sup>2</sup>, Bon-Jae Gu<sup>1</sup>, Gi-Hyung Ryu<sup>1</sup>. <sup>1</sup>Department of Food Science and Technology and Food and Feed Extrusion Research Center, Kongju National University, <sup>2</sup>Department of Food Science and Technology, Kongju National University
- P03-86 **Effect of Grafted Myofibrillar Protein on Physicochemical Properties of Enhanced Whole Cooked Ham**  
Yea-Ji Kim<sup>1,2\*</sup>, Tae-Kyung Kim<sup>1</sup>, Hyun-Jung Yun<sup>1</sup>, Jake Kim<sup>1</sup>, Ji Yoon Cha<sup>1</sup>, Jun Young Ahn<sup>1,2</sup>, Jae Hoon Lee<sup>1</sup>, Yun-Sang Choi<sup>1</sup>. <sup>1</sup>Research Group of Food Processing, Korea Food Research Institute, <sup>2</sup>Department of Food Science and Biotechnology of Animal Resources, Konkuk University
- P03-87 **Physicochemical and Bioactive Properties of Buckwheat Influenced by Germination Process for the Preparation of Buckwheat Tea**  
Na-Gyeong Koo\*, Hyeong-Jin Kim, Min-Su Lee, Gyu-Chang Mun, Yun-Ji Lee, Ji-Yun Nam, Min-Ju Park, Young-Tack Lee. Gachon University
- P03-88 **Antioxidative Capacities and Physicochemical Properties of Yanggaeng Treated *Corni Fructus* Powder**  
Hyunsoo Jang<sup>1\*</sup>, Jisu Lee<sup>1</sup>, Jihye Lee<sup>1</sup>, Sihoon Park<sup>2</sup>, Jae-Joon Lee<sup>2</sup>, Jungseok Choi<sup>3</sup>, Inyong Kim<sup>4</sup>, Jung-Heun Ha<sup>1</sup>. <sup>1</sup>Department of Food Science and Nutrition, Dankook University, <sup>2</sup>Department of Food and Nutrition, Chosun University, <sup>3</sup>Department of Animal Science, Chungbuk National University, <sup>4</sup>Food and Nutrition Department, Suncheon National University
- P03-89 **Effect of subcritical water process on the structure and antioxidant properties of milk proteins**  
Jong-Won Lee\*, Geun-Pyo Hong. Department of Food Science and Biotechnology and Carbohydrate Bioproduct Research Center, Sejong University
- P03-90 **Study of sugar production from rice husk based on the impact of subcritical water and enzymatic hydrolysis**  
Wonhyeong Lee\*, Jong-Won Lee, Jiseon Lee, Geun-Pyo Hong. Department of Food Science and Biotechnology, and Carbohydrate Bioproduct Research Center, Sejong University
- P03-91 **Characterization of porcine peptides prepared from pork meat hydrolyzed by bromelain under high pressure**  
Wonhyeong Lee\*, Geun-Pyo Hong. Department of Food Science and Biotechnology, and Carbohydrate Bioproduct Research Center, Sejong University
- P03-92 **전분 및 검류 믹스의 조성비에 따른 점성 비교**  
인병호, 김채영, 주가영, 장다빈, 배경아, 한기정, 이경행\*. 한국교통대학교 식품영양학전공
- P03-93 **데치기 시간에 따른 잔대 새싹의 일반성분 및 품질특성 변화**  
차승현\*, 박상범, 박세립, Shangle Jiang, 장금일. 충북대학교 식품생명공학과
- P03-94 **Physicochemical Qualities of Sliced-dried Oriental Melon Prepared by Different Combinations of Hot-air Drying, Freeze-thawing, and Steaming**  
Youngmin Kim\*, Minhui Kim, Yujung Jung, Deokyeong Choe. School of Food Science and Biotechnology, Kyungpook National University

- P03-95 **Evaluation of Different Levels of *Rhynchosia nulubilis* Powder on Product Quality of Low-fat Model Sausages**  
Min Jae Kim\*, Koo Bok Chin. Depart of Animal Science, Chonnam National University
- P03-96 **Quality Properties of Cooked *Biji* Noodles Manufactured Using Dough Prepared *Psyllium Husk* (*Plantago ovata* Forssk) Through Steaming Treatment**  
Shangle Jiang\*, Se-Lim Bak, Seung-Hyeon Cha, Sang-Beom Park, Keum-Il Jang. Chungbuk National University
- P03-97 **Effects of Different Processing Methods on Physicochemical Properties of Juice Products from Chinese Cabbages**  
Seung Hwa Gwak<sup>1,2\*</sup>, Su Min Bae<sup>1</sup>, Seonyeong Kang<sup>1</sup>, Da Hun Jeong<sup>1,2</sup>, Youngmin Heo<sup>1</sup>, Eunseo Kim<sup>1</sup>, Yujin Lee<sup>1</sup>, Jong Youn Jeong<sup>1,2</sup>. <sup>1</sup>Department of Food Science & Biotechnology, Kyungsoong University, <sup>2</sup>Center for Senior-friendly Novel Material, Food, and Pharmaceutical (Brain Busan 21 Plus), Kyungsoong University
- P03-98 **The Effects of Concentration of Chinese Cabbage Juice and Incubation Time for the Production of Natural Pre-converted Nitrite as a Nitrite Alternative**  
Seonyeong Kang<sup>1\*</sup>, Su Min Bae<sup>1</sup>, Da Hun Jeong<sup>1,2</sup>, Seung Hwa Gwak<sup>1,2</sup>, Youngmin Heo<sup>1</sup>, Eunseo Kim<sup>1</sup>, Yujin Lee<sup>1</sup>, Jong Youn Jeong<sup>1,2</sup>. <sup>1</sup>Department of Food Science & Biotechnology, Kyungsoong University, <sup>2</sup>Center for Senior-friendly Novel Material, Food, and Pharmaceutical (Brain Busan 21 Plus), Kyungsoong University
- P03-99 **Survey of Naturally Cured Commercial Hams on the Market in Korea**  
Da Hun Jeong<sup>1,2\*</sup>, Su Min Bae<sup>1</sup>, Seung Hwa Gwak<sup>1,2</sup>, Seonyeong Kang<sup>1</sup>, Youngmin Heo<sup>1</sup>, Eunseo Kim<sup>1</sup>, Yujin Lee<sup>1</sup>, Jong Youn Jeong<sup>1,2</sup>. <sup>1</sup>Department of Food Science & Biotechnology, Kyungsoong University, <sup>2</sup>Center for Senior-friendly Novel Material, Food, and Pharmaceutical (Brain Busan 21 Plus), Kyungsoong University
- P03-100 **The Quality Properties of Traditionally or Naturally Cured Commercial Sausages**  
Da Hun Jeong<sup>1,2\*</sup>, Su Min Bae<sup>1</sup>, Seonyeong Kang<sup>1</sup>, Seung Hwa Gwak<sup>1,2</sup>, Youngmin Heo<sup>1</sup>, Eunseo Kim<sup>1</sup>, Yujin Lee<sup>1</sup>, Jong Youn Jeong<sup>1,2</sup>. <sup>1</sup>Department of Food Science & Biotechnology, Kyungsoong University, <sup>2</sup>Center for Senior-friendly Novel Material, Food, and Pharmaceutical (Brain Busan 21 Plus), Kyungsoong University
- P03-101 **Applicability of phytosterol-based oleogel as a 3D printing material in physico-mechanical properties**  
Bonbeen Koo\*, Yourim Oh, Yehyun Ham, Nam Keun Lee, Jin-Kyu Rhee. Department of Food Science and Biotechnology, Ewha Womans University
- P03-102 **Effect of osmotic dehydration with different type of agents on hot-air drying of mangoes**  
Hyeonbin Oh\*, Hyunjung Shim, Chae-Wan Baek, Hyun Wook Jang, Young Hwang, Yong Sik Cho. Fermented and Processed Food Division, National Institute of Agricultural Sciences, Rural Development Administration
- P03-103 **Optimization of processing mango jelly with response surface methodology**  
Hyeonbin Oh\*, Hyunjung Shim, Chae-Wan Baek, Hyun Wook Jang, Young Hwang, Yong Sik Cho. Fermented and Processed Food Division, National Institute of Agricultural Sciences, Rural Development Administration
- P03-104 **식품영양성분 빅데이터를 활용하여 명태 알을 첨가한 스크 반죽의 영양특성 예측 및 부합성**  
권인상\*, 이다연, 안재희, 김민교, 허민수. 경상국립대학교 식품영양학과/해양산업연구소
- P03-105 **Physicochemical properties of encapsulated rosemary essential oil by spray drying**  
Woongjun Hwang\*, Jiseon Lee, Mi-Jung Choi. Department of Food Science and Biotechnology of Animal Resources, Konkuk University
- P03-106 **Functional Characteristics of Freeze-Dried Surimi Powder Using Domestic croaker**  
Seung Eun Lee\*, Seo Hyun Choi, Jeong Hyen Song, Jae Hak Sohn, Mi Ryung Kim. Food Culinary Arts Major, Faculty of Food Nutrition and Culinary Arts, Silla University
- P03-107 **Characteristics and storage stability of D-allulose solution**  
Tae-Hwi Moon<sup>1\*</sup>, Jung-Ah Han<sup>1,2</sup>. <sup>1</sup>Department of Foodservice Management and Nutrition, Sangmyung University, <sup>2</sup>Department of Food and Nutrition, Sangmyung University
- P03-108 **Effects of addition of sugars, sugar alcohols, and protein materials on softening of mackerel treated with high-pressure saturated steam**  
Hye Ji Seo<sup>1\*</sup>, Soyoun Kim<sup>1</sup>, In Ki Park<sup>2</sup>, Soyoun Joo<sup>1,2</sup>, Ju Yeon Park<sup>2</sup>, Jieun Oh<sup>3</sup>. <sup>1</sup>Department of Nutritional Science and Food Management, Ewha Womans University, <sup>2</sup>Hyundai Green Food Co., <sup>3</sup>College of Science & Industry Convergence, Ewha Womans University
- P03-109 **Quality characteristics of 3D printing material prepared by extruded rice flours mixture**  
Bo-Ram Park<sup>2\*</sup>, Jeonghui Yeo<sup>1</sup>, Juhyun Lee<sup>1</sup>, Euna Kim<sup>1</sup>, Junhee No<sup>1</sup>. <sup>1</sup>Department of Food Science and

Nutrition, Kyungpook National University, <sup>2</sup>Department of Agro-Food Resources, National Institute of Agricultural Sciences, Rural Development Administration

- P03-110 **Comparison of characteristics of soy protein based patties with different types of binding agents**  
Su-Bin Lim<sup>1\*</sup>, Tae-Hwi Moon<sup>1</sup>, Sun-Goo Yim<sup>1</sup>, Ye-Lim You<sup>1</sup>, Sang-Jin Kang<sup>2</sup>, Jung-Ah Han<sup>3</sup>. <sup>1</sup>Department of Foodservice Management and Nutrition, Sangmyung University, <sup>2</sup>Agricultural Corporation, A-life, <sup>3</sup>Department of Food Science and Nutrition, Sangmyung University
- P03-111 **Effects of extrusion process parameters on physicochemical and textural properties of pea protein-based meat analogs**  
Yu Zhang\*, Chaeyon Kang, Bon-Jae Gu, Gi-Hyung Ryu. Department of Food Science and Technology and Food and Feed Extrusion Research Center, Kongju National University
- P03-112 **Evaluation of deep frozen temperature preservation on the physicochemical properties of commercially frozen foods**  
Honggyun Kim<sup>1\*</sup>, Geun-Pyo Hong<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Sejong University, <sup>2</sup>Carbohydrate Bioproduct Research Center, Sejong University
- P03-113 **개두릅잎의 콩단백 융합가공에 따른 성분 및 맛 변화**  
노예진<sup>1,2\*</sup>, 박상아<sup>2</sup>, 임병현<sup>2</sup>. <sup>1</sup>서울과학기술대학교, <sup>2</sup>한국과학기술연구원
- P03-114 **Effect of particle size of plant-based protein ink on the texture of 3D printed alternative meat**  
Yourim Oh\*, Nam Keun Lee, Jin-Kyu Rhee. Department of Food Science and Biotechnology, Ewha Womans University
- P03-115 **Development of Gelato processing technology using Icheon specialties**  
Jeong Been Park, Dong Ho Kim, Min Su Jung\*, So Young Yang, Myeong Hee Kim. Icheon-si Agricultural Technology Center
- P03-116 **Physicochemical and *in vitro* release properties of low methoxyl pectin-based cryogel beads filled with inulin as a delivery system for catechin**  
Hee Jin Yi\*, Yoon Hyuk Chang. Department of Food and Nutrition, and Bionanocomposite Research Center, Kyung Hee University
- P03-117 **Effect of extraction method on yield of the aronia juice**  
Min Su Jung\*, Dong Ho Kim, Jeong Been Park, So Young Yang, Hyun Joo Lee. Icheon-si Agricultural Technology Center
- P03-118 **Nutritional and quality attributes of eggless muffins formulated using insect protein isolate and hydrocolloid solutions**  
Ha-Seong Cho<sup>1\*</sup>, Ibukunoluwa Fola Olawuyi<sup>1</sup>, Yoo-Jin Na<sup>1</sup>, Gwang-Deok Park<sup>1</sup>, Lena Chiamaka Okonkwo<sup>1</sup>, Jong-Jin Park<sup>1,2</sup>, Won-Young Lee<sup>1,3</sup>. <sup>1</sup>School of Food Science and Technology, Kyungpook National University, <sup>2</sup>Coastal Agricultural Research Institute, Kyungpook National University, <sup>3</sup>Research Institute of Tailored Food Technology, Kyungpook National University
- P03-119 **Comparison of quality by treatment for removal of Schisandra seeds**  
Ji-Seon Park\*, Jin-Kwan Ham, Eun-Ha Chang, Jae-Geel Lim, Kye Hyun Lim, Jeung Ae Yoon, Sun Young Kim, Hyang Kwon, Kyung Ah Jang. Agro-food Research Institute, Gangwondo Agricultural Research and Extension Services
- P03-120 **과일 다면 영상 획득을 위한 플러 회전 장치 개발**  
이아영\*, 김기영, 김광급. 국립농업과학원 농업공학부
- P03-121 **Analysis of Quality Characteristics of Gochujang Added with Fermented Deodeok (*Codonopsis lanceolata*) Root Powder by Lactic Acid Bacteria**  
Jae-Geel Lim<sup>1\*</sup>, Ji-Seon Park<sup>1</sup>, Hyo-Young Lee<sup>2</sup>, Se-Won Kim<sup>2</sup>, Jin-Kwan Ham<sup>1</sup>, Eun-Ha Chang<sup>1</sup>, Eun-Kyung Yeom<sup>1</sup>. <sup>1</sup>Agro-food Research Institute, Gangwondo Agricultural Research and Extension Services, <sup>2</sup>Wild Vegetable Research Institute, Gangwondo Agricultural Research and Extension Services
- P03-122 **Optimization of plant-based protein ink to express the texture of 3d printed meat analog**  
Yurim Ha\*, Yourim Oh, Eunji Kim, Yehyun Ham, Seungmin Lee, Nam Keun Lee, Jin-Kyu Rhee. Department of Food Science and Biotechnology, Ewha Womans University
- P03-123 **Rheological and Microstructural Properties of Cheese Analogue Made with Cell-Free Culture Supernatants of *Lactobacillus casei* and Chicory Fiber**  
You Young Lee<sup>1\*</sup>, Eunghee Kim<sup>2</sup>, Myeongsu Jo<sup>2</sup>, Young Jin Choi<sup>1,2,3</sup>. <sup>1</sup>Department of Agricultural Biotechnology, Seoul National University, <sup>2</sup>Center for Food and Bioconvergence, Seoul National University, <sup>3</sup>Research Institute of Agriculture and Life Sciences, Seoul National University
- P03-124 **Comparison of Volatile Compounds of Growing *Protaetia brevitarsis* larva by Breeding Cage**  
Ji Yoon Cha<sup>1\*</sup>, Tae-Kyung Kim<sup>1</sup>, Jae Hoon Lee<sup>1</sup>, Min-Cheol Kang<sup>1</sup>, Hae Won Jang<sup>2</sup>, Yun-Sang Choi<sup>1</sup>. <sup>1</sup>Korea Food Research Institute, <sup>2</sup>Sungshin Women's University
- P03-125 **Effect of Hot-Air Drying on Quality and Physicochemical Properties of Lettuce and Nappa Cabbage**

Seung-Hee Lee\*, Mi-Yeon Lee, Eun Young Ko, Hyeonbo Lee, Jiseon Lee, Mi-Jung Choi. Department of Food Science and Biotechnology of Animal Resources, Konkuk University

- P03-126 Monitoring and optimization of roasting conditions of lime (*Citrus aurantifolia*) peel for flavonoid recovery and anticancer activity**  
Dong Min Kim\*, Duhyeon Kim, Seonghui Kim, Suengmok Cho. Department of Food Science And Technology, Institute of Food Science, Pukyong National University
- P03-127 꺾임분말을 활용한 진통 다과 개발**  
이화정<sup>1\*</sup>, 유수인<sup>2</sup>, 백진경<sup>1</sup>. <sup>1</sup>울지대학교 식품영양학과, <sup>2</sup>성남식품연구개발지원센터
- P03-128 Bioconverted citrus pomace extract product using a kefir lactic acid bacteria improved HF-induced obesity and intestinal microbiota**  
Hye-Young Youn<sup>2\*</sup>, Kun-Ho Seo<sup>2</sup>, Hyeon-Jin Kim<sup>2</sup>, Young-Seon Kim<sup>2</sup>, E Seul Kim<sup>1</sup>, Hyunsook Kim<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Hanyang University, <sup>2</sup>KU Center for Food Safety, College of Veterinary Medicine, Konkuk University
- P03-129 꺾임펙틴을 이용한 장건강, 기능성 과립 “TangeRe: play” 개발**  
임애은<sup>1\*</sup>, 성현준<sup>1</sup>, 백승욱<sup>2</sup>, 임건우<sup>2</sup>. <sup>1</sup>전남대학교 응용식품바이오공학과, <sup>2</sup>전남대학교 농식품생명공학부 식품공학과
- P03-130 초음파 추출 기술을 이용한 꺾임 추출물의 상처회복 보조 제품 고안**  
조철현\*, 손유진. 세종대학교 식품생명공학과
- P03-131 Optimization of Enzyme-Assisted Extraction for Citrus peel using Response Surface method and Citrus peel jelly making**  
Han Bi Kim\*, Mina Kim, Ae-Jin Choi, Jeong-Sook Choe. Functional Food & Nutrition Division, National Academy of Agricultural Science, Rural Development Administration
- P03-132 MZ세대를 겨냥한 한국식 디저트 ‘꺾임 주약’ 개발**  
이현보\*, 하린, 이예린, 박지영, 고은영. 건국대학교 축산식품생명공학과
- P03-133 리포솜으로 포장한 꺾임 추출물을 이용한 스킨케어 제품 개발**  
최유희<sup>1\*</sup>, 황웅준<sup>1</sup>, 이준관<sup>1</sup>, 이지선<sup>1</sup>, 연제영<sup>2</sup>, 김효태<sup>2</sup>, 강구현<sup>2</sup>, 최미정<sup>1</sup>. <sup>1</sup>건국대학교 축산식품생명공학과, <sup>2</sup>주식회사 뉴엔뉴
- P03-134 Development and Quality Characteristics of Xylitol Candy “Jinpitanghwan” with Added Dried Citrus Peel**  
Jisu Han\*, Hae-In Lee, Mi-Kyung Lee. Department of Food and Nutrition, Sunchon National University
- P03-135 꺾임을 활용한 저열량 양극 고로케 제품의 개발**  
김하늘\*, 김다영, 진수성, 이다빈, 김태완. 안동대학교 식품생명공학과
- P03-136 식물성 단백질을 이용한 식물성 반려견 간식 개발**  
이미진\*, 김가현, 임소정, 하준모. 고려대학교 세종캠퍼스
- P03-137 병아리콩과 옥수수전분을 이용한 글루텐-프리 루(gluten-free roux) 제품 및 활용 전략 개발**  
남궁은, 박다솜\*, 윤소미, 박건웅, 정유리. 고려대학교 식품생명공학과
- P03-138 노인층의 연하 곤란자를 위한 영양 보충식 개발**  
조한희\*, 나상인. 고려대학교
- P03-139 청갈 마요네즈 개발과 품질특성 연구**  
안이선\*, 이민호. 울지대학교 식품산업외식학과
- P03-140 햄프씨드 자원을 활용한 셀락 코팅 육포 제품의 개발**  
정민호<sup>1,3\*</sup>, 황성규<sup>1</sup>, 김승현<sup>1,3</sup>, 허성윤<sup>2</sup>, 정태진<sup>3</sup>, 김태완<sup>1</sup>. <sup>1</sup>안동대학교 식품생명공학과, <sup>2</sup>(주)히스텔리, <sup>3</sup>(주)히스텔리 부설기술연구소
- P03-141 뽕나무 잎과 오디를 활용한 발효차 개발**  
신류성\*, 박주현, 김주현, 최성욱, 윤금성, 김민선, 김가영. 고려대학교 식품생명공학과

## Food Preservation / Packaging

- P04-01 Inactivation of *Salmonella* Typhimurium, *Escherichia coli* O157:H7, and *Listeria monocytogenes* in Apple Puree by Combined Treatment with Mild Heat and High Hydrostatic Pressure**  
Eun-Jung Lee\*, Nam-Soon Oh, Gi-Hyung Ryu, Eui-Hong Byun, Yoon-Jae Park, Bon-Jae Koo, Sang-Hyun Park. Department of Food Science and Technology, Kongju National University
- P04-02 백합구근추출물 함유 파우더스틱 제품의 저장 중 품질변화**  
김승태\*, 이상엽, 박세진, 김윤현, 이원중, 김성훈. 보타노스
- P04-03 Antimicrobial, antioxidant, and pH-sensitive polyvinyl alcohol/chitosan-based multifunctional biocomposites**  
Ahmed A. Oun<sup>1,2</sup>, Gye Hwa Shin<sup>3</sup>, Jun Tae Kim<sup>1\*</sup>. <sup>1</sup>Department of Food and Nutrition, BioNanocomposite



Research Center, Kyung Hee University, <sup>2</sup>Nanotechnology and Advanced Materials Central Lab, Regional Center for Food & Feed, Agricultural Research Center, Giza, Egypt, <sup>3</sup>Department of Food and Nutrition, Kunsan National University

- P04-04 **The Changes in Storage Characteristics of Milled Rice under Different Temperature**  
Hyun-Jin Park\*, Yu-Chan Choi, Jieun Kwak, You-Geun Oh, Seon-Min Oh, Jeom-Sig Lee, Jeong-Heui Lee. Department of Central Area Crop Science, National Institute of Crop Science, Rural Development Administration
- P04-05 **Changes in quality characteristics according to the storage period of garlic and onion due to natural browning inhibitor treatment**  
Yun-Jeong Jo\*, Jeong Lee, Jong-Kug Lee, Jung-Il Ju. Chungcheongnam-do Agricultural Research and Extension Services
- P04-06 **Quality Characteristics during Storage of Deodeok (*Codonopsis lanceolata* Trautv.) Buds Washed by Different Methods**  
Ji-Seon Park\*, Jin-Kwan Ham, Eun-Ha Chang, Jae-Geel Lim, Kye Hyun Lim, Jeung Ae Yoon, Sun Young Kim, Hyang Kwon, Kyung Ah Jang. Agro-food Research Institute, Gangwondo Agricultural Research and Extension Services

### Food Microbiology / Fermentation / Enzyme

- P05-01 **Screening and Identification of *Bacillus amyloliquefaciens* and its Application for Naringin Biotransformation**  
Seung-Hee Nam<sup>1,2\*</sup>, Ae Eun Im<sup>1</sup>, Jeong-Yong Cho<sup>1</sup>. <sup>1</sup>Department of Integrative food, Bioscience and Biotechnology, Chonnam national university, <sup>2</sup>Institute of Agricultural and Life Science Technology, Chonnam National University
- P05-02 **Deglycosylation of naringin using naringinase from *Aspergillus oryzae* NYO-2**  
Seung-Hee Nam<sup>1,2\*</sup>, Hyeon Jun Seong<sup>1</sup>, Kwang-Yeol Yang<sup>3</sup>. <sup>1</sup>Department of integrative food, bioscience and biotechnology, Chonnam National University, <sup>2</sup>Institute of Agricultural and Life Science Technology, Chonnam National University, <sup>3</sup>Department of Applied Biology, College of Agriculture and Life Science, Chonnam National University
- P05-03 **Production, identification of caffeic acid glucoside using *Leuconostoc* dextransucrase and its functional characterization**  
Hyeon Jun Seong<sup>1\*</sup>, Geon Woo Lim<sup>2</sup>, Seungwook Baek<sup>2</sup>, Hyeon Seok Park<sup>3</sup>, Sugju Ko<sup>3</sup>, Seung-Hee Nam<sup>1,4</sup>. <sup>1</sup>Department of integrative food, bioscience and biotechnology, Chonnam national university, <sup>2</sup>Major of food Science & Technology, Division of Food Technology & Biotechnology, Chonnam National University, <sup>3</sup>Tea industry Institute of Jeollanamdo Agricultural Research and Extension Services, <sup>4</sup>Institute of Agricultural and Life Science Technology, Chonnam National University
- P05-04 **Development of Optimal Conditions for Surface Sterilization by Ultraviolet Radiation**  
Byung Soo Ko\*, Choon Gil Kang, Seung Wook Kim. Ottogi Research Center, Korea
- P05-05 **Metabolic variations according to culture conditions and strains of kimchi-derived probiotics**  
Sung-Hee Lee\*, Ji-Sue Lee, Young-Shick Hong. Department of Food and Nutrition, Chonnam National University
- P05-06 **The Characteristics of *Bacillus* Species Isolated from Korean Traditional Soy Sauce, *Ganjang***  
Yeoun-Ju Choi\*, Ju Hee Yoon, Ji Hyeon Kim, Kiwon Lee. Research and Development Center, Korea Analysis Test Researcher
- P05-07 **The Characteristics of Lactic Acid Bacteria Isolated from *Kimchi***  
Ji-Hye Bu\*, Ju Hee Yoon, Ji Hyeon Kim, Kiwon Lee. Research and Development Center, Korea Analysis Test Researcher
- P05-08 **Establishment of Gnotobiotic Mice Model for Inoculation of Human-derived Intestinal Microorganisms using Germ-free Mice**  
Taewon Han\*, Kyoung-Won Lee, Ho-Young Park, Hyunjhung Jhun. Korea Food Research Institute
- P05-09 **Optimized Production Platform of Photosynthetic Pigments based on Microalgae for Health Functional Food**  
Chan Yoo<sup>1\*</sup>, Su-Hyun Bae<sup>1</sup>, Dae-Sung Yoo<sup>1</sup>, Do-Yeong Son<sup>1</sup>, Eun-Jin Sung<sup>1</sup>, Si-Won Lee<sup>1</sup>, Hee-Sik Kim<sup>2</sup>, Dea-Hyun Jo<sup>2</sup>, Dae-Bang Seo<sup>1</sup>. <sup>1</sup>Food Research Institute, Asklabs Co., Ltd., <sup>2</sup>Cell Factory Research Center, Korea Research Institute of Bioscience and Biotechnology
- P05-10 **Enhancement of Anti-inflammatory and Anti-osteoporosis Effects of Fermented *Abelmoschus manihot* L. by *Bacillus licheniformis* CP6 from Tong-yeong seawater**

Sang-Jae Lee<sup>1\*</sup>, Min Kyeong Kim<sup>1</sup>, Joo Young Yang<sup>1</sup>, Mi-Hwa Park<sup>2</sup>. <sup>1</sup>Department of Food Biotechnology and Research Center for Extremophiles & Marine Microbiology, Silla University, <sup>2</sup>Department of Food and Nutrition, Silla University

- P05-11 **Vitamin K Complex Purified from Fermented Spinach**  
Hyunsol Jo<sup>1</sup>, Sanghee Lee<sup>2</sup>, Sunmee Hong<sup>1\*</sup>. <sup>1</sup>Dep. Research and Development, Marine Industry Research Institute for East sea rim, <sup>2</sup>Research Group of Aging and Metabolism, Korea Food Research Institute
- P05-12 **Cholesterol-Lowering Effects of *Lactiplantibacillus plantarum* DY42 in Hypercholesterolemia Murine Model**  
Ye Eun Moon<sup>1\*</sup>, Dongyoung Choo<sup>1</sup>, Hyunjoon Park<sup>2</sup>, Deuk Sang Cheung<sup>3</sup>, Sang Beom Lee<sup>3</sup>, Chul Sung Huh<sup>1,2</sup>. <sup>1</sup>Graduate School of International Agricultural Technology, Seoul National University, <sup>2</sup>Institute of Green-Bio Science and Technology, Seoul National University, <sup>3</sup>Ssial Food Inc.
- P05-13 **Comparison Between the Culture Method And The Real Time PCR Method in Detection Method of *Staphylococcus aureus***  
Hae Ji Kim\*, Do Gyun Kim, Young Il Kim, Hee Sook Lee, Su Ok Kim, Kwang Su Lee, Woo Sung Kim, Chang Hee Lee. Hazardous Substance Analysis Division, Busan Regional office of Food and Drug Safety
- P05-14 **Separation and characteristics of yeast with anti-articular inflammation activity from traditional foods and wild flowers in Chungnam province**  
Jong-Kug Lee\*, Jeong Lee, Yoon-Jeong Cho, Jung-Il Ju. Chungcheongnam-do Agricultural Research and Extension Services
- P05-15 **Application of Fermented *Ulgari-Baechu* (Winter Grown Cabbage) Broth using Lactic Acid Bacteria during the Curing Process of Ground Beef**  
Selim Kim<sup>1\*</sup>, Seoyoung Lee<sup>2</sup>, Heejeong Kim<sup>1</sup>, Hyeon-Son Choi<sup>3</sup>, Jungil Hong<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Technology, College of Natural Science, Seoul Women's University, <sup>2</sup>Department of Cosmetic Engineering, College of Natural Science, Seoul Women's University, <sup>3</sup>Department of Food Nutrition, Sangmyung University
- P05-16 **Bioconversion of Nitrogen Oxides in Nitrate-containing Vegetables through The Fermentation Process of Lactic Acid Bacteria**  
Seoyoung Lee<sup>1\*</sup>, Heejeong Kim<sup>2</sup>, Selim Kim<sup>2</sup>, Subin Hwang<sup>2</sup>, Sumin Jung<sup>2</sup>, Hyunjung Ha<sup>2</sup>, Jungil Hong<sup>1,2</sup>, Hyeonson Choi<sup>3</sup>. <sup>1</sup>Department of Cosmetic Engineering, College of Natural Science, Seoul Women's University, <sup>2</sup>Department of Food Science and Technology, College of Natural Science, Seoul Women's University, <sup>3</sup>Department of Food Nutrition, Sangmyung University
- P05-17 **Anti-microbial Activities of Commercial Dental Gum and Disciples-produced Gum for Companion Dog**  
Deok-Gyeong Kang<sup>1\*</sup>, Yun-Jin Lee<sup>1</sup>, Ji-Min Kim<sup>1</sup>, Ji-Hoon Dong<sup>2</sup>, Ho-Yong Sohn<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Disciples, Inc.
- P05-18 **Isolation and characterization of *Pediococcus* strain from traditional fermented food, *Jangajji* and their application for broccoli fermentation**  
Sang Kyu Park, Yong Gun Yun, Sang Ho Baik\*. Dept. of Food Science and Human Nutrition, Jeonbuk National University
- P05-19 **국내 수종의 토스팅 정도 및 숙성기간이 증류주 품질특성에 미치는 영향**  
박의광<sup>1\*</sup>, 윤동규, 최성열, 신혜림, 윤향식. 충청북도농업기술원 와인연구소
- P05-20 **효모 균주 및 접종농도별 스파클링 와인의 품질특성**  
신혜림\*, 황은빛, 최성열, 박의광, 윤동규, 윤향식. 충북농업기술원 와인연구소
- P05-21 **자두 리큐르의 침출조건 및 기간별 품질특성 및 생리활성 비교**  
신혜림\*, 황은빛, 최성열, 박의광, 윤동규, 윤향식. 충북농업기술원 와인연구소
- P05-22 **Antioxidant and Inhibition activity of Acetylcholinesterase and Butyrylcholinesterase of peptide fractions from chia seed protein by protease from *Bacillus* sp.5**  
Hao Jin\*, Na-Jeong Kim, Sang-Ho Baik. Food Science and Human Nutrition, Chonbuk National University
- P05-23 ***Saccharomyces cerevisiae* strains isolated from Korean rice wine alleviating intestinal inflammation**  
Bum Ju Kil<sup>1\*</sup>, Young Jin Pyung<sup>1</sup>, Cheol-Heui Yun<sup>1,2,3</sup>, Chul Sung Huh<sup>3,4</sup>. <sup>1</sup>Biomodulation major and Center for Food and Bioconvergence, Seoul National University, <sup>2</sup>Department of Agricultural Biotechnology, and Research Institute for Agriculture and Life Sciences, Seoul National University, <sup>3</sup>Research Institute of Eco-Friendly Livestock Science, Institute of Green-Bio Science & Technology, Seoul National University, <sup>4</sup>Graduate School of International Agricultural Technology, Seoul National University
- P05-24 **Identification of microorganisms by next generation sequencing Ganjang (Korean soy sauce)**  
Kyung-Tae Jang<sup>1\*</sup>, Min-Ho Lee<sup>2</sup>. <sup>1</sup>Department of Hotel Culinary Arts, Sin-ansan University, <sup>2</sup>Department of Senior Healthcare, Eulji University



- P05-25 **Synthesis of alpha-galacto-oligosaccharide using alpha galactosidase from GH36 *Bacteroides thetaiotaomicron***  
Hyeon-Gyu-Yang\*, Young-Wan Kim. Department of Food and Biotechnology, Korea University
- P05-26 **Isolation and Characterization of Novel Probiotic Strains of containing Rutin Biosynthetic Pathway Genes from Buckwheat**  
Jeong Seon Eom\*, Hye-Young Park, Eun-Yeong Sim, Jiyoung Park, Mi Jung Kim, Hong-Sig Kim, Hye Sun Choi. Crop post-harvest technology division, National Institute of Crop Science, RDA
- P05-27 **Strengthening the National Microbial Management in Food Safety: Opinions from Multidisciplinary Experts on Future Research Themes**  
Sun Min Park\*, Seon Gyeong Park, Min Suk Rhee. Department of Biotechnology, Korea University
- P05-28 **Development of Direct Real-time PCR-based Rapid Detection Method Highly Specific for *Streptococcus suis* in Meat by Targeting *recN* Gene**  
Ho Sik Ham<sup>1\*</sup>, Sum Min Park<sup>1</sup>, Changsun Choi<sup>2</sup>, Min Suk Rhee<sup>1</sup>. <sup>1</sup>Department of Biotechnology, Korea University, Korea, <sup>2</sup>Department of Food and Nutrition, Chung-Ang University
- P05-29 **Prevalence of *Streptococcus suis* in Pork, Beef, and Edible Pig Organs Distributed in South Korea**  
Ho Sik Ham<sup>1\*</sup>, Sum Min Park<sup>1</sup>, Changsun Choi<sup>2</sup>, Min Suk Rhee<sup>1</sup>. <sup>1</sup>Department of Biotechnology, Korea University, <sup>2</sup>Department of Food and Nutrition, Chung-Ang University
- P05-30 **Prevalence and Pathogenicity of *Arcobacter* and *Enterococcus* in Pork Ham and Beef Tartare in South Korea: Toxin Gene Pattern and Antimicrobial Resistance**  
Won Sik Cho<sup>1\*</sup>, Sun Min Park<sup>1</sup>, Changsun Choi<sup>2</sup>, Min Suk Rhee<sup>1</sup>. <sup>1</sup>Department of Biotechnology, Korea University, <sup>2</sup>Department of Food and Nutrition, Chung-Ang University
- P05-31 **Establishment of Optimal Thermal/Non-thermal Household Cooking Methods to Control *Escherichia coli* O157:H7 in Button and Oyster Mushrooms**  
Su Min Kim<sup>1\*</sup>, Seon Gyeong Park<sup>1</sup>, Seo Young Chung<sup>1</sup>, Sun Ae Kim<sup>2</sup>, Min Suk Rhee<sup>1</sup>. <sup>1</sup>Department of Biotechnology, Korea University, <sup>2</sup>Department of Food Science and Engineering, Ewha Womans University
- P05-32 **Growth Modeling of *Escherichia coli* O157:H7 in Button Mushroom Based on Distribution and Storage Conditions**  
Seon Gyeong Park<sup>1\*</sup>, Sun Ae Kim<sup>2</sup>, Min Suk Rhee<sup>1</sup>. <sup>1</sup>Department of Biotechnology, Korea University, <sup>2</sup>Department of Food Science and Engineering, Ewha Womans University
- P05-33 **Development and Verification of Predictive Models for Growth of *Escherichia coli* O157:H7 in Oyster Mushroom**  
Seon Gyeong Park<sup>1\*</sup>, Seo Young Chung<sup>1</sup>, Sun Ae Kim<sup>2</sup>, Min Suk Rhee<sup>1</sup>. <sup>1</sup>Department of Biotechnology, Korea University, <sup>2</sup>Department of Food Science and Engineering, Ewha Womans University
- P05-34 **Growth, Survival, and Death Patterns of Pathogenic *Escherichia coli* in Ready-to-eat Seafood Products**  
Hary Yu<sup>1\*</sup>, Tae Jin Cho<sup>2</sup>, Sun Ae Kim<sup>3</sup>, Min Suk Rhee<sup>1</sup>. <sup>1</sup>Department of Biotechnology, Korea University, <sup>2</sup>Department of Food and Biotechnology, Korea University, <sup>3</sup>Department of Food Science and Engineering, Ewha Womans University
- P05-35 **Comparison of Behaviors of Foodborne Pathogens (*Listeria monocytogenes*, *Staphylococcus aureus*, *Escherichia coli*, and *Salmonella* Enteritidis) on the Surface of Peaches and Nectarines at Refrigerated/Room Temperatures**  
Hyeong Cheol Kim\*, Seon Gyeong Park, Min Suk Rhee. Department of Biotechnology, Korea University
- P05-36 **Synergistic Complex of GRAS-Certified Food Additives Eradicated High Concentrations of Bacteria, Fungi, or Viruses in Both Liquid and Gas Phase**  
Beom Chang Baek\*, Hary Yu, Min Suk Rhee. Department of Biotechnology, Korea University
- P05-37 **Evaluation of the Virucidal Efficacy of Quaternary Ammonium Compounds against Representative Enveloped and Non-Enveloped Viruses**  
Beom Chang Baek<sup>1\*</sup>, Hary Yu<sup>1</sup>, In-Young Chung<sup>2</sup>, Jiyoung Jang<sup>2</sup>, Min Suk Rhee<sup>1</sup>. <sup>1</sup>Department of Biotechnology, Korea University, <sup>2</sup>Chemicals Research Division, National Institute of Environmental Research
- P05-38 **Safety evaluation of *Lactobacillus plantarum* and *Weissella cibaria* strain isolated from pear and Korean melon to use as a dietary probiotics additives**  
Jinsu Koo\*, Nayeon Lee, Daekeun Shin. GREENSTORE R&D Institute
- P05-39 **A study on manufacture and fermentation characteristics of fermented soybean using non-germinated soybeans**  
Eunah Sim\*, Seungil Jeong, Boung-Jun Oh. Jeonju AgroBio-Materials Institute, Food R&DB Team
- P05-40 **Quality Characteristics of Non-steamed Fermentation Method with Different Raw Material Pretreatment Process**

- Seung-Eun Lee\*, Heui-Yun Kang. Fermented & Processed Food Science Division, Department of Agro-food Resources, National Institute of Agricultural Sciences, Rural Development Administration
- P05-41 **Comparison of rice beer fermented by different types of yeast**  
So-Hee Kim<sup>1</sup>, Ye-Rim Hwang<sup>1</sup>, Jun-Hyuk Shin<sup>1</sup>, Yun-Ho Park<sup>1\*</sup>, Sam-Pin Lee<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Technology, Keimyung University, <sup>2</sup>The Center for Traditional Microorganism Resource, Keimyung University
- P05-42 **Development of functional vinegar fortified with soybean peptides and  $\gamma$ -aminobutyric acid (GABA)**  
Yun-Ho Park<sup>1\*</sup>, Min-Jeong Kwon<sup>1</sup>, Sam-Pin Lee<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Technology, Keimyung University, <sup>2</sup>The Center for Traditional Microorganism Resource, Keimyung University
- P05-43 **Comparison of Characteristics among The Isolates from Soybean Pastes for The Mixed Starter Use of *Meju***  
Seongeui Yoo\*, Jieon Park, Seoyeon Kwak, Seung-Yeon Baek, Woosoo Jeong, Soo-Hwan Yeo, So-Young Kim. Department of Agrofood Resources, National Institute of Agriculture Science, RDA
- P05-44 **Functional processed cheese manufactured by cottage cheese and fermented soybean mixture**  
Yeong-Jun Kim<sup>1\*</sup>, Byeong-Hwa Kim<sup>1</sup>, Min-Jeong Kwon<sup>1</sup>, Sam-Pin Lee<sup>1,2</sup>. <sup>1</sup>Department of Food science and Technology, Keimyung University, <sup>2</sup>The Center for Traditional Microorganism Resource, Keimyung University
- P05-45 **Isolation and characterization of *Listeria monocytogenes* and *Salmonella* spp. bacteriophages from sewage disposal plant**  
Jong-Lak Cho<sup>1\*</sup>, Kyung-Hee Park<sup>1</sup>, Jun-Hyeong Seo<sup>2</sup>, Yong-Chae Oh<sup>2</sup>, Jeong-Mok Kim<sup>1,2</sup>. <sup>1</sup>Institute of Seafood Safety and Toxicology, Mokpo National University, <sup>2</sup>Department of Food Engineering, Mokpo National University
- P05-46 **Stainless steel 표면의 *Bacillus licheniformis* biofilm 형성에 대한 aqueous chlorine dioxide와 UV-C의 제어 효과**  
천사아<sup>1</sup>, 조종락<sup>2\*</sup>, 오용채<sup>1</sup>, 김정목<sup>1,2</sup>. <sup>1</sup>목포대학교 식품공학과, <sup>2</sup>목포대학교 수산물안전독성연구소
- P05-47 **Enhancing the functional properties of mixture of red ginseng and *Dendropanax morbiferus* extract by co-fermentation using three types of microorganisms**  
Beom-Su Cho<sup>1\*</sup>, Yu-Jeong An<sup>1</sup>, Sam-Pin Lee<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Technology, Keimyung University, <sup>2</sup>The Center for Traditional Microorganism Resource, Keimyung University
- P05-48 **Ecumicin and rufomycin as anti-tuberculosis lead compounds targeting *Mycobacterium tuberculosis* ClpC1 were isolated from actinomycetes extract library (Ecum)**  
Hanki Lee<sup>1</sup>, Mi-Sook Hong<sup>2</sup>, Joo-Hyung Cho<sup>2\*</sup>, Joo-Won Suh<sup>2</sup>. <sup>1</sup>Interdisciplinary program of biomodulation, Graduate school of Natural Science, Myongji University, <sup>2</sup>Myongji bioefficacy Research Center Myongji University
- P05-49 **Manufacture of medium composition using defatted salmon skin and development of marine protein fermentation material using *Saccharomyces cerevisiae***  
Jun-Ki Park\*, Kyung-Yun Kang, Beom-Gyun Jeong, Jeong-Ho Kim, Ho Yeol Jang, Yun-Seo Oh, Kyung-Wuk Park. Suncheon Research Center for Bio Health Care
- P05-50 **Establishment of Alcohol Fermentation Conditions for Production of Coffee Cherry Wine**  
Hyeon-Jin Kang\*, Eun-Jung Yim, Seung-Wha Jo, Eun-Bi Oh, Su-Yeon Gu, Kang-Yeol Yu, Do-Youn Jeong. Microbial Institute for Fermentation Industry
- P05-51 **Quality Characteristics and Physiological Activities of Sweet Cherry (*Prunus avium*) Wine Using *Saccharomyces cerevisiae***  
Hyeon-Jin Kang\*, Eun-Jung Yim, Seung-Wha Jo, Su-Yeon Gu, Eun-Bi Oh, Kang-Yeol Yu, Do-Youn Jeong. Microbial Institute for Fermentation Industry
- P05-52 **Establishment of Alcohol Fermentation Conditions for Production of Chinese wild peach (*Prunus davidiana* Carr.) Wine.**  
Eun-Jung Yim\*, Hyeon-Jin Kang, Seung-Wha Jo, Eun-Bi Oh, Su-Yeon Gu, Kang-Yeol Yu, Do-Youn Jeong. Microbial Institute for Fermentation Industry
- P05-53 **Establishment of Acetic acid Fermentation Conditions for Production of Chinese wild peach (*Prunus davidiana* Carr.) Vinegar.**  
Eun-Jung Yim\*, Hyeon-Jin Kang, Seung-Wha Jo, Eun-Bi Oh, Su-Yeon Gu, Kang-Yeol Yu, Do-Youn Jeong. Microbial Institute for Fermentation Industry
- P05-54 **A Study on quality of Cheddar Cheese using Lactic acid bacteria Isolate from Cheese Aging Cave in Imsil**  
Hee Young Choi\*, Eun Ha Park, Tae Jin Um, Il Hwan Seo, Joon Kwon, Aa Hyeon Kang, Su Bin Lim, Seok Geun Jeong. Imsil cheese & Food research institute
- P05-55 **Phytochemical Profiling and Cellular Antioxidant Activity of *L. reuteri* Fermented Brown Rice**

- Reveal it as a Potential Dietary Antioxidative and Stress-Reducing Target**  
 Nam-Hyeon Kim\*, Akanksha Tyagi, Su-Jung Yeon, Deog-Hwan Oh. Department of Food Science and Biotechnology, College of Agriculture and Life Sciences, Kangwon National University
- P05-56 **Manufacture of Functional Kombucha with Black Rice and Popped Rice using *Saccharomyces cerevisiae* and *Acetobacter aceti***  
 Su-Jin Son<sup>1\*</sup>, Yeong-Jun Kim<sup>1</sup>, Sam-Pin Lee<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Technology, Keimyung University, <sup>2</sup>The Center for Traditional Microorganism Resource, Keimyung University
- P05-57 **An new attempt to manufacture a distilled soju with enhanced ester aroma**  
 Mi Seong Kim\*, Chul Hyeon Beak, Je Young Shin, Ji Su Lee, Han-Seok Choi. Major of Agriculture & Fisheries Processing, Korea National University of Agriculture and Fisheries
- P05-58 **Quality Analysis, Ginsenosides and Fragrance Compounds Comparison of White Ginseng Vinegar, Red Ginseng Vinegar and Black Ginseng Vinegar**  
 Jong Hee Yoo\* Da Eun Lee, Da Eun Jeong, Tae Young Kim, Hyo Bin Oh. Institute of Jinan Red Ginseng
- P05-59 **전통장류 유래 신규 발효 종균 탐색과 건강지향형 장류 및 발효 단백질 소재 개발**  
 문세희\*, 배소희, 강현진, 차지은, 백지환. 광주대학교 식품영양학과
- P05-60 **간장박 유래 발효대두 단백질 소재 전처리공정 개발 연구**  
 강현진\*, 배소희, 문세희, 차지은, 백지환. 광주대학교 식품영양학과
- P05-61 **Metagenomic analysis on chicken from farm to market using 16S rRNA gene targeted sequencing**  
 Yeo Min Kim<sup>1\*</sup>, Jiwon Park<sup>1</sup>, Jeongyeon Yeom<sup>1</sup>, Dongryeoul Bae<sup>2</sup>, Sun Ae Kim<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Ewha Womans University, <sup>2</sup>Research Institute of Pharmaceutical Science, Gyeongsang National University
- P05-62 **A study on microbiological ecology in beef from production to distribution through 16S rRNA gene sequencing**  
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- P05-64 **Physiological Properties of *Momordica charantia* Extracts Fermented by *Leuconostoc* Strains**  
 Jiwoo Kim<sup>1\*</sup>, Heewon Moon<sup>1</sup>, Jiwon Yoon<sup>1</sup>, Young-Sun Kim<sup>2</sup>, Jae-Wan Park<sup>2</sup>, Inyong Kim<sup>3</sup>, Jung-Heun Ha<sup>1</sup>, Yoonhwa Jeong<sup>1</sup>, Misook Kim<sup>1</sup>. <sup>1</sup>Department of Food Science and Nutrition, Dankook University, <sup>2</sup>Jeju farm Agriculture Association Crop, Jeju, Korea, <sup>3</sup>Department of Food and Nutrition, Suncheon National University
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 Boyeon Park<sup>1,2\*</sup>, Sejin Kim<sup>1</sup>, Jaehyun Ahn<sup>1</sup>, Jaemin Seo<sup>2</sup>. <sup>1</sup>Corporate R&D Center, Bluebio Farm Co., Ltd., <sup>2</sup>Department of Food and Nutrition, Yeungnam University
- P05-70 **보리 및 귀리가공품의 수출 활성화를 위한 글로벌 인증 위생관리 체크리스트 개발**  
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<sup>2</sup>Food Microbiology Division, National Institute of Food and Drug Safety Evaluation, Ministry of Food and Drug Safety

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Yeon Ju Lee\*, Young Hoon Jung. School of Food Science and Biotechnology, Kyungpook National University
- P05-125 Selection of additives for browning and oxidase control of *Cheongsoo* wine**  
Ye Seul Kwon<sup>1,2\*</sup>, Young Mi Kim<sup>2</sup>, Ji Eun Kang<sup>2</sup>. <sup>1</sup>Major of Agriculture & Fisheries Processing, Korea National University of Agriculture and Fisheries, <sup>2</sup>Fermented & Processing Food Science Division, National Institute of Agricultural Sciences
- P05-126 Improving the detection of murine norovirus and hepatitis A virus in post-washing water containing humic acid, starch, and pectin**  
Zhaoqi Wang<sup>1\*</sup>, Soontag Jung<sup>1</sup>, Daseul Yeo<sup>1</sup>, Seoyoung Woo<sup>1</sup>, Yeeun Seo<sup>1</sup>, Md Iqbal Hossain<sup>1</sup>, Myeong-In Jeong<sup>2</sup>, Changsun Choi<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, College of Biotechnology and Natural Resources, Chung-Ang University, <sup>2</sup>National Institute of Agricultural Sciences
- P05-127 Immune-enhancing effects of *Pediococcus pentosaceus-Cirsium japonicum* var. *maackii* fermentation**  
Thi Hoa My Tran\*, Yeon-Ju Kim. Department of Biotechnology, College of Life Science, Kyung Hee University
- P05-128 Structural Insights on Novel Antibiofilm Mechanism of SAEW Combined Preheating Technology against Multi-resistant *Staphylococcus aureus* Biofilm**  
Pianpian Yan\*, Xiuqin Chen, Ramachandran Chelliah, Kyoung-Hee Jo, Akanksha Tyagi, Deog-Hwan Oh. Department of Food Science and Biotechnology, College of Agriculture and Life Sciences, Kangwon National University

## Nutrient Metabolism / Nutrition Physiology / Clinical Nutrition

- P06-01 Therapeutic Role of Time-Restricted Feeding on Obesity-driven Myelopoiesis**  
Yelim Kim, Munkyoung Pae\*. Department of Food and Nutrition, Chungbuk National University



- P06-02 **Effect of Probiotics Supplementations on Adverse Events of COVID-19 Vaccination: Safety Monitoring for Adverse Events Using Real-World Data**  
Myunghee Hong<sup>1,2,3\*</sup>, Chae Won Lee<sup>1,2,3</sup>, Ju Hee Kim<sup>1,2,3</sup>, Yohwan Lim<sup>1,2,3</sup>, Kanghyun Kim<sup>1,2,3</sup>, Myeong Hoon Lee<sup>1,2,3</sup>, Hyun Wook Han<sup>1,2,3</sup>. <sup>1</sup>Department of Biomedical Informatics, Graduate School of Medicine, CHA University, <sup>2</sup>Institute of Basic Medical Sciences, School of Medicine, CHA University, <sup>3</sup>Institute for Biomedical Informatics, School of Medicine, CHA University
- P06-03 **Inhibitory effect of 1,25-Dihydroxyvitamin D on Oxidative Stress in Tertiary Butyl-Hydrogen Peroxide-treated C2C12 Muscle Cells**  
Eugene Chang<sup>1\*</sup>, Ji-Young Choi<sup>2</sup>. <sup>1</sup>Department of Food and Nutrition, College of Life Sciences, Gangneung-Wonju National University, <sup>2</sup>Department of Food and Nutrition, College of Natural Science and Public Health and Safety, Chosun University
- P06-04 **Nutrition Solution for Muscle Health**  
Yanghoon Peter Jung\*, Hyunji Kim, Ermel Manuel, Sungwook Han. Human Nutrition and Health, CJ CheilJedang
- P06-05 **국민건강영양조사 (2008-2011) 자료를 활용하여 구조방정식 접근법을 이용한 한국 성인 여성의 골밀도에 미치는 결정 요인 분석 연구**  
제민경<sup>1\*</sup>, 김혜림<sup>1</sup>, 김윤아<sup>2</sup>. <sup>1</sup>경상국립대학교 식품영양학과, <sup>2</sup>경상국립대학교 식품영양학과/농업생명과학연구원
- P06-06 **Validation of Newly Developed Care Food in Older Adults with Swallowing Difficulty**  
Hyejin Han<sup>1,2\*</sup>, Yoon-Hee Park<sup>3</sup>, Yeseung Jeong<sup>1</sup>, Mi-Sook Choi<sup>1</sup>, Hee-Won Jung<sup>4</sup>, Yuri Kim<sup>1,2,3</sup>. <sup>1</sup>Department of Nutritional Science and Food Management, Ewha Womans University, <sup>2</sup>Department of Nutritional Science & Food management, Graduate Program in System Health Science & Engineering, Ewha Womans University, <sup>3</sup>Majors in Clinical Nutrition, Graduate School of Clinical & Public Health Convergence, Ewha Womans University, <sup>4</sup>Division of Geriatrics, Department of Internal Medicine, Asan Medical Center, University of Ulsan College of Medicine
- P06-07 **Changes in the effective ingredients of the ethanol extracts from *Taraxacum coreanum* Nakai with roasting process**  
Byung Ju Lee\*, Yu Su Shin, Chang Yeol Yang, Gwi Yeong Jang, Geum-Soog Kim, Su Ji Choi. Department of Herbal Crop Research, NIHHS, RDA
- P06-08 **Protective Effects of Flavone Luteolin on Obese Sarcopenia in Mice with High-fat Diet-induced Obesity**  
Ji-Won Kim<sup>1,2\*</sup>, Yiqi Pei<sup>1,2</sup>, Su-Kyung Shin<sup>1,2</sup>, Ji-Young Choi<sup>3</sup>, Eun-Young Kwon<sup>1,2</sup>. <sup>1</sup>Department of Food Sciences and Nutrition, Kyungpook National University, <sup>2</sup>Center for Food and Nutritional Genomics Research, Kyungpook National University, <sup>3</sup>Department of Food and Nutrition, Chosun University
- P06-09 **Effect of chicken breast protein supplementation on sarcopenia in aging mice**  
Ji-Yoon Lee<sup>1,2\*</sup>, Ji-Won Han<sup>1,2</sup>, Su-Kyung Shin<sup>1,2</sup>, Hae-Jin Park<sup>3</sup>, Jung-Bok Lee<sup>4</sup>, Eun-Young Kwon<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Nutrition, Kyungpook National University, <sup>2</sup>Center for Food and Nutritional Genomics Research, Kyungpook National University, <sup>3</sup>Bio Convergence Testing Center, Daegu Haany University, <sup>4</sup>Kyochoon F&B
- P06-10 **Effect of natural product A on Sarcopenia in aging mice**  
Ji-Won Han<sup>1\*</sup>, Ji-Yoon Lee<sup>1</sup>, Ji-Won Kim<sup>1</sup>, Su-Kyung Shin<sup>1</sup>, Ji-Young Choi<sup>2</sup>, Hae-Jin Park<sup>3</sup>, Eun-Young Kwon<sup>1</sup>. <sup>1</sup>Department of Food Science and Nutrition, Kyungpook National University, <sup>2</sup>Department of Food and Nutrition, Chosun University, <sup>3</sup>Department of Food and Nutrition, Daegu Haany University
- P06-11 **닭가슴살 분말이 텍사메타손 유도 근위축 마우스 모델에 미치는 영향**  
페이이치<sup>1,2\*</sup>, 이중복<sup>3</sup>, 박해진<sup>4</sup>, 권은영<sup>1,2</sup>. <sup>1</sup>경북대학교 생활과학대학 식품영양학과, <sup>2</sup>경북대학교 식품영양유전체연구센터, <sup>3</sup>교촌에프앤비(주), <sup>4</sup>대구한의대학교 바이오융복합시험센터
- P06-12 **셀러리씨가 텍사메타손 유도 근위축 모델에 미치는 영향**  
한징<sup>1,2\*</sup>, 권은영<sup>1,2</sup>. <sup>1</sup>경북대학교 생활과학대학 식품영양학과, <sup>2</sup>경북대학교 식품영양유전체연구센터
- P06-13 **N-acetylglucosamine(NAG) Supplementation Alleviates Inflammatory Responses through Maintaining Intestinal Membrane Integrity in a Murine Colitis Model**  
Sung-In Choi<sup>1\*</sup>, Mi-Kyung Sung<sup>1</sup>, Yong Chul Shin<sup>2</sup>, Joong Su Lee<sup>3</sup>. <sup>1</sup>Department of Food and Nutrition, Sookmyung Women's University, <sup>2</sup>Amicogen, Inc., <sup>3</sup>Amicogen, Inc. healthcare Laboratory
- P06-14 **Air Pollutant Accelerates Premature Skin Aging via Ceramide-1-Phosphate-Dependent Mechanism**  
Yerim Choi<sup>1,2\*</sup>, Bogyong Kim<sup>1,2</sup>, Jeongeun Kim<sup>1,2</sup>, Kyong-Oh Shin<sup>1,2,3</sup>, Yoshikazu Uchida<sup>1,2,3</sup>, Kyungho Park<sup>1,2,3</sup>. <sup>1</sup>Department of Food Science & Nutrition, Hallym University, <sup>2</sup>The Korean Institute of Nutrition, Hallym University, <sup>3</sup>LaSS Lipid Institute, LaSS Inc.
- P06-15 **C-peptide prevents Muscle Wasting in Dexamethasone-Induced Muscle Atrophy**  
Jin Joo Kim<sup>1\*</sup>, Eugene Chang<sup>2</sup>, Ji-Young Choi<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, College of Natural

Science and Public Health and Safety, Chosun University, <sup>2</sup>Department of Food and Nutrition, College of Life Sciences, Gangneung-Wonju National University

- P06-16 **Icariin attenuates nonalcoholic steatohepatitis (NASH) progression induced by methionine choline-deficient (MCD) diet in mice via suppressing ferroptosis**  
Jiwon Choi\*, Hyewon Choi, Jayong Chung. Department of Food and Nutrition, Kyung Hee University
- P06-17 **Beneficial effects of C-peptide on skeletal muscle regulation**  
Eunwon Choi<sup>1\*</sup>, Eugene Chang<sup>2</sup>, Ji-Young Choi<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Chosun University, <sup>2</sup>Department of Food and Nutrition, College of Life Sciences, Gangneung-Wonju National University
- P06-18 **Tanshinone 1 prevents high fat diet-induced obesity through activation of brown adipocytes and induction of browning in white adipocytes**  
Dae Young Jung<sup>1</sup>, Myeong Ho Jung\*. Division of Longevity and Biofunctional Medicine, School of Korean Medicine, Pusan National University
- P06-19 **Bioaccessibility of nutritional and functional ingredients from soymilk during *in vitro* digestion**  
Da-Bin Lee\*, Kyeong-A Jang, Su-Koung Lee, Han-Na Chu, Min-Sook Kang, Haeng-Ran Kim. Department of agrofood resources, National institute of agricultural sciences, RDA
- P06-20 **Bioaccessibility of nutritional and functional ingredients from legumes during *in vitro* digestion**  
Da-Bin Lee\*, Kyeong-A Jang, Su-Koung Lee, Han-Na Chu, Min-Sook Kang, Haeng-Ran Kim. Department of Agrofood Resources, National Institute of Agricultural Sciences, RDA
- P06-21 **Therapeutic potential of C-peptide on muscle atrophy in Streptozotocin-induced type 1 diabetes**  
Su Min Lee\*, Ji-Young Choi. Department of Food and Nutrition, Chosun University
- P06-22 **Anti-obesity Effect of Compounds obtained from *Crinum japonicum* Extract in 3T3-L1 Cells**  
Seon-A Yoon\*, Sung Chun Kim, Weon-Jong Yoon, Hyejin Hyeon, Yong-Hwan Jung, Young-Min Ham. Biodiversity Research Institute, Jeju Technopark
- P06-23 **Comparison of Dietary Patterns by Age in Different Metabolic Healthy Status of Korea Adults.**  
Hyeon-Jeong Kim\*, Soo-Yeon Cho, Gichang Kim, Hwan-Hee Jang. National Institute of Agricultural Sciences, Rural Development Administration
- P06-24 **Slow delivery of chlorogenic acid realization through a novel portable syringe-pump enhanced its anti-inflammatory effect**  
Lei Cao<sup>1\*</sup>, Won Han<sup>1</sup>, Sanggil Lee<sup>2,3</sup>, Joong Ho Shin<sup>1,4</sup>. <sup>1</sup>Biomedical Engineering Department, Pukyong National University, <sup>2</sup>Food Science and Nutrition Department, Pukyong National University, <sup>3</sup>Department of Smart Green Technology Engineering, Pukyong National University, <sup>4</sup>Industry 4.0 Convergence Bionics Engineering, Pukyong National University
- P06-25 **Sex Differences in Diet-induced Obesity: Identification of Hub Genes in association with Phenotypes**  
Yu-Gyeong Lee\*, Ji-In Yoon, Mi-Kyung Sung. Sookmyung Women's University
- P06-26 **The Effect of Chicken Breast Diet on Nutritional status, Muscle Strength and Physical Performance in Vulnerable Older Adults in South Korea**  
Ju-Hee Nho<sup>1</sup>, Eun-Jin Kim<sup>1</sup>, Yi-Hyung Chung<sup>2</sup>, Hee-Jeong Kim<sup>2</sup>, Jae-Hun Yang<sup>2\*</sup>, Eun Kyung Hwang<sup>3</sup>, Hyeon Ji Kim<sup>3</sup>. <sup>1</sup>College of Nursing, Jeonbuk National University, <sup>2</sup>Jeonbuk Institute for Food-Bioindustry, <sup>3</sup>Farmjoa
- P06-27  **$\alpha$ -Glucosidase Inhibitory Effect of *Ulmus davidiana* Planch**  
Ha-Na Kim\*, Jung-In Kim. Institute of Digital Anti-aging Healthcare, Inje University
- P06-28 **Pectolarigenin induced cell death via lipid peroxidation in Gastric Cancer**  
Ju Hong Lee\*, Ho Jeong Lee, Jeong Doo Heo. Gyeongnam Bio-Health Research Support Center, Gyeongnam Branch Institute, Korea Institute of Toxicology
- P06-29 **Comparison of health behavior and prevalence rate of chronic disease by employment types**  
Huijung Choi, Byungyong Ahn\*. Department of Food Science and Nutrition, University of Ulsan
- P06-30 **Curcumin이 RBL-2H3 cell에서 matrix metalloproteinases(MMPs) 억제에 의한 알레르기 반응 조절 효과**  
최수진<sup>1\*</sup>, 정수민<sup>1</sup>, 송승민<sup>2</sup>, 정가영<sup>1</sup>, 김우경<sup>1</sup>. <sup>1</sup>단국대학교 과학기술대학 식품영양학과, <sup>2</sup>이화여자대학교 신산업융합대학 식품영양학과
- P06-31 **Effect of Maternal Omega-3 Diet in Pregnancy on ADHD-related Behaviors of Rat Offspring**  
Jeongwon Park\*, Gyu-Mi An, So-Young Park, Sohyun In, Kyoung-Sik Han. Department of Food Science and Biotechnology, Sahmyook University
- P06-32 **Tryptophan Metabolites and the Gut Microbiota Associated with Human Metabolic Health in Korean Adults**  
Hwayoung Noh<sup>1,2\*</sup>, Hwan-Hee Jang<sup>3</sup>, Gichang Kim<sup>3</sup>, Jeongseon Kim<sup>4</sup>, Augustin Scalbert<sup>2</sup>, Heinz Freisling<sup>2</sup>, Pekka Keski-Rahkonen<sup>2</sup>, Marc Gunter<sup>2</sup>. <sup>1</sup>Department of Cancer Prevention and Environment, INSERM U1296, Léon Bérard Cancer Center, France, <sup>2</sup>Nutrition and Metabolism Branch, International Agency for

Research on Cancer (IARC-WHO), France, <sup>3</sup>National Institute of Agricultural Sciences, Rural Development Administration, Korea, <sup>4</sup>Cancer Epidemiology Branch, National Cancer Center, Korea

- P06-33 **Physical Properties of Soybean meal fermented extracts**  
Boyeon Park<sup>1,2\*</sup>, Sejin Kim<sup>1</sup>, Jaehyun Ahn<sup>1</sup>. <sup>1</sup>Corporate R&D Center, Bluebio Farm Co., Ltd., <sup>2</sup>Department of Food and Nutrition, Yeungnam University
- P06-34 **Lipidomic analysis of liver tissues in mice with non-alcoholic steatohepatitis (NASH) and modulating effects of coenzyme Q and selenium (CoQ+Se) mixture supplementation.**  
Seung-A Sohn\*, Hyewon Choi, Sujin Gwon, Jayong Chung. Department of Food and Nutrition, Kyung Hee University
- P06-35 **The effects of time-restricted feeding (TRF) on glucose tolerance and skeletal muscle mass and function in sarcopenic obese mice**  
Sujin Gwon\*, Jayong Chung. Department of Food and Nutrition, Kyung Hee University
- P06-36 **Analysis of components and Structural form of *Ishige okamurae* Yendo according to the Harvesting Area and Time**  
Hyeonjoeng Moon\*, Min-Ju Kim, Ramakrishna Chilakala, Kangho Ko, Jinsol Ra, Seongheon Jeong, Yeji Cheon, Sun Hee Cheong. Department of Marine Bio Food Science, College of Fisheries and Ocean Science, Chonnam National University
- P06-37 **지역사회 돌봄대상 노인의 만성질환 영양상담 효과**  
최윤정<sup>1\*</sup>, 이지현<sup>2</sup>, 박유경<sup>3</sup>. <sup>1</sup>경희대학교 동서의학대학원 의학영양학과 고령서비스-테크 융합전공, <sup>2</sup>용인시 수지노인복지관, <sup>3</sup>경희대학교 동서의학대학원 의학영양학과
- P06-38 **2-Amino-1-methyl-6-phenylimidazo[4,5-b]pyridine triggers activation of colonic oxidative phosphorylation in male C57BL/6N mice**  
Jeong Hoon Pan<sup>1\*</sup>, Dahye Kim<sup>2</sup>, Da Seul Lee<sup>3</sup>, Jae Kyeom Kim<sup>4</sup>. <sup>1</sup>Department of Food and Nutrition, Chosun University, <sup>2</sup>Animal Genomics and Bioinformatics Division, National Institute of Animal Science, Rural Development Administration, <sup>3</sup>Agricultural Microbiology Division, National Institute of Agricultural Sciences, Rural Development Administration, <sup>4</sup>Department of Behavioral Health and Nutrition, University of Delaware, USA
- P06-39 **Comprehensive Omics Analysis Underlying Therapeutic Mechanisms of D-allulose for Obesity and T2 Diabetes**  
Heekyong R. Bae<sup>1\*</sup>, Youngji Han<sup>1,2</sup>, Su-Kyung Shin<sup>1,2</sup>, Eun-Young Kwon<sup>1,2</sup>. <sup>1</sup>Center for Food and Nutritional Genomics Research, Kyungpook National University, <sup>2</sup>Department of Food Science and Nutrition, Kyungpook National University
- P06-40 **Dietary Pattern and Genetic Risk Score Interaction of Pre-Chronic Kidney Disease (CKD) among Korean Adults**  
Min-Jae Jang<sup>1\*</sup>, Li-Juan Tan<sup>2</sup>, Sangah Shin<sup>2</sup>, Jun-Mo Kim<sup>1</sup>. <sup>1</sup>Department of Animal Science and Technology, Chung-Ang University, <sup>2</sup>Department of Food and Nutrition, Chung-Ang University
- P06-41 **Co-supplementation of coenzyme Q and selenium ameliorates the hepatic ferroptosis and the development of nonalcoholic fatty liver disease (NAFLD) in mice**  
Hyewon Choi\*, Jiwon Choi, Jayong Chung. Department of Food and Nutrition, Kyung Hee University
- P06-42 **한국 성인의 식이패턴과 혈중 납, 카드뮴에 따른 신질환의 상관성 연구 - 2016년 국민건강영양조사를 바탕으로**  
황효정<sup>1\*</sup>, 안수린<sup>2</sup>, 조은채<sup>3</sup>, 이유진<sup>2</sup>, 박수진<sup>2</sup>, 최연정<sup>1</sup>, 신경옥<sup>1</sup>, 정태환<sup>1</sup>. <sup>1</sup>삼육대학교 식품영양학과, <sup>2</sup>삼육대학교 식품생명산업학과, <sup>3</sup>삼육대학교 융합과학과
- P06-43 **Improvement Effect of Meroterpenoid-rich Fraction from the Ethanolic Extract of *Sargassum macrocarpum* (MES) on Atopic Dermatitis in DNCB-induced HR-1 mice and HaCaT cells**  
Myeong-Jin Kim\*, Bonggi Lee. Department of Food Science and Nutrition, Pukyong National University
- P06-44 **The Effects of Neogaro-oligosaccharides(NAOs) on Body Weight and Body Fat: A Randomized, Double-Blind, Placebo-Controlled Clinical Trial**  
Yu-Kyung Park<sup>1\*</sup>, Ki-Chan Ha<sup>1</sup>, Eun Joo Kim<sup>2</sup>, Je Hyeon Lee<sup>2</sup>, Jong Cheon Joo<sup>3</sup>. <sup>1</sup>Healthcare Claims & Management Inc., <sup>2</sup>Dyne Bio Inc., <sup>3</sup>Department of Sasang Constitutional Medicine, College of Korean Medicine, Wonkwang University
- P06-45 **Effect of adipose tissue-derived exosomes on the activities of NK cells and CD8 T cells against Panc02 cells**  
Inae Jeong\*, Juhwan Lee, Ok-Kyung Kim. Department of Food and Nutrition, Chonnam National University
- P06-46 **Immune-enhancing Effects of Parabiotics Produced from *Bacillus* sp. in RAW264.7 Macrophages and Splenocytes**  
Hyo-Jun Lee\*, Ha-Minh Le, Elsa Easter Justine, Thi Hoa My Tran, Yeon-Ju Kim. Graduate School of Biotechnology, College of Life Science, Kyung Hee University

## Nutritional Diet and Nutrition Survey

- P07-01 **Dietary niacin intake and risk of dyslipidemia: a pooled analysis of three prospective cohort studies**  
Chaehyun Kim\*, Kyong Park. Department of Food and Nutrition, Yeungnam University
- P07-02 **Sugar-sweetened coffee intake and blood glucose management in Korean patients with type 2 diabetes**  
Hyeonji Yoo\*, Kyong Park. Department of Food and Nutrition, Yeungnam University
- P07-03 **Changes in the health-related quality of life of critically ill patients before and during the COVID-19 pandemic in Korea**  
Yeeun Park\*, Kyong Park. Department of Food and Nutrition, Yeungnam University
- P07-04 **Healthy Eating Index is Associated with Relative Handgrip Strength among the Elderly in Korean**  
Yun-Jung Bae\*, Ye-Eun Yoon, Yujin Song, Min Ju Jo. Division of Food Science and Biotechnology, Korea National University of Transportation
- P07-05 **한국인 중장년층의 탄수화물 섭취 수준에 따른 심혈관질환 위험과의 관계**  
조운희\*, 박경. 영남대학교 식품영양학과
- P07-06 **Immunity Development in *Streptococcus parauberis* Infected Zebrafish Model by using *Sargassum horneri* as a Prebiotic Dietary Supplement**  
Rajasinghe Peli Gedara Sewwandi Kaushalya Amarasiri\*, Nisansala Madushani Liyanage, Dineth Pramuditha Nagahawatta, Hyu-Geon Lee, Sang-Woon Lee, Mihidukulasuriya Jude Michael Shehan Kurera, You-Jin Jeon. Jeju National University
- P07-07 **Content validity evaluation of items for the development of tools to evaluate the quality of adolescent diet**  
Jieun Oh<sup>1\*</sup>, Ji Soo Oh<sup>2</sup>, Ji-Yun Hwang<sup>3</sup>, Young-Suk Lim<sup>4</sup>, Hye-Young Kim(A)<sup>2</sup>. <sup>1</sup>College of Science and Industry Convergence, Ewha Womans University, <sup>2</sup>Food and Nutrition, Yongin University, <sup>3</sup>Major of Foodservice Management and Nutrition, Sangmyung University, <sup>4</sup>Food and Nutrition, Myongji University
- P07-08 **수도권 거주 다문화가정 자녀의 행동평가에 영향을 미치는 환경적 요소 탐색**  
육성민<sup>1\*</sup>, 황지윤<sup>2</sup>. <sup>1</sup>상명대학교 일반대학원 외식영양학과, <sup>2</sup>상명대학교 식품영양학전공
- P07-09 **노인식단의 평가 도구 개발을 위한 후보 문항의 내용타당도 평가**  
임영숙<sup>1\*</sup>, 오지수<sup>2</sup>, 황지윤<sup>3</sup>, 오지은<sup>4</sup>, 김혜영(a)<sup>5</sup>. <sup>1</sup>명지대학교 식품영양학과, <sup>2</sup>용인대학교 식품영양학과, <sup>3</sup>상명대학교 식품영양학전공, <sup>4</sup>이화여자대학교 신산업융합대학, <sup>5</sup>용인대학교 식품영양학과
- P07-10 **Low sodium diet digital cookbook for hypertensive patients**  
Yu Jin Lim<sup>1\*</sup>, Eun Hye Lee<sup>2</sup>, Hyunjin Park<sup>1</sup>, Hyun-Sook Kim<sup>3</sup>, Yong-Jae Kim<sup>2</sup>. <sup>1</sup>Amazing Food Solution, Inc., <sup>2</sup>Department of Neurology, Catholic University of Korea Eunpyeong St. Mary's Hospital, <sup>3</sup>Department of Food and Nutrition, Sookmyung Women's University
- P07-11 **Association between Korean Traditional Fermented Vegetables (Kimchi) Intake and Weight Loss**  
Li-Juan Tan<sup>1\*</sup>, Jiwon Jeong<sup>1</sup>, Seok-Jae Oh<sup>1</sup>, Jun-Mo Kim<sup>2</sup>, Sangah Shin<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Chung-Ang University, <sup>2</sup>Department of Animal Science and Technology, Chung-Ang University
- P07-12 **The association between dietary patterns, incident chronic kidney disease and kidney function decline among middle-aged Korean: The cohort study**  
Jialei Fu\*, Khongorzul Ganbat, Noviana Astuti Irna Sakir, Sangah Shin. Department of Food and Nutrition, Chung-Ang University
- P07-13 **Association Between Mushroom intake and Risk of All-Cause and Cause-Specific Mortality: Using Korean Genome and Epidemiology Study (KoGES) Cohort**  
Hyein Jung\*, Su Bin Hwang, Hyeon Ju Park, Sangah Shin. Department of Food and Nutrition, Chung-Ang University
- P07-14 **Association of Hypertension with Noodle Consumption among Korean Adults: using The Health Examinees (HEXA) Study**  
Suji Choi, Jungmin Park\*, Nasan-Ulzii Bayarmaa, Sangah Shin. Department of Food and Nutrition, Chung-Ang University
- P07-15 **The folic acid and vitamin C content of Korea's domestic foods according to the processing method**  
Jong-Kug Lee<sup>1\*</sup>, Jeong Lee<sup>1</sup>, Yoon-Jeong Cho<sup>1</sup>, Jung-Il Ju<sup>1</sup>, Jin-Ju Park<sup>2</sup>. <sup>1</sup>Chungcheongnam-do Agricultural Research and Extension Services, <sup>2</sup>Institute of Agricultural Science, Rural Development Administration
- P07-16 **Associations among Psychosocial Stress, Eating Behavior, and Abdominal Obesity in Korean Adults: A Community-based Prospective Cohort Study**

Junhwi Moon\*, Minji Kim, Yangha Kim. Graduate Program in System Health Science and Engineering, Department of Nutritional Science and Food Management, Ewha Womans University

- P07-17 **고추 유전자원의 ASTA 값 변이 분석**  
이수경, 노나영, 황애진, 허은숙, 이윤정, 김성훈, 김빛샘, 우희중, 한범수, 고호철\*. 국립농업과학원 농업유전자원센터
- P07-18 **고추 유전자원의 매운맛 함량 변이**  
고호철\*, 이수경, 노나영, 황애진, 허은숙, 김빛샘, 한범수, 우희중, 이윤정, 김성훈. 국립농업과학원 농업유전자원센터
- P07-19 **고추 유전자원의 비타민 C 함량 변이**  
노나영, 이수경, 허은숙, 한범수, 우희중, 윤문섭, 고호철\*. 국립농업과학원 농업유전자원센터
- P07-20 **Investigation on health benefit of fermented wheat bran by lactic acid bacteria**  
Kwon Park<sup>1,2\*</sup>, Yang Soo Byeon<sup>1</sup>, Sang Dong Lim<sup>1</sup>, Young Soo Kim<sup>2</sup>, Sang Sook Kim<sup>1</sup>. <sup>1</sup>Research Group of Food Processing, Korea Food Research Institute, <sup>2</sup>Food Science and Technology, Jeonbuk National University
- P07-21 **당뇨관리식 두유를 이용한 임상시험에 관한 연구**  
신경옥\*, 황효정<sup>1</sup>, 정태환<sup>1</sup>, 박순희<sup>2</sup>, 안수린<sup>3</sup>, 박선영<sup>3</sup>, 전광진<sup>4</sup>, 송중화<sup>4</sup>, 문대균<sup>4</sup>. <sup>1</sup>삼육대학교 식품영양학과, <sup>2</sup>삼육서울병원, <sup>3</sup>삼육대학교 식품생명산업학과, <sup>4</sup>삼육식품
- P07-22 **서울지역에 거주하는 고등학생들의 카페인 함유 음료에 대한 인식도 조사**  
신경옥\*, 황효정<sup>1</sup>, 최연정<sup>1</sup>, 조은채<sup>2</sup>, 박수진<sup>3</sup>, 이유진<sup>3</sup>, 주영은<sup>1</sup>, 이연우<sup>1</sup>. <sup>1</sup>삼육대학교 식품영양학과, <sup>2</sup>삼육대학교 융합과학과, <sup>3</sup>삼육대학교 식품생명산업학과
- P07-23 **어린이와 청소년의 가공식품 섭취 행태 이해를 위한 질적 연구: 프로브를 활용하여**  
장은진<sup>1,2\*</sup>, 고은지<sup>1,2</sup>, 김지영<sup>3</sup>, 권성희<sup>3</sup>, 박소현<sup>1,2</sup>. <sup>1</sup>한림대학교 식품영양학과, <sup>2</sup>한국영양연구소, <sup>3</sup>식품안전정보원
- P07-24 **주간보호센터 이용자의 영양 상태 개선과 노쇠예방을 위한 건강증진 프로그램 개발**  
심지원<sup>1,2\*</sup>, 신동수<sup>3</sup>, 박소현<sup>1,2</sup>. <sup>1</sup>한림대학교 식품영양학과, <sup>2</sup>한국영양연구소, <sup>3</sup>한림대학교 간호대학 간호학연구소
- P07-25 **제주지역 성인의 비만관련 생활습관 요인: 지역사회건강조사 자료를 활용하여**  
함현지\*, 김수민, 고한빈, 하경호. 제주대학교 식품영양학과
- P07-26 **Analysis of Sodium Intake in Korean Children Aged 3-5 Years during the COVID-19 Pandemic: Based on the Korea National Health and Nutrition Examination Survey (KNHANES), 2019-2020**  
Min Gyeong Jo\*, Na-Hui Kim, Buyoung Jo, Heeyeon Joo, Jeong Sun Ahn, Kwang Il Kwon, Jung Ho Choi, Kyu Heon Kim, Hye Young Lee. National Institute of Food and Drug Safety Evaluation
- P07-27 **Chemical composition and Antioxidant activities of *Colpomenia sinuosa* and their extract**  
Kangho Ko\*, Min-Ju Kim, Ramakrishna Chilakala, Hyeonjoeng Moon, Jinsol Ra, Seongheon Jeong, Yeji Cheon, Sun Hee Cheong. Department of Marine Bio Food Science, College of Fisheries and Ocean Science, Chonnam National University
- P07-28 **The perception of healthy eating and consumption behavior regarding convenience foods for the development of healthy convenience foods—Focus Group Interviews between 10s and 50s years old**  
Jimin Lim<sup>1\*</sup>, Suah Moon<sup>1</sup>, Gaeun Yeo<sup>1</sup>, Mi-Sook Cho<sup>1</sup>, Yuri Kim<sup>1</sup>, Jieun Oh<sup>2</sup>. <sup>1</sup>Department of Nutritional Science and Food Management, Ewha Womans University, Republic of Korea, <sup>2</sup>College of Science and Industry Convergence, Ewha Womans University
- P07-29 **양파분말 처리 수준별 먹이원 급이 흰점박이꽃무지 유충 생육 변화 비교**  
장다현\*, 김정윤, 박찬욱, 배성문, 유병만, 정경희, 김종원, 이슬비, 이영한, 김영광. 경상남도농업기술원 유용곤충연구소
- P07-30 **장내미생물 활용한 먹이원 급이에 따른 흰점박이꽃무지 유충 생육특성 비교**  
장다현\*, 김정윤, 박찬욱, 배성문, 유병만, 정경희, 김종원, 이슬비, 이영한, 김영광. 경상남도농업기술원 유용곤충연구소
- P07-31 **Analysis of ergothioneine content in fruiting bodies of domestic sawdust-cultivated *Lentinula edodes* cultivars**  
Min-Jun Kim\*, Yeun Sug Jeong, Eunjin Kim, Yeongseon Jang, Kang-Hyeon Ka. Forest Microbiology Division, Department of Forest Bio-resources, National Institute of Forest Science
- P07-32 **Seaweed intake modulates the association between *VIPR2* gene variants and the incidence of metabolic syndrome in Korean adults**  
Haeun Park<sup>1</sup>, Kyung Won Lee<sup>2</sup>, Dayeon Shin<sup>1\*</sup>. <sup>1</sup>Department of Food and Nutrition, Inha University, <sup>2</sup>Department of Home Economics Education, Korea National University of Education
- P07-33 **Evaluation of Nutritional Status of Vitamins and Minerals according to Dietary Supplements Consumption in Korean Adults: Based on the Korean National Health and Nutrition Examination Survey 2018-2020**  
Moon Yeong Hwang<sup>1\*</sup>, You Jin Yang<sup>1</sup>, Sang Gyeong Lee<sup>1</sup>, Ji Youn Hong<sup>1,2</sup>, Young Jun Kim<sup>1,2,3</sup>. <sup>1</sup>Department of Food and Regulatory Science, Korea University, <sup>2</sup>Department of Food and Biotechnology, Korea

University, <sup>3</sup>BK21 FOUR Research Education Team for Omics-based Bio-health on Food Industry, Korea University

- P07-34 **Interaction between *TAS2R4* rs2233998 Polymorphism and Dietary Intake on the Incidence of Type 2 Diabetes in Middle-Aged and Older Korean Adults**  
Kyung Won Lee<sup>1\*</sup>, Dayeon Shin<sup>2</sup>. <sup>1</sup>Department of Home Economics Education, Korea National University of Education, <sup>2</sup>Department of Food and Nutrition, Inha University
- P07-35 **A study on the correlation between food-related media use and dietary behavior of elementary school students and parents**  
Seo-Jeong Yim<sup>1</sup>, Seoyoung Choi<sup>1\*</sup>, Jieun Oh<sup>2</sup>. <sup>1</sup>Department of Nutritional Science and Food Management, Ewha Womans University, <sup>2</sup>College of Science and Industry Convergence, Ewha Womans University
- P07-36 **Iodine intake from seaweed and thyroid hormones**  
Se-A Lee<sup>1,2\*</sup>, Ah Jin Jung<sup>2</sup>, Jihee Choi<sup>1,2</sup>, Hae-Jeong Lee<sup>1,2</sup>. <sup>1</sup>Department of Food and Nutrition, College of BioNano Technology, Gachon University, <sup>2</sup>Institute for Aging and Clinical Nutrition Research, Gachon university
- P07-37 **Micro-nutrients (vitamin A, vitamin C, calcium, and iron) intake through dietary supplements and foods: Based on the Korea National Health and Nutrition Examination Survey (KNHANES), 2019-2020.**  
Heeyeon Joo\*, Na-Hui Kim, Buyoung Jo, Min Gyeong Jo, Jeong Sun Ahn, Kwang Il Kwon, Jung Ho Choi, Kyu Heon Kim, Hye Young Lee. Nutrition and Functional Food Research Division, National Institute of Food and Drug Safety Evaluation
- P07-38 **Evaluation of the Nutritional Intake Level of the Elderly Receiving the Meals-on-Wheels Service at Some General Welfare Centers in Seoul**  
Chaewon Park<sup>1\*</sup>, Yeonjin Park<sup>1</sup>, Junghyun Kim<sup>2</sup>, Hyeja Chang<sup>1</sup>. <sup>1</sup>Department of Food Science and Nutrition, Dankook University, <sup>2</sup>Seoul Welfare Foundation
- P07-39 **한국형 건강기능식품 섭취 실태조사를 통한 한국 성인의 건강기능식품으로부터의 영양·기능성분 섭취량 추정**  
육성민<sup>1\*</sup>, 김정현<sup>2</sup>, 이형준<sup>3</sup>, 이희석<sup>4</sup>, 고광석<sup>5</sup>, 황지윤<sup>6</sup>. <sup>1</sup>상명대학교 일반대학원 외식영양학과, <sup>2</sup>중앙대학교 체육교육과, <sup>3</sup>이화여자대학교 컴퓨터공학과, <sup>4</sup>중앙대학교 식품공학과, <sup>5</sup>이화여자대학교 식품영양학과, <sup>6</sup>상명대학교 식품영양학전공
- P07-40 **Dietary Patterns Derived by Reduced Rank Regression Are Associated with Lipid Disorders in Korean Men and Women**  
Hyun Ah Kim\*, SuJin Song. Department of Food and Nutrition, Hannam University
- P07-41 **Limits and the solutions for 2020 KDRI for zinc**  
Jae-Hee Kwon<sup>1\*</sup>, Young-Eun Cho<sup>1</sup>, Mi-Kyung Lee<sup>2</sup>, In-Sook Kwun<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, College of Life Science, Andong National University, <sup>2</sup>Department of Food and Nutrition, Suncheon National University
- P07-42 **Comparison of nutrient intakes among Koreans by the consumption of fish and shellfish**  
Young Hee Suk\*, Sunny Ham. Dept. of Food & Nutrition, Yonsei University

## Food Functionality / Biological Activity

- P08-01 **Silk Peptide Improves Sarcopenia in 22-26-month-old C57BL/6 mice**  
Hyun-Ji Oh\*, Heegu Jin, Hyein Han, Boo-Yong Lee. Department of Food Science and Biotechnology, CHA University
- P08-02 **Neuroprotective effects of mushroom *Lentinula edodes* extracts with antioxidants on oxidative-stress-induced PC-12 cells.**  
Hye-Young Cho\*, Dae-Ok Kim. Department of Food Science and Biotechnology, Kyung Hee University
- P08-03 **Development of Gel Formulation with Increased Permeability using *Angelica gigas* Nakai Extract**  
Yu Lim Song<sup>1\*</sup>, Su In Kim<sup>1</sup>, Hyun Jin Kim<sup>2</sup>, Kang Min Kim<sup>1</sup>. <sup>1</sup>Department of Pharmaceutical Science and Technology, Kyungsung University, <sup>2</sup>Naturetech Co. Ltd.
- P08-04 **Cytoprotective effect of polysaccharides extracted from *Cudrania tricuspidata* against chemotherapeutic agents (cisplatin)-induced cell death in macrophages**  
Eui-Baek Byun<sup>1\*</sup>, Ha-Yeon Song<sup>1</sup>, Jeong Moo Han<sup>1,2</sup>, Eui-Hong Byun<sup>3</sup>. <sup>1</sup>Advanced Radiation Technology Institute, Korea Atomic Energy Research Institute, <sup>2</sup>Department of Biotechnology, Korea University, <sup>3</sup>Department of Food Science and Technology, Kongju National University
- P08-05 **A Randomized, Double-Blind, and Placebo-Controlled Clinical Trial to Evaluate the Efficacy and Safety of *Eckloniastolonifera* Extract for Improvement of Hepatic Function**



Eun Jin Kim\*, Junghee Kim, Dahye Kang, Changhee Kim, Jongwook Kim. R&D Center, Naturalway Co. Ltd.

**P08-06 Effects of *Codium fragile* on Lipid Parameters and Obesity in C57Bl/6J Mice Fed a High-Fat Diet**

Jeong Woo Park\*, Hyun Hee Kim, Ji Yun Lee, Jeong Yeon Yu, Seung Jin Kim, So Young Jang, Hyeon Hui Shin, Bo Mi Kim, Dong Wook Shin, Dae-Hee Lee. Department of Wellness Bio Industry, Gangneung-Wonju National University

**P08-07 The immunological roles of extracellular vesicles derived from *Petasites japonicus*, in the maturation and activation of dendritic cell**

Eui-Baek Byun<sup>1\*</sup>, Jeong Moo Han<sup>1,2</sup>, Ho Seong Seo<sup>1</sup>, Ha-Yeon Song<sup>1</sup>. <sup>1</sup>Advanced Radiation Technology Institute, Korea Atomic Energy Research Institute, <sup>2</sup>Department of Biotechnology, Korea University

**P08-08 Immunostimulatory effects of an aqueous extract of Chopi(*Zanthoxylum piperitum*) on a mouse macrophage cell line and peritoneal macrophages**

Hyungsik Jeon<sup>1\*</sup>, So Yeon Oh<sup>1</sup>, Sooyeong Seo<sup>2</sup>, Eunjoo Kum<sup>2</sup>, Giok Kim<sup>1</sup>. <sup>1</sup>Biodiversity Research Institute, Jeju Technopark, <sup>2</sup>Yuyu healthcare Inc.

**P08-09 Exposure to Fine Particulate Matter(PM<sub>2.5</sub>) induces Inflammation, Mucus Secretion, and Cytotoxicity in Human Nasal, Bronchial and Lung Epithelial cell**

Min Young Kim\*, Jung In Kim, Sang Woo Kim, Sungup Kim, Eunyoung Oh, Jeongeun Lee, Eunsoo Lee, Myoung Hee Lee. Department of Southern Area Crop Science, National Institute of Crop Science, Rural Development Administration

**P08-10 Changes in Antioxidant Compound and Activities of Perilla Seed, flower and Leaf (*Perilla frutescens*) according to Extraction Method and Solvent.**

Min Young Kim\*, Jung In Kim, Sang Woo Kim, Sungup Kim, Eunyoung Oh, Jeongeun Lee, Eunsoo Lee, Myoung Hee Lee. Department of Southern Area Crop Science, National Institute of Crop Science, Rural Development Administration

**P08-11 Protein rich-extract of *Oxya chinensis sinuosa* induced Th1-mediated anti-tumor immunity in bone marrow-derived dendritic cells and CT26 tumor-bearing mice**

Ha-Yeon Song<sup>1\*</sup>, Jeong Moo Han<sup>1</sup>, Eui-Baek Byun<sup>1</sup>, Woo Sik Kim<sup>2</sup>. <sup>1</sup>Advanced Radiation Technology Institute, Korea Atomic Energy Research Institute, <sup>2</sup>Functional Biomaterial Research Center, Korea Research Institute of Bioscience and Biotechnology

**P08-12 The immunostimulatory effects of polysaccharides from black radish against cyclophosphamide-induced Rat**

Hyungsik Jeon<sup>1</sup>, So Yeon Oh<sup>1</sup>, Sooyeong Seo<sup>2</sup>, Eunjoo Kum<sup>2</sup>, Giok Kim<sup>1\*</sup>. <sup>1</sup>Biodiversity Research Institute, Jeju Technopark, <sup>2</sup>Yuyu healthcare Inc.

**P08-13 A Study on Antioxidant Content of Edible Flower tea Cultivated in Northern Gyeonggi Province**  
Jin-Ok Ha\*, Hae-Geun Hong, Yeon-Ok Kwon, Yu-Na Song, Hyeon-Ji Kim, Myeong-Jin Son, Jeong-Hwa Park, Yong-Bae Park. Food Analysis Team in North Branch, Gyeonggi Province Institute of Health and Environment

**P08-14 Effects of *Morus alba L.* and *Angelica keiskei* on Dexamethasone-induced Skeletal Muscle Atrophy through Muscle Protein Metabolism**

Hyun Hwangbo<sup>1,2\*</sup>, Seon Yeong Ji<sup>1,2</sup>, Min Yeong Kim<sup>1,2</sup>, Jae Hyun Yoon<sup>3</sup>, Seong Un Jeong<sup>3</sup>, Tae Hee Kim<sup>3</sup>, Yung Hyun Choi<sup>1,2</sup>. <sup>1</sup>Department of Biochemistry, Dong-eui University College of Korean Medicine, <sup>2</sup>Anti-Aging Research Center, Dong-eui University, <sup>3</sup>Hamsopharm Central Research

**P08-15 Anti-thrombosis, Anti-oxidant and Anti-diabetes activities of Walnut leaves**

Yun-Jin Lee<sup>1\*</sup>, Deok-Gyeong Kang<sup>1</sup>, Ji-Min Kim<sup>1</sup>, Yong-Jun Kim<sup>2</sup>, Ho-Yong Sohn<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Toomaru Co. LTD.

**P08-16 Effect of Heat treatment and Pressed temperature on Bio-activities of Walnut Pressed Cake**

Yun-Jin Lee<sup>1\*</sup>, Deok-Gyeong Kang<sup>1</sup>, Ji-Min Kim<sup>1</sup>, Yong-Jun Kim<sup>2</sup>, Ho-Yong Sohn<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Toomaru Co. LTD.

**P08-17 Immune-enhancing Effects of the Hot Water Extract from *Allium cepa L.* Skins in RAW 264.7 Cells**

Sung Hyen Lee\*, Ji Su Kim, Jieun Jung, Ju-Hui Kim, Un Yul Jeong, Hwan-Hee Jang, Gi-Chang Kim, Shin-Young Park. National Institute of Agricultural Sciences, Rural Development Administration

**P08-18 The Antioxidant Property and Cell Viability of Corn Poppy (*Papaver rhoeas L.*) Extracted with Natural Deep Eutectic Solvent (NADES)**

Jinhan Kim\*, Bong Jun Yoon, Ji Hyeon Kim, Kiwon Lee. Research and Development Center, Korea Analysis Test Researcher

**P08-19 The antioxidant and photoprotective effects of *Ishige okamurae* Celluclast extract**

Fengqi Yang<sup>1,2\*</sup>, Young-Sang Kim<sup>1,2</sup>, D. P. Nagahawatta<sup>1,2</sup>, Jun-Ho Heo<sup>1,2</sup>, You-Jin Jeon<sup>1,2</sup>. <sup>1</sup>Department

- of Marine Life Science, Jeju National University, <sup>2</sup>Marine Science Institute, Jeju National University
- P08-20 **The Potential Neuroprotective Effects of Extracts from Oat seedlings against Alzheimer's Disease**  
Woo Duck Seo<sup>1\*</sup>, Hyun Young Kim<sup>1</sup>, Seung Yeob Song<sup>1</sup>, Mi Ja Lee<sup>1</sup>, Eun Ho Kim<sup>2</sup>. <sup>1</sup>3Division of Crop Foundation, National Institute of Crop Science, Rural Development Administration, <sup>2</sup>Department of Biochemistry, School of Medicine, Daegu Catholic University
- P08-21 **HM-chromanone Alleviates Inflammation and Hyperglycemia in Mice with Endotoxin-induced Insulin Resistance**  
Ha Jeong Lim<sup>\*</sup>, Jae Eun Park, Ji Sook Han. Department of Food Science and Nutrition, Pusan National University
- P08-22 **HM-chromanone Ameliorates Hyperglycemia via Activating PI3K/AKT Pathway and Improving FOXO1 Pathway in ob/ob Mice**  
Jeong Yoo<sup>\*</sup>, Jae Eun Park, Ji Sook Han. Department of Food Science and Nutrition, Pusan National University
- P08-23 **Anti-Osteoporotic Effects of n-trans-Hibiscusamide and Its Derivative Alleviate Ovariectomy-Induced Bone Loss in Mice by Regulating RANKL-Induced Signaling**  
Hyung Jin Lim<sup>\*</sup>, Seon Gyeong Bak, Yeong-Seon Won, Seung Jae Lee. Functional Biomaterial Research Center, Korea Research Institute of Bioscience and Biotechnology
- P08-24 **Development of decomposition products of silkworm fed with *Cudrania tricuspidata* leaves for improvement of vascular health**  
Jae-Hwan Choi<sup>1\*</sup>, Min-Ji Nam<sup>1</sup>, Ga-Hee Ryu<sup>1</sup>, Jeong-Wook Jeon<sup>2</sup>, Sung-Seob Yun<sup>1</sup>. <sup>1</sup>RMI Center, Nutricare Co., Ltd., Center, Nutricare Co., Ltd.
- P08-25 **Bioactivity Screening for Antioxidant and Antiinflammatory Activities of Marine Microorganisms (Bacteria, Fungus, Microalgae) Collected in Korea**  
Hyo-Geun Lee<sup>\*</sup>, M.j.m.s.kurera, R.p.g.s.k.amarasiri. Department of Marine Life Sciences, Jeju National University
- P08-26 **Yellow-Hearted Pine Hot Water Extract Alleviates Skin Hyperpigmentation by Inhibiting Tyrosinase and Melanogenesis in Murine Melanoma Cell Line B16F10**  
Cheol Hyeon Cho<sup>1\*</sup>, Wonchul Lim<sup>2</sup>, Tae-Gyu Lim<sup>1,2</sup>. <sup>1</sup>Department of Food Science & Biotechnology, Sejong University, <sup>2</sup>Department of Food Science & Biotechnology, and Carbohydrate Bioproduct Research Center, Sejong University
- P08-27 **Synergistic effect of the combination of *Angelica gigas* and *Aster glehni* on immune enhancement in RAW264.7 cells**  
Jeongho Jeong<sup>\*</sup>, Soyeon Lee, Sang-Ho Lee, Eun Hye Han. R&D center, Koreaeundan Healthcare Co., Ltd.
- P08-28 **Anti-thrombosis and Anti-oxidant activities of Seven Varieties of Red bean (*Vigna angularis*)**  
Deok-Gyeong Kang<sup>\*</sup>, Yun-Jin Lee, Ji-Min Kim, Ho-Yong Sohn. Department of Food and Nutrition, Andong National University
- P08-29 **Comparison of Useful Functionality between *Ganoderma lucidum* and *Ganoderma gibbosum***  
Deok-Gyeong Kang<sup>1\*</sup>, Yun-Jin Lee<sup>1</sup>, Ji-Min Kim<sup>1</sup>, Jin-Sun Kim<sup>2</sup>, Ho-Yong Sohn<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Goldfarm Bio Co.
- P08-30 **Fermented Mealworm Extract Supplementation Reduced Fasting Blood Glucose Level by Increasing Hepatic Glycogen Synthesis in Type 2 Diabetic Mice**  
Hae-In Lee, Mi-Kyung Lee<sup>\*</sup>. Department of Food and Nutrition, Suncheon National University
- P08-31 **Comparison of Antioxidant Activities and Anti-adipogenic Effects between *Porphyra dentata*, *Porphyra yezoensis* and *Porphyra seriata* in Korea**  
Mi-Kyung Lee<sup>\*</sup>, Hae-In Lee. Department of Food and Nutrition, Suncheon National University
- P08-32 **Enzymatic hydrolysis of head byproducts from olive flounder surimi industry: pepsin hydrolysate attenuates LPS-induced inflammation and oxidative stress in RAW 264.7 macrophages via blocking cell signaling pathways**  
Henarath Hetti Arachchilage Chathuri Kanchana Jayawardhana<sup>\*</sup>, Nisansala Madushani Liyanage, Dineth Pramuditha Nagahawatta, Jimin Hyun, You-Jin Jeon. Jeju National University
- P08-33 **Sargachromenol Isolated from *Sargassum horneri* Inhibits Particulate Matter-Induced Inflammation in Macrophages through Toll-like Receptor-Mediated Cell Signaling Pathways**  
Nisansala Madushani Liyanage<sup>1\*</sup>, Dineth Pramuditha Nagahawatta<sup>1</sup>, Henerath Hetti Arachchilage Chathuri Kanchana Jayawardhana<sup>1</sup>, Jun-Geon Je<sup>1</sup>, You-Jin Jeon<sup>1,2</sup>. <sup>1</sup>Department of Marine Life Sciences, Jeju National University, <sup>2</sup>Marine Science Institute, Jeju National University
- P08-34 **Anti-inflammatory activity of fucoidan extracted from brown alga *Ecklonia maxima* Leaves in particulate matter-stimulated RAW 264.7 Macrophage cells**  
Dineth Pramuditha Nagahawatta<sup>1\*</sup>, Nisansala Madushani Liyanage<sup>1</sup>, Henerath Hetti Arachchilage Chathuri Kanchana Jayawardhana<sup>1</sup>, Hyo-Geun Lee<sup>1</sup>, Jun-Geon Je<sup>1</sup>, You-Jin Jeon<sup>1,2</sup>. <sup>1</sup>Department of Marine Life

- Sciences, Jeju National University, <sup>2</sup>Marine Science Institute, Jeju National University
- P08-35 **Free amino acid, phenolic acid composition and anti-diabetic, anti-hypertension and skin-lightening activities in domestic oats 'Daeyang' and 'Choyang' cultivars**  
Narae Han\*, Yu-Young Lee, Jin Young Lee, Mihyang Kim, Moon Seok Kang, Hyun-Joo Kim. Department of Central Area Crop Science, National Institute of Crop Science
- P08-36 ***Scrophularia Buergeriana* Extract Regulates Inflammation in BV-2 cells and Attenuates Memory Impairment in Scopolamine and Amyloid- $\beta$  Induced Memory Loss Mice Model**  
So-Jung Lee\*, Da-Eun Min, Hae-Lim Kim, Hae-Jin Lee, Sung-Kwon Lee, Dong-Ryung Lee. Research Institute, NUON Co., Ltd.
- P08-37 **Antioxidant Activity of Hot Water Extracts from *Allium cepa* L. (Onion) Skins**  
Ji Su Kim\*, Sung Hyen Lee, Jieun Jung, Un Yul Jeong, Ju Hee Kim. National Institute of Agricultural Sciences, Rural Development Administration
- P08-38 **품종별 팽이버섯에서 추출한 조다당 분획분의 생리활성**  
안민주\*, 김만수, 김민준, 이승준, 이준수. 충북대학교 식품생명공학과
- P08-39 **Comparison of Antioxidant Activity and Anti-adipogenic Effects of Hot-water and Ethanol Extracts from Yuzu (*Citrus junos* Sieb.) Peel Based on Harvest Period**  
Jiyeong Yun, Mi-Kyung Lee\*, Hae-In Lee. Department of Food and Nutrition, Suncheon National University
- P08-40 ***Melissa officinalis* attenuated lipopolysaccharide-induced BV2 microglial activation via MAPK and Nrf2 signaling**  
Jiwon Choi\*, Sintae Kim, Gyeongjin Jeon, Jinyoung Hur. Korea Food Research Institute
- P08-41 **Green Tea and Java Pepper Mixture Improves DSS-Induced Colitis via Regulating miR-223/TJP1/Occludin Pathway**  
Jumi Lee\*, Mak-Soon Lee, Yangha Kim. Graduate Program in System Health Science and Engineering, Department of Nutritional Science and Food Management, Ewha Womans University
- P08-42 **A study for increasing calcium absorption rate into rodent small intestine with mixture of antler and schizandra**  
Hwi Jin Kim<sup>1</sup>, Tae Hee Kim<sup>2</sup>, Seong Un Jeong<sup>2</sup>, Jun Yong Park<sup>2\*</sup>, Il Dae Song<sup>1</sup>, Jaesung Pyo<sup>3</sup>, Kang Min Kim<sup>1</sup>. <sup>1</sup>Department of Pharmaceutical Science and Technology, Kyungsung University, <sup>2</sup>Hamsa pharmaceuticals, <sup>3</sup>College of pharmacy, Kyungsung University
- P08-43 **Effects of *Portulaca Oleracea* L. Extract on Hepatic Cholesterol Metabolism and AMPK/MicroRNA-33/34a Pathway in Rats Fed a High-Cholesterol Diet**  
Yunji Lee\*, Mak-Soon Lee, Sojeong Jang, Yangha Kim. Graduate Program in System Health Science and Engineering, Department of Nutritional Science and Food Management, Ewha Womans University
- P08-44 **Anti-allergic effects of active fraction from abalone (*Haliotis discus hannai*) viscera selected by inhibitory activity of  $\beta$ -hexosaminidase release in PMACI-induced human basophilic KU812F cells**  
Ha Yeon Moon<sup>1\*</sup>, Eon Gyeong Kim<sup>1</sup>, Shin Hye Kim<sup>2</sup>, Tai-Sun Shin<sup>2</sup>, Jiyeon Chun<sup>1</sup>, Kap Seong Choi<sup>1</sup>, Sun-Yup Shim<sup>1</sup>. <sup>1</sup>Department of Food Science and Technology, Suncheon National University, <sup>2</sup>Division of Food and Nutrition, Chonnam National University
- P08-45 **Ellagic acid ameliorates dextran sodium sulfate-induced colitis in mouse through antioxidative and anti-inflammation activity in gut-liver-brain axis**  
Dong-Ha Kim<sup>2\*</sup>, Ji-Su Kim<sup>1</sup>, Yejin Sim<sup>1</sup>, Sang-Hun Choi<sup>1</sup>, Jaehee Kwon<sup>1</sup>, Sang-Hoon Lee<sup>1</sup>, Hyun-Jin Kim<sup>2</sup>, Young-Eun Cho<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Department of Molecular Medicine, School of Medicine, Kyungpook National University
- P08-46 **Hemp-derived Nanovesicles Protect Leaky Gut and Liver Injury in Dextran Sodium Sulfate-Induced Colitis.**  
Sang-Hun Choi<sup>1\*</sup>, Hyun-Jin Kim<sup>2</sup>, Yejin Sim<sup>1</sup>, Dong-Ha Kim<sup>2</sup>, Ji-Su Kim<sup>1</sup>, Jaehee Kwon<sup>1</sup>, Sang-Hoon Lee<sup>1</sup>, Young-Eun Cho<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Department of Molecular Medicine, School of Medicine, Kyungpook National University
- P08-47 **Pomegranate derived nanovesicles prevent binge alcohol-induced gut leakiness and liver damage**  
Ji-Su Kim<sup>1\*</sup>, Dong-Ha Kim<sup>2</sup>, Yejin Sim<sup>1</sup>, Sang-Hun Choi<sup>1</sup>, Jaehee Kwon<sup>1</sup>, Sang-Hoon Lee<sup>1</sup>, Hyun-Jin Kim<sup>2</sup>, Young-Eun Cho<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Department of Molecular Medicine, School of Medicine, Kyungpook National University
- P08-48 **Plum prevents Intestinal and Hepatic Inflammation in the Acute and Chronic Models of Dextran Sulfate Sodium-Induced Mouse Colitis**  
Hyun-Jin Kim<sup>2\*</sup>, Yejin Sim<sup>1</sup>, Dong-Ha Kim<sup>2</sup>, Ji-Su Kim<sup>1</sup>, Sang-Hun Choi<sup>1</sup>, Jaehee Kwon<sup>1</sup>, Sang-Hoon Lee<sup>1</sup>, Young-Eun Cho<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Department of

- Molecular Medicine, School of Medicine, Kyungpook National University
- P08-49 Ginseng and red ginseng derived nanovesicles alleviates liver fibrosis through microbiome change**  
Yejin Sim<sup>1\*</sup>, Dong-Ha Kim<sup>2</sup>, Ji-Su Kim<sup>1</sup>, Sang-Hun Choi<sup>1</sup>, Jaehee Kwon<sup>1</sup>, Sang-Hoon Lee<sup>1</sup>, Hyun-Jin Kim<sup>2</sup>, Young-Eun Cho<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Department of Molecular Medicine, School of Medicine, Kyungpook National University
- P08-50 Bone mineral density and function are maintained by the constant differentiation and mineralization of osteoblasts to prevent osteoporosis**  
Dong-Ha Kim<sup>2\*</sup>, Ji-Su Kim<sup>1</sup>, Yejin Sim<sup>1</sup>, Sang-Hun Choi<sup>1</sup>, Jaehee Kwon<sup>1</sup>, Sang-Hoon Lee<sup>1</sup>, Hyun-Jin Kim<sup>2</sup>, Young-Eun Cho<sup>1</sup>. <sup>1</sup>Department Of Food And Nutrition, Andong National University, <sup>2</sup>Department Of Molecular Medicine, School Of Medicine, Kyungpook National University
- P08-51 Aloe-derived nanovesicles attenuates acute colonic inflammation in mice and enhances tight junction proteins in intestinal epithelial cells.**  
Sang-Hun Choi<sup>1\*</sup>, Hyun-Jin Kim<sup>2</sup>, Yejin Sim<sup>1</sup>, Dong-Ha Kim<sup>2</sup>, Ji-Su Kim<sup>1</sup>, Jaehee Kwon<sup>1</sup>, Sang-Hoon Lee<sup>1</sup>, Young-Eun Cho<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Department of Molecular Medicine, School of Medicine, Kyungpook National University
- P08-52 Plum-derived nanovesicles promote the osteoblast differentiation and reduce the osteocalcin activation**  
Ji-Su Kim<sup>1\*</sup>, Dong-Ha Kim<sup>2</sup>, Yejin Sim<sup>1</sup>, Sang-Hun Choi<sup>1</sup>, Jaehee Kwon<sup>1</sup>, Sang-Hoon Lee<sup>1</sup>, Hyun-Jin Kim<sup>2</sup>, Young-Eun Cho<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Department of Molecular Medicine, School of Medicine, Kyungpook National University
- P08-53 Effects of Cow Milk-derived Extracellular Vesicles on the Differentiation and Mineralization of MC3T3-E1 cells**  
Jaehee Kwon<sup>1\*</sup>, Dong-Ha Kim<sup>2</sup>, Ji-Su Kim<sup>1</sup>, Sang-Hun Choi<sup>1</sup>, Yejin Sim<sup>1</sup>, Sang-Hoon Lee<sup>1</sup>, Hyun-Jin Kim<sup>2</sup>, Young-Eun Cho<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Department of Molecular Medicine, School of Medicine, Kyungpook National University
- P08-54 Apple-derived nanovesicles modulate osteoblast differentiation and mineralization in osteoblastic MC3T3-E1 cells**  
Yejin Sim<sup>1\*</sup>, Dong-Ha Kim<sup>2</sup>, Ji-Su Kim<sup>1</sup>, Sang-Hun Choi<sup>1</sup>, Jaehee Kwon<sup>1</sup>, Sang-Hoon Lee<sup>1</sup>, Hyun-Jin Kim<sup>2</sup>, Young-Eun Cho<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Department of Molecular Medicine, School of Medicine, Kyungpook National University
- P08-55 Human milk extracellular vesicles enhance the differentiation and mineralization of osteoblastic MC3T3-E1 cells.**  
Jaehee Kwon<sup>1\*</sup>, Dong-Ha Kim<sup>2</sup>, Ji-Su Kim<sup>1</sup>, Sang-Hun Choi<sup>1</sup>, Yejin Sim<sup>1</sup>, Sang-Hoon Lee<sup>1</sup>, Hyun-Jin Kim<sup>2</sup>, Young-Eun Cho<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Department of Molecular Medicine, School of Medicine, Kyungpook National University
- P08-56 Plum-derived nanovesicles alleviates intestinal inflammation through microbiome changes in dextran sulfate sodium-induced mouse colitis**  
Hyun-Jin Kim<sup>2\*</sup>, Yejin Sim<sup>1</sup>, Dong-Ha Kim<sup>2</sup>, Ji-Su Kim<sup>1</sup>, Sang-Hun Choi<sup>1</sup>, Jaehee Kwon<sup>1</sup>, Sang-Hoon Lee<sup>1</sup>, Young-Eun Cho<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Department of Molecular Medicine, School of Medicine, Kyungpook National University
- P08-57 Anti-Inflammatory Effect of *Peucedanum japonicum* Leaves Extract in LPS-stimulated Raw264.7 cells**  
Ji Hyeon Park, Eun Seo Kang, Jae Young Shin, Seon Il Jang, Byoung Ok Cho\*. Institute of Health Science, Jeonju University
- P08-58 Sonication-assisted water extract of *Dendronephthya gigantea* exhibits anti-fine dust effects; suppression of MAPK phosphorylation in Raw 264.7 macrophages**  
Mihidukulasuriya Jude Michael Shehan Kurera\*, Dineth Pramuditha Nagahawatta, Nisansala Madushani Liyanage, Henarath Hetthi Arachchilage Chathuri Kanchana Jayawardhana, Rajasinghe Peli Gedara Sewwandi Kaushalya Amarasiri, Hyo-Geun Lee, Sang-Woon Lee, You-Jin Jeon. Department of Marine Life Sciences, Jeju National University
- P08-59 Diverse Functionality of *Allium hookeri* Grown in the Plant Factory with Artificial Lights**  
Jieun Jung<sup>1\*</sup>, Hwal Choi<sup>1,2</sup>, Ji Su Kim<sup>1</sup>, Un Yul Jeong<sup>1</sup>, Jeong Wook Heo<sup>3</sup>, Chang Ki Shim<sup>4</sup>, Sung Hyen Lee<sup>1</sup>. <sup>1</sup>Department of Agro-Food Resources, National Institute of Agricultural Sciences, Rural Development Administration, <sup>2</sup>College of Veterinary Medicine, Jeonbuk National University, <sup>3</sup>Department of Agricultural Engineering, National Institute of Agricultural Sciences, Rural Development Administration, <sup>4</sup>Department of Agricultural Environment, National Institute of Agricultural Sciences, Rural Development Administration
- P08-60 Mixture of Natural Compounds Extract Inhibits Particulates Matter-Induced Skin Inflammation by Suppressing of AhR/ARNT Signaling Pathway**

- Woo-Jin Sim<sup>1\*</sup>, Dong-Uk Jo<sup>1</sup>, Cheol Hyeon Cho<sup>1</sup>, Wonchul Lim<sup>2</sup>, Tae-Gyu Lim<sup>1,2</sup>. <sup>1</sup>Department of Food Science & Biotechnology, Sejong University, <sup>2</sup>Department of Food Science & Biotechnology, and Carbohydrate Bioproduct Research Center, Sejong University
- P08-61 Production of protein hydrolysates from hemp (*Cannabis sativa* L.) seeds and regulatory effects on muscle differentiation in C2C12 myoblasts**  
Yeop Hwangbo<sup>1\*</sup>, Yu Jeong Kim<sup>1</sup>, Jung-Bok Lee<sup>2</sup>, Hye-Myoung Ahn<sup>2</sup>, Ye Hei Seo<sup>2</sup>, Jun Ho Kim<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Andong National University, <sup>2</sup>Research Institute of Food and Biosciences, Kyochon F&B
- P08-62 A Combination of Soy Isoflavones and L-Carnitine Improves Running Performance Through the Activation of AMPK Signaling in Skeletal Muscle of Mice**  
Jaewon Lee<sup>\*</sup>, Yoonjoe Joh, Cheoljun Choi, Kyungmin Kim, Yun-Hee Lee. College of Pharmacy and Research Institute of Pharmaceutical Sciences, Seoul National University
- P08-63 Nulichal Prethanol Extract Suppressed Expression of LPS-induced Nitric Oxide Production and Proinflammatory Cytokines Genes in Raw264.7 Cells**  
Jisu Han<sup>1\*</sup>, Young-Jin Son<sup>2</sup>, Mi-Kyung Lee<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Sunchon National University, <sup>2</sup>Department of Pharmacy, Sunchon National University
- P08-64 Enhancement to nutrient composition of *Tenebrio molitor* (Mealworm) fed with perilla-cake and its application as sustainable up-cycling food source**  
Hyun Yun<sup>\*</sup>, Jinsung Park, Wooseok Shin, Chanhoo Park, Seungwook Kim. Ottogi Research Center
- P08-65 Dieckol isolated from *Eisenia bicyclis* extract suppresses RANKL-induced osteoclastogenesis in murine RAW 264.7 cells**  
Su-Hyeon Cho<sup>\*</sup>, Kil-Nam Kim. Chuncheon Center, Korea Basic Science Institute
- P08-66 Gochujang improves hepatic inflammation in high-fat diet fed obese mice**  
Eun-Ji Lee<sup>1\*</sup>, Olivet Chiamaka Edward<sup>1</sup>, Eun-Gyung Mun<sup>1</sup>, Anna-Han<sup>1,2</sup>, Youn-Soo Cha<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Human Nutrition, Jeonbuk National University, <sup>2</sup>K-Food Research Center, Jeonbuk National University
- P08-67 Comparison of Cosmetic Function and Antioxidant Activity of *Undaria pinnatifida* sporophyll, *Saccharina japonica* and *Capsosiphon fulvescens* Hot Water Extracts**  
Soo-Young Choi<sup>\*</sup>, Hae-In Lee, Mi-Kyung Lee. Department of Food and Nutrition, Sunchon National University
- P08-68 Green Tea Extract Attenuates Macrophage-Driven Emphysema Induced by Cigarette Smoke Condensate**  
Jeong-Won Kim<sup>\*</sup>, Jin-Hwa Kim, Chang-Yeop Kim, Ji-Soo Jeong, Da-Young Jung, Tae-Won Kim, Je-Won Ko. College of Veterinary Medicine and BK21 FOUR program, Chungnam National University
- P08-69 Chestnut Inner-Shell Extracts Improve Denervation-Induced Atrophy of Tibialis Anterior through Inhibiting Apoptosis Signal**  
Jin-Hwa Kim<sup>\*</sup>, Jeong-Won Kim, Chang-Yeop Kim, Ji-Soo Jeong, Da-Young Jung, Je-Won Ko, Tae-Won Kim. College of Veterinary Medicine and BK21 FOUR program, Chungnam National University
- P08-70 Pharmacokinetics of Levamisole in Laying Hens and Its Residue Profiles in Egg**  
Dae-Hwan Kim<sup>\*</sup>, Ji-Soo Jeong, Jeong-Won Kim, Jin-Hwa Kim, Chang-Yeop Kim, Da-Young Jung, Je-Won Ko, Tae-Won Kim. College of Veterinary Medicine and BK21 FOUR program, Chungnam National University
- P08-71 Flaxseed Peptides (Linisorbs) and Their Health Benefits**  
Youn Young Shim<sup>1,2\*</sup>, Martin J. T. Reaney<sup>1</sup>. <sup>1</sup>Department of Food and Bioproduct Sciences, University of Saskatchewan, <sup>2</sup>Department of Integrative Biotechnology, Biomedical Institute for Convergence at SKKU, Sungkyunkwan
- P08-72 Functional juice and quality characteristics using fruits and vegetables**  
Heejeong Eo, Taenam Lee, Yeowool Kang, Heejoe Lee, Eunjeong Park, Nami Joo<sup>\*</sup>. Department of Food and Nutrition, Sookmyung Women's University
- P08-73 Skin-whitening and Antioxidant Activities of Emulsification Mealworm Oil**  
Soo-Young Choi<sup>1\*</sup>, Jisu Han<sup>1</sup>, Hae-In Lee<sup>1</sup>, Sungjin Kim<sup>2</sup>, Ju-Hye Im<sup>1</sup>, Se-Hwa Kim<sup>1</sup>, Mi-Kyung Lee<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Sunchon National University, <sup>2</sup>Jeonnam Bioindustry Foundation, Marine Biotechnology Research Center
- P08-74 Reversibility of sarcopenia by *Ishige okamurae* and its active derivative Dipfloroethoxyhydroxycarmalol: aging rodent and human clinical study**  
Jimin Hyun<sup>1\*</sup>, Bomi Ryu<sup>2</sup>, You-Jin Jeon<sup>1</sup>. <sup>1</sup>Department of Marine Life Sciences, Marine Biomedical Sciences, Jeju National University, <sup>2</sup>Department of Food Science and Nutrition, Pukyong National University
- P08-75 Vernicia fordii (Hemsl.) Airy Shaw extract stimulates insulin secretion in pancreatic  $\beta$ -cells and**

- improves insulin sensitivity in diabetic mice**  
Jimin Hyun\*. Department of Marine Life Sciences, Marine Biomedical Sciences, Jeju National University
- P08-76 **Immunomodulatory Effects of Aqueous Extract of *Codium fragile* in Mouse RAW264.7 Macrophages.**  
Seul-Bi Lee<sup>1\*</sup>, Seul Ah Lee<sup>1</sup>, Chun Sung Kim<sup>1,2</sup>. <sup>1</sup>Marine Healthcare Research & Evaluation Center, Chosun University, <sup>2</sup>Department of Oral Biochemistry, College of Dentistry, Chosun University
- P08-77 **Antioxidant and Antidiabetic Activities of Various Extracts from *Symplocos tanakana* and *Symplocos sawafutagi* Leaves**  
Myounglae Cho\*, Tae Su Kim, Su Hui Seong, Bo-Ram Kim, Su A Im, Jin-Woo Jeong. Honam National Institute of Biological Resources
- P08-78 **Major Active Components and Antioxidant Properties of *Cornus officinalis* Fruits According to Different Harvest Times**  
Gwi Yeong Jang\*, Eun Suk Lee, Su Ji Choi, Hyung Don Kim, Min Hye Kang, Yun-Jeong Ji, Geum Soog Kim. Department of Herbal Crop Research, RDA
- P08-78 **Major Active Components and Antioxidant Properties of *Cornus officinalis* Fruits According to Different Harvest Times**  
Gwi Yeong Jang\*, Eun Suk Lee, Su Ji Choi, Hyung Don Kim, Min Hye Kang, Yun-Jeong Ji, Geum Soog Kim. Department of Herbal Crop Research, RDA
- P08-79 **Protective Effect of Fermented Gold Kiwifruit (*Actinidia chinensis* L.) Powder in Alcohol-induced Liver Injury Mice Model**  
Ji-Hye Choi<sup>1\*</sup>, Sangmin Lee<sup>1</sup>, Hwal Choi<sup>1</sup>, Na-Young Lee<sup>2</sup>, Hyun-Jeong Oh<sup>2</sup>, Hyuck-Se Kwon<sup>2</sup>, Jungkee Kwon<sup>1</sup>. <sup>1</sup>Department of Laboratory Animal Medicine, College of Veterinary Medicine, Jeonbuk National University, <sup>2</sup>R&D Team, Food & Supplement Health Claims, Vitech
- P08-80 **Quality Characteristics of Bitter Melon(*Momordica charantia*) According to Cooking Methods**  
Heejoe Lee, Heejeong Eo, Sang A Kwak, Yeo Wool Kang, Eun Jeong Park, Nami Joo\*. Department of Food and Nutrition, Sookmyung Women's University
- P08-81 **Anti-obesity effect of Sargassum horneri in high fat diet induced obese mice**  
Jin-Ah Lee\*, Jeong Heon Kim, Se-Myung Kim, Kyung-Mo Song, Min-Cheol Kang. Korea Food Research Institute
- P08-82 **Anti-melanogenic effects of essential oil from Citrus Reticulate Blossom on B16-F10 melanoma cells and in vivo zebrafish embryos**  
Se-Myung Kim<sup>1\*</sup>, Sera Kim<sup>1</sup>, Jiyeon Cha<sup>2</sup>, Yun-Sang Choi<sup>1</sup>, Hye-Won Yang<sup>2</sup>, Hae Won Jang<sup>3</sup>, Kyung-Mo Song<sup>1</sup>, Min-Cheol Kang<sup>1</sup>. <sup>1</sup>Research Group of Food Processing, Korea Food Research Institute, <sup>2</sup>Department of Marine Life Science, School of Marine Biomedical Sciences, Jeju National University, <sup>3</sup>Department of Food Science and Biotechnology, Sungshin Women's University
- P08-83 **Apigenin exerts anti-inflammatory activity in LPS- or pseudo SARS-CoV-2-stimulated alveolar macrophages**  
Hengmin Han<sup>1</sup>, Yinzhu Xu<sup>2</sup>, Jung-Eun Kim<sup>2</sup>, Hyo-Jeong Lee<sup>1,2\*</sup>. <sup>1</sup>Department of Cancer Preventive Material Development, College of Korean Medicine, Graduate School, Kyung Hee University, <sup>2</sup>Department of Science in Korean Medicine, College of Korean Medicine, Graduate School, Kyung Hee University
- P08-84 **Anti-obesity effect of *Crataegus pinnatifida* Root extract in 3T3-L1 preadipocytes and high-fat diet-induced obese C57BL/6 mice by inhibiting SREBP-1 translocation.**  
Eunbi Lee\*, Yeonju Seo, Ju-Ock Nam. Department of Food Science and Biotechnology, Kyungpook National University
- P08-85 **Macamide, a component of lipophilic Extract from maca (*Lepidium meyenii* Walp) enhances myogenic differentiation and Attenuates Dexamethasone-induced Muscle atrophy**  
Jongbeom Chae\*, Ju-Hwi Park, Ju-Ock Nam. Department of Food Science and Biotechnology, Kyungpook National University
- P08-86 **Grape Seed Proanthocyanidin Extract Ameliorates Colonic Inflammation and Modulates GLP-1 Secretion in Dextran Sulfate Sodium-Induced Colitis Model.**  
Ah Hyun Kim<sup>1,2\*</sup>, Ryun Hee Kim<sup>1,2</sup>, Keum Taek Hwang<sup>1,2</sup>. <sup>1</sup>Department of Food and Nutrition, and Research Institute of Human Ecology, Seoul National University, <sup>2</sup>BK21 FOUR Education and Research Team for Sustainable Food & Nutrition, Seoul National University
- P08-87 **Chondroprotective effect of *Campylaephora hypnaeoides* Extract in IL-1 $\beta$ -Stimulated Rat Chondrocyte Cells.**  
Ji Yun Jang\*, Chun Sung Kim. Department of Oral Biochemistry, College of Dentistry, Chosun University
- P08-88 **Antioxidant Effect of *Tetragonia tetragonioides* on Growth Environment**  
Jin A Yoon<sup>3\*</sup>, Jidam Yun<sup>1</sup>, Yura Min<sup>2</sup>. <sup>1</sup>Korea International School Jeju, <sup>2</sup>School of Bio-Health Conver-



- gence, Sungshin Women's University, <sup>3</sup>Department of Food and Nutrition, Gangseo University
- P08-89 **Anti-Inflammatory Effects of Black Cumin(*Nigella Sativa* L.) Seed Oil in LPS-Induced RAW 264.7 Macrophages**  
Gwihwan Na\*, Minjeong Kim, Yeankyung Koo, Hyunmook Jung. R&I Center, COSMAXBIO
- P08-90 **Anti-Melanogenesis Effect of Brewer's Spent Grain Extract**  
Yu Jin Shon<sup>1\*</sup>, Won-Chul Lim<sup>2</sup>, Tae-Gyu Lim<sup>1,2</sup>. <sup>1</sup>Department of Food Science & Biotechnology, Sejong University, <sup>2</sup>Department of Food Science & Biotechnology, and Carbohydrate Bioproduct Research Center, Sejong University
- P08-91 ***Chrysanthemum coronarium* L. Extract Attenuates Homocysteine-Induced Vascular Inflammation in Vascular Smooth Muscle Cells**  
Yiseul Kim\*, Ae Sin Lee, Ji Won Kim, Songhee Lee, Mi Jeong Sung. Korea Food Research Institute
- P08-92 **Preparation of Extract with Sleep-Promoting Effects from By-Products During Agar Production from *Gelidium amansii***  
Junho Song<sup>1\*</sup>, Duhyeon Kim<sup>1</sup>, Seonghui Kim<sup>1</sup>, Gibeom Choi<sup>1</sup>, Dongmin Kim<sup>1</sup>, Sangoh Kwon<sup>2</sup>, Jaesun In<sup>2</sup>, Suengmok Cho<sup>1</sup>. <sup>1</sup>Department of Food Science and Technology, Institute of Food Science, Pukyong National University, <sup>2</sup>S&D Research and Development Institute
- P08-93 **Protective effects of protein extracts derived from *Protactia brevitarsis* larvae against hydrogen peroxide-induced oxidative stress in mouse C2C12 cells**  
Jae Hoon Lee\*, Tae-Kyung Kim, Min-Cheol Kang, Kyung-Mo Song, Bum-Keun Kim, Yun-Sang Choi. Research Group of Food Processing, Korea Food Research Institute
- P08-94 **Anti-bacterial and anti-inflammatory effects of supercritical *Pinus koraiensis* oil in acne**  
Jung-Eun Kim<sup>1\*</sup>, Yinzhu Xu<sup>1</sup>, Hengmin Han<sup>2</sup>, Hyo-Jeong Lee<sup>1,2</sup>. <sup>1</sup>Department of Science in Korean Medicine, Graduate School, College of Korean Medicine, Kyung Hee University, <sup>2</sup>Department of Cancer Preventive Material Development, Graduate School, College of Korean Medicine, Kyung Hee University
- P08-95 **아티초크를 이용한 막걸리 생산 및 기능 평가**  
조민지\*, 허연진, 정혜윤. 건양대학교 제약생명공학과
- P08-96 **FRVE inhibits liver fibrosis in the MCD diet-induced liver fibrosis model and activation of hepatic stellate cells by TGF-beta**  
Yinzhu Xu<sup>1</sup>, Hengmin Han<sup>2</sup>, Jung-Eun Kim<sup>1</sup>, Hyo-Jeong Lee<sup>1,2\*</sup>. <sup>1</sup>Department of Science in Korean Medicine, College of Korean Medicine, Graduate School, Kyung Hee University, <sup>2</sup>Department of Cancer Preventive Material Development, College of Korean Medicine, Graduate School, Kyung Hee University
- P08-97 **마이크로웨이브 처리에 의한 수수의 항당뇨 및 항고혈압 활성 변화**  
전예솔<sup>1\*</sup>, 김현주<sup>2</sup>, 이승준<sup>1</sup>, 김민하<sup>1</sup>, 이준수<sup>1</sup>. <sup>1</sup>충북대학교 식품생명공학과, <sup>2</sup>국립식량과학원 중부작물부 수확 후이용과
- P08-98 ***Euphorbia Supina Rafin* Extracts Inhibit Diesel Particulate Matter-Induced Apoptosis Through Blockade of NADPH Oxidase-Mediated Signaling Pathway**  
Yerim Choi<sup>1,2\*</sup>, Bogyong Kim<sup>1,2</sup>, Jeongeun Kim<sup>1,2</sup>, Hyunseok Lee<sup>3</sup>, Kyong-Oh Shin<sup>1,2,3</sup>, Yoshikazu Uchida<sup>1,2,3</sup>, Kyungho Park<sup>1,2,3</sup>. <sup>1</sup>Department of Food Science & Nutrition, Hallym University, <sup>2</sup>The Korean Institute of Nutrition, Hallym University, <sup>3</sup>LaSS Lipid Institute, LaSS Inc.
- P08-99 **Anti-inflammatory Effects of *Olea europaea* on LPS-stimulated cells**  
Sunghoon Choi, Seunghwa Cha, Mi-Yeon Kim\*. Department of Bioinformatics and Life Science, Soongsil University
- P08-100 **HepG2 세포에서 포도당 흡수능에 대한 수수 추출물과 metformin의 상승효과**  
박희림<sup>1\*</sup>, 김민하<sup>1</sup>, 김현주<sup>2</sup>, 김만수<sup>1</sup>, 이준수<sup>1</sup>. <sup>1</sup>충북대학교 식품생명공학과, <sup>2</sup>국립식량과학원 중부작물부 수확 후이용과
- P08-101 ***Sanguisorba officinalis* L. and Its Derived Compounds Inhibit Liver Fibrosis in TGF-β1-treated LX-2 Hepatic Stellate Cells**  
Yunseong Nam<sup>1,2\*</sup>, Myungsuk Kim<sup>3</sup>, Saruul Erdenebileg<sup>1,2</sup>, Chu Won Nho<sup>1,2</sup>. <sup>1</sup>Smart Farm Research Center, Gangneung Institute of Natural Products Korea Institute of Science and Technology, <sup>2</sup>Division of Bio-Medical Science and Technology, KIST School, University of Science and Technology, <sup>3</sup>Natural Product Research Center, Gangneung Institute of Natural Products Korea Institute of Science and Technology
- P08-102 **Variation of agricultural traits and principal ingredient of faba bean(*Vicia faba* L.) germplasm**  
Yu Mi Choi\*, Sukyeung Lee, Myoung-Jae Shin, Hyemyeong Yoon, Joungyun Yi, Kebede Taye Desta, Xiaohan Wan. National Agrobiodiversity Center, National Institute of Agricultural Sciences
- P08-103 **Mulberry Vinegar Alleviates Lipopolysaccharide-induced Cognitive Deficits by Regulating Neuroinflammation and Amyloidogenesis**  
Seok Hee Han<sup>1\*</sup>, Se In Bang<sup>2</sup>, Weon Taek Seo<sup>1</sup>, Hyun Young Kim<sup>1</sup>, Eun Ju Cho<sup>2</sup>, Ah Young Lee<sup>1</sup>. <sup>1</sup>Department of Food Science, Gyeongsang National University, <sup>2</sup>Department of Food Science and Nutrition, Pusan National University,

- P08-104 Antioxidant activities of sulfated polysaccharides from an enzymatic digest of *Sargassum thunbergii* in vitro and in vivo zebrafish model**  
Sang-Woon Lee\*, Hyo-Geun Lee, R. P. G. S. K. Amarasiri, Jimin Hyun, You-Jin Jeon. Department of Marine Life Sciences, Jeju National University
- P08-105 Mealworm Oil enhances wound healing potential through the activation of fibroblast and endothelial cells**  
Joung-Hee Kim<sup>1</sup>, Syng-Ook Lee<sup>2</sup>, Dae-Hwan Kim<sup>3</sup>, Keuk-Jun Kim<sup>4\*</sup>. <sup>1</sup>Department of biomedical laboratory science, DaeKyeung University, <sup>2</sup>Department of food science and technology, KeiMyung University, <sup>3</sup>Department of laboratory animal research support team, YeungNam university medical center, <sup>4</sup>Department of biomedical laboratory science, DaeKyeung University
- P08-106 Sulforaphene Attenuates *Cutibacterium acnes*-induced Inflammation**  
Hwan Ju Hwang<sup>1</sup>, Ki Won Lee<sup>1</sup>, Jong-Eun Kim<sup>2\*</sup>. <sup>1</sup>WCU Biomodulation Major and Research Institute of Agriculture and Life Sciences, Department of Agricultural Biotechnology, Seoul National University, <sup>2</sup>Department of Food Science and Technology, Korea National University of Transportation
- P08-107 Effect of Menaquinone-4 on Receptor Activator of Nuclear Factor  $\kappa$ B Ligand-Induced Osteoclast Differentiation and Ovariectomy-Induced Bone Loss**  
Ae Sin Lee<sup>1</sup>, Mi Jeong Sung<sup>1</sup>, Seok Jun Son<sup>2\*</sup>, Ah-Ram Han<sup>3</sup>, Gwang-Ju Jang<sup>4</sup>, Sang-Hee Lee<sup>1</sup>. <sup>1</sup>Aging and Metabolism Research Group, Korea Food Research Institute, <sup>2</sup>Food Functionality Infrastructure Team, Korea Food Research Institute, <sup>3</sup>Food Convergence Infrastructure Team, Korea Food Research Institute, <sup>4</sup>Food Analysis Research Center, Korea Food Research Institute
- P08-108 Comparative response of functional compounds and physiological activities in peanut shell treated with atmospheric pressure plasma**  
Narae Han<sup>1\*</sup>, Jin Hee Bae<sup>2</sup>, Jin Young Lee<sup>1</sup>, Mihyang Kim<sup>1</sup>, Yu-Young Lee<sup>1</sup>, Moon Seok Kang<sup>1</sup>, Sanghoo Park<sup>2</sup>, Hyun-Joo Kim<sup>1</sup>. <sup>1</sup>Department of Central Area Crop Science, National Institute of Crop Science, Rural Development Administration, <sup>2</sup>Department of Nuclear and Quantum Engineering, Korea Advanced Institute of Science and Technology
- P08-109 Anti-oxidant, Anti-inflammatory and Antibacterial Activities of a 70% EtOH *Symphyclocladia linearis* extract**  
Jeong Min Lee\*, Mi-Jin Yim, Hyun-Soo Kim, Seok-Chun Ko, Ji-Yul Kim, Gun-Woo Oh, Kyunghwa Baek, Dae-Sung Lee. National Marine Biodiversity Institute of Korea
- P08-110 Ferulic Acid Grafted Self-Assembled Fructo Oligosaccharide Micro Particle for Targeted Delivery to Colon**  
Joo-Won Suh<sup>2,3\*</sup>, Eldin M. Johnson<sup>1,3</sup>, Misook Hong<sup>3</sup>. <sup>1</sup>Department of Life Science, Food Microbiology and Bioprocess Laboratory, National Institute of Technology, Rourkela, India, <sup>2</sup>Graduate School of Interdisciplinary Program of Biomodulation, Myongji University, <sup>3</sup>Myongji Bioefficacy Research Center, Myongji University
- P08-111 Effects of Kombucha Fermented by *Saccharomyces cerevisiae* and *Gluconobacter oxydans* on Hangover Relief in ICR Mice**  
Hyeongyeong Kim<sup>1,2\*</sup>, Hee Ho Song<sup>1,2</sup>, Chun Woong Park<sup>1,2</sup>, Hyowon Lee<sup>1,2</sup>, Hyung Joo Suh<sup>1,2</sup>. <sup>1</sup>Department of Integrated Biomedical and Life Science, Graduate School, Korea University, <sup>2</sup>Transdisciplinary Major in Learning Health Systems, Graduate School, Korea University
- P08-112 Effect of Extracts Containing Quercetin-3-Glucuronide (Q3G) on Sleep Enhancement in Pentobarbital-induced Sleep Model**  
Hyowon Lee<sup>1,2\*</sup>, Yeok Boo Chang<sup>1,2</sup>, Yejin Ahn<sup>1</sup>, Hyung Joo Suh<sup>1,2</sup>. <sup>1</sup>Department of Integrated Biomedical and Life Science, Graduate School, Korea University, <sup>2</sup>Transdisciplinary Major in Learning Health Systems, Graduate School, Korea University
- P08-113 Effect of Hydrolyzed Soybean Peptide against Oxidative Stress-induced Inflammatory Response and Extrinsic Apoptosis**  
Wan Heo<sup>1\*</sup>, Kyung-Im Kim<sup>2</sup>, Bok Kyung Han<sup>3</sup>, Jiyoun Hong<sup>3</sup>, Young Jun Kim<sup>3</sup>. <sup>1</sup>Department of Food Science and Engineering, Seowon University, <sup>2</sup>Department of Culinary Arts & Business, Hyejeon College, <sup>3</sup>Department of Food and Biotechnology, Korea University
- P08-114 Snail Extract Ameliorates Loperamide-induced Constipation in Rats**  
Chun Woong Park<sup>1,2\*</sup>, Yejin Ahn<sup>1</sup>, Hoon Kim<sup>3</sup>, Hyung Joo Suh<sup>1,2</sup>. <sup>1</sup>Department of Integrated Biomedical and Life Science, Graduate School, Korea University, <sup>2</sup>Transdisciplinary Major in Learning Health Systems, Graduate School, Korea University, <sup>3</sup>Department of Food and Nutrition, Chung-Ang University
- P08-115 Angiotensin I-converting enzyme (ACE) inhibition and molecular docking study of meroterpenoids from brown alga, *Sargassum macrocarpum***  
Seok-Chun Ko\*, Ji-Yul Kim, Kyunghwa Baek, Jeong Min Lee, Mi-Jin Yim, Hyun-Soo Kim, Gun-Woo Oh, Dae-Sung Lee. National Marine Biodiversity Institute of Korea

- P08-116 ***Cirsium japonicum* var. *maackii* Extract Suppress Vascular Adhesion Factor Expression in TNF- $\alpha$ -treated Human Vascular Endothelial Cells by Inhibiting NF- $\kappa$ B Activation**  
Jae Young Shin<sup>1,2</sup>, Byoung Ok Cho<sup>1</sup>, Ji Hyeon Park<sup>1</sup>, Eun Seo Kang<sup>1</sup>, Jae Suk Sim<sup>3</sup>, Dong Jun Sim<sup>3</sup>, Seon Il Jang<sup>1\*</sup>. <sup>1</sup>Institute of Health & Science, Jeonju University, <sup>2</sup>Department of Food Science and Technology, Jeonbuk National University, <sup>3</sup>Research Institute, Imsil Herbal Medicine Association
- P08-117 **Immune enhancing effect of red ginseng residue mixture complex on immune cells**  
Eun Seo Kang<sup>1</sup>, Jae Young Shin<sup>2</sup>, Ji Hyeon Park<sup>2</sup>, Byoung Ok Cho<sup>2</sup>, Yi Teak Lim<sup>1</sup>, Seon Il Jang<sup>2,3\*</sup>. <sup>1</sup>Jinandang Farming Association Corporation, <sup>2</sup>Institute of Health Science, Jeonju University, <sup>3</sup>Department of Health Management, Jeonju University
- P08-118 **Gambogic acid attenuates hepatic lipogenesis**  
Yu Geon Lee\*, Ye Na Park, Soo Hyun Park, Jae Ho Park. Personalized Diet Research Group, Korea Food Research Institute
- P08-119 **Improvement effects of Geniposide in Depression and Obesity Comorbidity Animal Model**  
Ji-Hye Song<sup>1,2\*</sup>, Seul-Ki Won<sup>1,2</sup>, Guen-Hyang Eom<sup>1,2</sup>, Ji-Yeun Park<sup>1,2</sup>. <sup>1</sup>College of Korean Medicine, Daejeon University, <sup>2</sup>Institute of Bioscience & Integrative Medicine, Daejeon University
- P08-120 **Effects of Gamisoyo-san on H<sub>2</sub>O<sub>2</sub>-induced oxidative stress damage in human SH-SY5Y neuroblastoma cells**  
Guen-Hyang Eom<sup>1,2\*</sup>, Seul-Ki Won<sup>1,2</sup>, Ji-Hye Song<sup>1,2</sup>, Ji-Yeun Park<sup>1,2</sup>. <sup>1</sup>College of Korean Medicine, Daejeon University, <sup>2</sup>Institute of Bioscience & Integrative Medicine, Daejeon University
- P08-121 **Photoprotective effects and molecular mechanism of mixed probiotics in UVB-irradiated hairless mice**  
Eunsol Seo<sup>1,2\*</sup>, Hee Ho-Song<sup>3,4</sup>, Hyung Joo Suh<sup>3,4</sup>, Byung-Yong Kim<sup>1</sup>. <sup>1</sup>CH Labs Corp., <sup>2</sup>WCU Biomodulation Major, Department of Agricultural Biotechnology, College of Agriculture and Life Sciences, Seoul National University, <sup>3</sup>Department of Integrated Biomedical and Life Science, Graduate School, Korea University, <sup>4</sup>Transdisciplinary Major in Learning Health Systems, Graduate School
- P08-122 **Improvement effects of Aquilariae Lignum treatment on the Symptoms of Chronic Fatigue Syndrome in Reserpine-induced Animal Model**  
Seul-Ki Won<sup>1,2\*</sup>, Ji-Hye Song<sup>1,2</sup>, Guen-Hyang Eom<sup>1,2</sup>, Ji-Yeun Park<sup>1,2</sup>. <sup>1</sup>College of Korean Medicine, Daejeon University, <sup>2</sup>Institute of Bioscience & Integrative Medicine, Daejeon University
- P08-123 **Anti-inflammatory effects of the aged garlic extracts in LPS-stimulated RAW264.7 cells**  
Dong-Gyu Kim\*, Gun Su Cha, Min-Jung Kang. Namhae Garlic Research Institute
- P08-124 **Antioxidant activities and cholesterol production inhibiting abilities of Spinach (*Spinacia oleracea* L.) extracts**  
Dong-Gyu Kim\*, Min-Jung Kang. Namhae Garlic Research Institute
- P08-125 **Dioscin decreases breast cancer stem cell proliferation via cell cycle arrest by modulating p38 MAPK and AKT/mTOR signaling pathways.**  
Chae Won Ock<sup>1,2</sup>, Gi Dae Kim<sup>2\*</sup>. <sup>1</sup>College of Pharmacy, Natural Products Research Institute, Seoul National University, <sup>2</sup>Department of Food and Nutrition, Kyungnam University
- P08-126 **Harmine hydrochloride mediates the induction of G2/M cell cycle arrest in breast cancer cells by regulating the MAPKs and AKT/FOXO3a signaling pathways.**  
Chae Won Ock<sup>1,2</sup>, Gi Dae Kim<sup>2\*</sup>. <sup>1</sup>College of Pharmacy, Natural Products Research Institute, Seoul National University, <sup>2</sup>Department of Food and Nutrition, Kyungnam University
- P08-127 **Changes in the compounds according to the aging conditions of garlic and the physiological activity of the extract**  
Gun Su Cha, Dong-Gyu Kim, Seung Hee Yoo, Min Jung Kang\*. Namhae Garlic Research Institute
- P08-128 **Nutritional Composition of Korean New Bred-Potato Cultivars**  
Soojin Park<sup>1\*</sup>, Seung Yun Lee<sup>2</sup>, Jung Hwan Nam<sup>3</sup>. <sup>1</sup>School of Bio Food & Nutrition Science, Semyung University, <sup>2</sup>Department of Animal Science and Technology, Chung-Ang University, <sup>3</sup>Highland Agriculture Research Institute, National Institute of Crop Science, RDA
- P08-129 **Cognitive Ability Effect of the Fermented *Dendropanax morbifera* Extract using *Lactiplantibacillus plantarum* K118**  
Seulki Kim, Sang-Pil Hong, Ji-Yi Kim, Sang-Dong Lim\*. Korea Food Research Institute
- P08-130 **Black ginseng promotes osteoblast mineralization through Rk1, Rg5, and Rg3-induced osteocalcin and bone sialoprotein expression**  
Jin Seong Kim<sup>1\*</sup>, Yun Ho Jo<sup>1</sup>, Sejeong Kim<sup>1</sup>, Sun Sic Yang<sup>2</sup>, Beom-Su Kim<sup>3</sup>. <sup>1</sup>Guemsan Ginseng & Herb Development Agency, <sup>2</sup>Wonkwang Bone Regeneration Research Institute, <sup>3</sup>Carbon Nano Convergence Technology Center for Next Generation Engineers, Jeonbuk National University
- P08-131 **Phlorofucofuroeckol A isolated from *Ecklonia cava* improves the inflammation in TNF- $\alpha$ /IFN- $\beta$ -stimulated HaCaT keratinocytes and TPA-induced ear edema in mice**

Eui Jeong Han<sup>1\*</sup>, Kirinde Gedara Isuru Sandanuwan Kirindage<sup>1</sup>, Arachchige Maheshika Kumari Jayasinghe<sup>1</sup>, Si Won Yoo<sup>2</sup>, Miok Cha<sup>2</sup>, Hyun-Soo Kim<sup>3</sup>, Ginnae Ahn<sup>1,2</sup>. <sup>1</sup>Department of Food Technology and Nutrition, Chonnam National University, <sup>2</sup>Department of Marine Bio-Food Sciences, Chonnam National University, <sup>3</sup>National Marine Biodiversity Institute

- P08-132 **Effects of Benzyl isothiocyanate (BITC) on the Inhibition of Melanogenesis in B16F10 Cells**  
Eun-Pyeong Yang\*, Jung-Mi Yun. Department of Food and Nutrition, Chonnam National University
- P08-133 **Isolation and characterization of efficient active compounds using high-performance centrifugal partition chromatography (CPC) from anti-inflammatory activity fraction of *Ecklonia maxima* in South Africa**  
Hyun-Soo Kim\*, Jeong Min Lee, Mi-Jin Yim, Seok-Chun Ko, Kyung Woo Kim, Ji-Yul Kim, Gun-Woo Oh, Kyunghwa Baek. National Marine Biodiversity Institute of Korea
- P08-134 **(-)-Loliolide isolated from *Sargassum horneri* inhibits the oxidative stress by activating the Nrf2/HO-1 signaling in UVB-exposed HaCaT cells**  
Min-Ju Kim<sup>1</sup>, Eui Jeong Han<sup>1\*</sup>, Kirinde Gedara Isuru Sandanuwan Kirindage<sup>1</sup>, Arachchige Maheshika Kumari Jayasinghe<sup>1</sup>, Si Won Yoo<sup>2</sup>, Miok Cha<sup>2</sup>, Kyounghoon Lee<sup>3</sup>, Ginnae Ahn<sup>1,2</sup>. <sup>1</sup>Department of Food Technology and Nutrition, Chonnam National University, <sup>2</sup>Department of Marine Bio-Food Sciences, Chonnam National University, <sup>3</sup>Department of Marine Production Management, Chonnam National University
- P08-135 **Dibenzoylmethane suppressed adipocyte-induced neuroinflammatory/oxidative responses.**  
Ye Lim You<sup>2\*</sup>, Hyeon Son Choi<sup>1</sup>. <sup>1</sup>Department of Food science and Nutrition, Sangmyung University, <sup>2</sup>Department of Foodservice Management and Nutrition, Sangmyung University
- P08-136 **Measurement of physiological activity of *Schisandra chinensis* essential oil**  
So Hyeon Lee\*, Won Seok Choi, Chang Ho Lee. Department of Research and Development, Gyeongbuk Institute for Bio industry
- P08-137 **Comparison of physiological activity and quality of domestic aronia and foreign aronia**  
So Hyeon Lee\*, Won Seok Choi, Chang Ho Lee. Department of Research and Development, Gyeongbuk Institute for Bio industry
- P08-138 **Nootkatone suppresses the lipid accumulation by regulating JAK-STAT in murine adipocyte**  
Ye Lim You<sup>2\*</sup>, Hyeon Son Choi<sup>1</sup>, Ji Yeon Lee<sup>1</sup>. <sup>1</sup>Department of Food science and Nutrition, Sangmyung University, <sup>2</sup>Department of Foodservice Management and Nutrition, Sangmyung University
- P08-139 **Oenothera biennis sprout extract inhibited the adipogenic lipid storage by regulating JAK-STAT in murine adipocyte**  
Ye Lim You<sup>3\*</sup>, Hyeon Son Choi<sup>1</sup>, Hoon Kim<sup>2</sup>. <sup>1</sup>Department of Food science and Nutrition, Sangmyung University, <sup>2</sup>Department of Food and Nutrition, Chung Ang University, <sup>3</sup>Department of Foodservice Management and Nutrition, Sangmyung University
- P08-140 **Determination of the Value of Marine Biological Materials for Use as Health Functional Food and Cosmetic Materials**  
Won Seok Choi\*, So Hyeon Lee, Chang Ho Lee. Department of Research and Development, Gyeongbuk Institute for Bio industry
- P08-141 **Quality Characteristics and Antioxidant Activity of Vinegar Added with Onion and Black Onion**  
Nan Kyung Kim\*, Mi Suk Kim, Ji Hyun Kim, Weon Taek Seo, Hyun Young Kim. Department of Food Science, Gyeongsang National University
- P08-142 **CHDT Attenuates Dexamethasone-induced Muscle Atrophy by the Regulation of Protein Turnover in C57BL/6 Mice**  
Jihe Yoo<sup>1\*</sup>, Hyo Jun Kim<sup>1</sup>, Hyun-Ji Oh<sup>2</sup>, Heegu Jin<sup>2</sup>, Boo-Yong Lee<sup>2</sup>, Byung-Yong Kim<sup>1</sup>. <sup>1</sup>CH Labs Corp., <sup>2</sup>Department of Food Science and Biotechnology, College of Life Science, CHA University
- P08-143 **Improvement of dyslipidemic activity of smilax sieboldii extract in C57BL/6 mice fed a high-carbohydrate diet**  
Seo Hyun Park\*, Min Hee Hwang, Jung A Lee, Young-Rak Cho, Seong Su Hong, Eun-Kyung Ahn. Bio-Center, Gyeonggido Business and Science Accelerator
- P08-144 ***Perilla frutescens* var. *acuta* Aqueous Extract Attenuates Dexamethasone-induced Muscle Atrophy via Regulating Proteostasis in Mice**  
Jeongjin Park<sup>1,2\*</sup>, Yunji Park<sup>1</sup>, Kyungmi Kim<sup>3</sup>, Woojin Jun<sup>1,2</sup>. <sup>1</sup>Division of Food and Nutrition, Chonnam National University, <sup>2</sup>Research Institute for Human Ecology, Chonnam National University, <sup>3</sup>Department of Biofood Analysis, Bio Campus of Korea Polytechnic
- P08-145 **Effect of *Phlomis umbrosa* Turcz. Water Extracts on C2C12 Muscle Cells**  
Yeonhwa Lee<sup>1\*</sup>, Boreum Yang<sup>1</sup>, Jeongjin Park<sup>1,2</sup>, Woojin Jun<sup>1,2</sup>. <sup>1</sup>Division of Food and Nutrition, Chonnam National University, <sup>2</sup>Research Institute for Human Ecology, Chonnam National University
- P08-146 ***Cucurbita maxima* Duchesne Attenuates Dexamethasone-Induced Cell Damage in C2C12 Skeletal Muscles**

- Jihye Choi<sup>1\*</sup>, Boreum Yang<sup>1</sup>, Jeongjin Park<sup>1,2</sup>, Woojin Jun<sup>1,2</sup>. <sup>1</sup>Division of Food and Nutrition, Chonnam National University, <sup>2</sup>Research Institute for Human Ecology, Chonnam National University
- P08-147 Ethanol Extract of *Phlomis umbrosa* Turcz. Attenuates Simple Steatosis and Oxidative Stress in High Fat Diet-Induced C57BL/6 Mice**  
 Suhyun Hwang<sup>1\*</sup>, Jeongjin Park<sup>1,2</sup>, Yoo-Hyun Lee<sup>3</sup>, Woojin Jun<sup>1,2</sup>. <sup>1</sup>Division of Food and Nutrition, Chonnam National University, <sup>2</sup>Research Institute for Human Ecology, Chonnam National University, <sup>3</sup>Department of Food Science and Nutrition, The University of Suwon
- P08-148 Bromophenols from *Symphycycladia latiuscula* (Harvey) Yamada as Novel Cholecystokinin 2 Receptor Antagonists**  
 Pradeep Paudel<sup>1,2</sup>, Se Eun Park<sup>1,3</sup>, Su Hui Seong<sup>1,4</sup>, Fazlin Mohd Fauzi<sup>5</sup>, Hyun Ah Jung<sup>6\*</sup>, Jae Sue Choi<sup>1</sup>. <sup>1</sup>Department of Food and Life Science, Pukyong National University, <sup>2</sup>National Center for Natural Products Research, School of Pharmacy, The University of Mississippi, USA, <sup>3</sup>Department of Biomedical Science, Asan Medical Institute of Convergence Science and Technology, <sup>4</sup>Division of Natural Products Research, Honam National Institute of Biological Resource, <sup>5</sup>Department of Pharmacology and Chemistry, Faculty of Pharmacy, Universiti Teknologi MARA, Selangor Branch, Puncak Alam Campus, Malaysia, <sup>6</sup>Department of Food Science and Human Nutrition, Jeonbuk National University
- P08-149 6-Formyl Umbelliferone, a Novel Furanocoumarin from *Angelica decursiva* L., Inhibits Key Diabetes-related Enzymes and Advanced Glycation End-product Formation in Molecular Docking Study**  
 Md Yousof Ali<sup>1,2</sup>, Su Hui Seong<sup>2,3</sup>, Hyun Ah Jung<sup>4\*</sup>, Jae Sue Choi<sup>2</sup>. <sup>1</sup>Department of Physiology and Pharmacology, Hotchkiss Brain Institute and Alberta Children's Hospital Research Institute, Cumming School of Medicine, University of Calgary, Canada., <sup>2</sup>Department of Food and Life Science, Pukyong National University, <sup>3</sup>Division of Natural Products Research, Honam National Institute of Biological Resource, <sup>4</sup>Department of Food Science and Human Nutrition, Jeonbuk National University
- P08-150 Stilbene Dimers, Prenylated Diels-Alder Adducts as Potent Anti-diabetic Inhibitor of *Morus bombycis* Leaves**  
 Seon Min Ju<sup>1\*</sup>, Seung Mi Ko<sup>1</sup>, Jung Hye Ryu<sup>1</sup>, Md Yousof Ali<sup>2,3</sup>, Jae Sue Choi<sup>2</sup>, Hyun Ah Jung<sup>1</sup>. <sup>1</sup>Department of Food Science and Human Nutrition, Jeonbuk National University, <sup>2</sup>Department of Food Science and Nutrition, Pukyong National University, <sup>3</sup>Department of Physiology and Pharmacology, Hotchkiss Brain Institute and Alberta Children's Hospital Research Institute, Cumming School of Medicine, University of Calgary, Canada
- P08-151 Potent Natural Cholinesterase Inhibitors for Alzheimer's Disease from *Morus bombycis* Leaves**  
 Seon Min Ju<sup>1\*</sup>, Seung Mi Ko<sup>1</sup>, Jung Hye Ryu<sup>1</sup>, Jae Sue Choi<sup>2</sup>, Hyun Ah Jung<sup>1</sup>. <sup>1</sup>Department of Food Science and Human Nutrition, Jeonbuk National University, <sup>2</sup>Department of Food Science and Nutrition, Pukyong National University
- P08-152 Antioxidant and Anti-inflammatory Potentials of Carrot (*Daucus carota* L.) Leaves from Jeju Island**  
 Ji Soo Kim<sup>1\*</sup>, Do Manh Cuong<sup>1</sup>, Ji Hee Lim<sup>2</sup>, Somi Kim Cho<sup>1,3</sup>. <sup>1</sup>Interdisciplinary Graduate Program in Advanced Convergence Technology and Science, Jeju National University, <sup>2</sup>OLAOLAB Research institute, <sup>3</sup>Department of Biotechnology, College of Applied Life Sciences, SARI, Jeju National University
- P08-153 Cholinesteraseinhibitory Effects of Major Compounds from Non-polar Fraction of *Angelica gigas* Roots**  
 Jung Hye Ryu<sup>1\*</sup>, Seon Min Ju<sup>1</sup>, Seung Mi Ko<sup>1</sup>, Seul Gi Park<sup>1</sup>, Jae Sue Choi<sup>2</sup>, Hyun Ah Jung<sup>1</sup>. <sup>1</sup>Jeonbuk National University, <sup>2</sup>Pukyong National University
- P08-154 Antioxidant activities of *ssam-moo* (pickled radish) added with natural coloring powder**  
 Young-Hwa Jang, Ji-Hyun Kim\*. Department of Food and Nutrition, Kwangju Women's University
- P08-155 Anti-melanogeinc effect of Libanordin isolated from *Corydalis heterocapa* on B16F10 cells.**  
 Jung Hwan Oh<sup>1,2\*</sup>, Fatih Karadeniz<sup>1</sup>, Hyunjung Lee<sup>3</sup>, Jiho Yang<sup>3</sup>, Mi-Na Choi<sup>2</sup>, Seongeun Jeon<sup>2</sup>, Zhou Xianrong<sup>3</sup>, Youngwan Seo<sup>4</sup>, Chang-Suk Kong<sup>1,3</sup>. <sup>1</sup>Marine Biotechnology Center for Pharmaceuticals and Foods, College of Medical and Life Sciences, Silla University, <sup>2</sup>Nutritional education, Graduate School of Education, Silla University, <sup>3</sup>Department of Food and Nutrition, College of Medical and Life Sciences, Silla University, <sup>4</sup>Division of Convergence on Marine Science, College of Ocean Science and Technology, Korea Maritime and Ocean University
- P08-156 Ginsenoside Rg3 exhibits strain-specific phenotypic responses of dexamethasone-induced muscle wasting in genetically diverse collaborative cross mouse founder strains**  
 Bao Ngoc Nguyen<sup>1\*</sup>, Soyeon Hong<sup>2</sup>, Yunseong Nam<sup>2</sup>, Choonggu Lee<sup>3</sup>, Gyhye Yoo<sup>2</sup>, Myungsuk Kim<sup>1</sup>. <sup>1</sup>Natural Product Research Center, Gangneung Institute of Natural Products Korea Institute of Science and Technology, <sup>2</sup>Smart Farm Research Center, Gangneung Institute of Natural Products Korea Institute of Science and Technology, <sup>3</sup>Natural Product Informatics Research Center, Gangneung Institute of

Natural Products Korea Institute of Science and Technology

- P08-157 **The Antioxidant Activity of *Aster glehni* by Extraction Methods**  
Kyeong-A Jang\*, Su-Koung Lee, Da-Bin Lee, Han-Na Chu, Eun-Suk Jung, Min-Sook Kang, Haeng-Ran Kim. Department of Agrofood Resources, National Institute of Agricultural Sciences, RDA
- P08-158 **Identification and quantification of key phytochemicals and phytohormones in *Coccinia grandis* during fruits ripening and their antioxidant properties**  
In Young Lee\*, Nami Joo. Sookmyung Women's University
- P08-159 **Physiological Activity of Soybean Resources, Identification of the Relationship between Individual Isoflavone Derivatives and Genetic Traits, and Their Differences by Cultivation Year**  
Han-Na Chu\*, Eun-Suk Jung, Mi-Kyung Seo, Kyeong-A Jang, Haeng-Ran Kim. Department of agro-food resources, National Institute Agricultural Sciences
- P08-160 **Changes of autophagy activity by fisetin concentration in normal and aging cells.**  
So Yeon Park\*, Seo-Yeon Hwang, Young-In Park, Youn-Je Park. Kongju national university
- P08-161 **Potential therapeutic applications of coumarin derivatives for diabetic wound healing in high glucose-induced keratinocytes**  
Dong Yeon Kim\*, Min-Kyung Kang. Department of Food Science and Nutrition, Andong National University
- P08-162 **Anti-microbial and Anti-diabetic Activities of *Lycium chinense*, *Cornus officinalis*, *Lespedeza cuneate*, *Cirsium japonicum*, *Houttuynia cordata***  
Deok-Gyeong Kang<sup>1\*</sup>, Yun-Jin Lee<sup>1</sup>, Jong-Sik Kim<sup>2</sup>, Man-Hyo Lee<sup>3</sup>, Ho-Yong Sohn<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Andong National University, <sup>2</sup>Department of Biological Science, Andong National University, <sup>3</sup>Gyeongbuk Institute for Bio-Industry
- P08-163 **Phenethyl Isothiocyanate Attenuates Renal Inflammation in High-Fat/Cholesterol-Induced C57BL/6 Mice**  
Ha-Rin Moon\*, Jung-Mi Yun. Department of Food and Nutrition, Chonnam National University
- P08-164 **Effect of *Allium Hookeri* Root Extract on Foam Cell Formation in THP-1 Macrophages**  
Ha-Rin Moon\*, Jung-Mi Yun. Department of Food and Nutrition, Chonnam National University
- P08-165 **Protective effect of *Ganjang* (soy sauce) on Dextran Sulfate Sodium (DSS)-induced colitis in mice**  
Hyeon-Ji Lim<sup>1\*</sup>, Ha-Rim Kim<sup>1</sup>, In-Sun Park<sup>1</sup>, Hee-Jong Yang<sup>2</sup>, Do-Youn Jeong<sup>2</sup>, Seon-Young Kim<sup>1</sup>, Chan-Hun Jung<sup>1</sup>. <sup>1</sup>Jeonju AgroBio-Materials Institute, <sup>2</sup>Microbial Institute for fermentation Industry
- P08-166 **Anti-inflammation and Anti-wrinkle Effect of *Semiaquilegia adoxoides* (DC.) Makino adventitious roots Extract**  
In-Sun Park, Hyeon-Ji Lim\*, Seon-Young Kim, Chan-Hun Jung. Jeonju AgroBio-Materials Institute
- P08-167 **The antioxidant activity of *Glenia littoralis* F. Schmidt(GL) according to the extraction conditions**  
Su-Koung Lee\*, Kyeong-A Jang, Da-Bin Lee, Han-Na Chu, Eun-Suk Jung, Min-Sook Kang, Haeng-Ran Kim. Department of agrofood resources, National institute of agricultural Sciences, RDA
- P08-168 **Comparison of the antioxidant activity and anti-inflammatory efficacy according to the extraction conditions of Safflower, *Carthamus tinctorius* L.**  
Eun-Sook Jung\*, Han-Na Chu, Su-Koung Lee, Kyung-Ah Jang, Min-Sook Kang, Haeng-Ran Kim. National Institute of Agricultural Sciences, Rural Development Administration
- P08-169 **Preventive effects of standardized krill oil on alcohol hangovers in a clinical trial**  
Woo-Hyun Kim<sup>1\*</sup>, Hyun-Jeong Lee<sup>1</sup>, Chan-Yang Lee<sup>1</sup>, Jeong-Ho Oh<sup>1</sup>, Jeong-Eun Kim<sup>1</sup>, Kiet Vu Tan<sup>1</sup>, Seung-Ki Kang<sup>2</sup>, Byungkwon Kim<sup>3</sup>, Seong-Bong Hong<sup>4</sup>, Namkyu Yoon<sup>5</sup>, Han-Joo Lee<sup>5</sup>, Soon-Mi Shim<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Sejong University, <sup>2</sup>Graduate School of Education, YongIn University, <sup>3</sup>Academic Credit Bank System Department Physical Education, YongIn University, <sup>4</sup>College of sport Science, SungKyunKwan University, <sup>5</sup>Ari B&C
- P08-170 **Anti-inflammatory Effect of 8-shogaol and 10-shogaol in a Dextran Sodium Sulfate-induced Colitis Mouse Model**  
Ha-Rim Kim\*, Eun-Mi Noh, Seon-Young Kim. Jeonju Agrobio-Materials Institute
- P08-171 **Anti-inflammatory Effects of *Momordica charantia* Extracts using an Ultrasonic Extraction System**  
Ha-Rim Kim<sup>1\*</sup>, Eun-Mi Noh<sup>1</sup>, Seung-Hyeon Lee<sup>1</sup>, Nam Hyouck Lee<sup>2</sup>, Seon-Young Kim<sup>1</sup>, Mi Hee Park<sup>1</sup>. <sup>1</sup>Jeonju Agrobio-Materials Institute, <sup>2</sup>3FC Co., In KFRI
- P08-172 ***Lacticaseibacillus paracasei* AO356 ameliorates obesity by regulating thermogenesis and adipogenesis**  
Young In Kim<sup>1\*</sup>, Eun-Sook Lee<sup>1</sup>, Eun-Ji Song<sup>2</sup>, Dong-Uk Shin<sup>1,3</sup>, Ji-Eun Eom<sup>4</sup>, Hee Soon Shin<sup>1,3</sup>, Jung Eun Kim<sup>5</sup>, Ju Yeoun Oh<sup>6</sup>, Young-Do Nam<sup>2</sup>, So-Young Lee<sup>1,3</sup>. <sup>1</sup>Aging and Metabolism Research Group,



- Korea Food Research Institute, <sup>2</sup>Research Group of Healthcare, Korea Food Research Institute, <sup>3</sup>Department of Food Biotechnology, Korea University of Science and Technology, <sup>4</sup>Food Functional Evaluation Support Team, Korea Food Research Institute, <sup>5</sup>COSMAX NS INC., Seongnam-Si, <sup>6</sup>COSMAX NBT INC.
- P08-173 Antioxidant Compounds and Activities of Korean Perilla leaves (*Perilla frutescens*) extracts on Extraction Solvents**  
Hyun Young Kim\*, Ji Yeong Yang, Woo Duck Seo, Mi Ja Lee, Seung-Yeob Song. Division of Crop Foundation, National Institute of Crop Science, Rural Development Administration
- P08-174 Antioxidant Activities of Various Cultivars of Korean Perilla leaves (*Perilla frutescens*)**  
Hyun Young Kim\*, Ji Yeong Yang, Woo Duck Seo, Mi Ja Lee, Seung-Yeob Song. Division of Crop Foundation, National Institute of Crop Science, Rural Development Administration
- P08-175 Identification of intestinal immune system modulating polysaccharide from postbiotics prepared from *Phellinus linteus* mycelial submerged culture**  
Hyun Young Shin<sup>1\*</sup>, Hoon Kim<sup>2</sup>, Eun-Jin Jeong<sup>1</sup>, Eun Ji Ha<sup>3</sup>, Gaeuleh Kim<sup>3</sup>, Se Bin Jeong<sup>3</sup>, Sang-Young Choi<sup>4</sup>, Min Geun Suh<sup>4</sup>, Hyung Joo Suh<sup>1</sup>, Kwang-Won Yu<sup>3</sup>. <sup>1</sup>Transdisciplinary Major in Learning Health System, Department of Integrated Biomedical and Life Science, Korea University, <sup>2</sup>College of Biotechnology and Natural Resources, Chung-Ang University, <sup>3</sup>Major in Food and Nutrition, Korea National University of Transportation, <sup>4</sup>Department of R & D, Neo Cremer Corporation Limited
- P08-176 Establishment of anti-inflammatory activity model using intestinal epithelial cells and effect of solvent extracts from *Centella asiatica***  
Yeon Suk Kim<sup>1\*</sup>, Hyun Young Shin<sup>2</sup>, Eun-Jin Jeong<sup>2</sup>, Se Bin Jeong<sup>1</sup>, Eun Ji Ha<sup>1</sup>, Gaeuleh Kim<sup>1</sup>, Ja Pyeong Koo<sup>1</sup>, Kwang-Won Yu<sup>1</sup>. <sup>1</sup>Major in Food and Nutrition, Korea National University of Transportation, <sup>2</sup>Transdisciplinary Major in Learning Health System, Department of Integrated Biomedical and Life Science, Korea University
- P08-177 Anti-oxidative and anti-inflammatory activity of ethanol extracts from *Centella asiatica* by low temperature storage period**  
Eun Ji Ha<sup>1\*</sup>, Hyun Young Shin<sup>2</sup>, Yeon Suk Kim<sup>1</sup>, Eun-Jin Jeong<sup>2</sup>, Se Bin Jeong<sup>1</sup>, Gaeuleh Kim<sup>1</sup>, Ja Pyeong Koo<sup>1</sup>, Kwang-Won Yu<sup>1</sup>. <sup>1</sup>Major in Food and Nutrition, Korea National University of Transportation, <sup>2</sup>Transdisciplinary Major in Learning Health System, Department of Integrated Biomedical and Life Science, Korea University
- P08-178 A pilot study on the effect of formulation and individual muscle mass on vitamin C absorption in randomized clinical study**  
Won-Jo Choi<sup>1\*</sup>, Kiet Tan Vu<sup>1</sup>, Jeong-Eun Kim<sup>1</sup>, In-Ho Cho<sup>2</sup>, Noh-Hwan Park<sup>2</sup>, Jong-Kyu Kim<sup>3</sup>, Yoon-Seok Chun<sup>3</sup>, Young-Tae Koo<sup>4</sup>, Sang-Hun Lee<sup>4</sup>, Dong-Hyun Paik<sup>4</sup>, Soon-Mi Shim<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Sejong University, <sup>2</sup>Human Performance Lab, Korea National Sport University, <sup>3</sup>Aribio H&B Co., Ltd., <sup>4</sup>Kwang-Dong Pharmaceutical Co., Ltd.
- P08-179 A new butenolide of the brown alga *Sargassum micracanthum***  
Ji-Yul Kim<sup>1</sup>, Gun-Woo Oh<sup>1\*</sup>, Jeong Min Lee<sup>1</sup>, Hyun-Soo Kim<sup>1</sup>, Dae-Won Ki<sup>2</sup>, Seok-Chun Ko<sup>1</sup>, Mi-Jin Yim<sup>1</sup>, Kyung Woo Kim<sup>1</sup>, Dae-Sung Lee<sup>1</sup>, Kyunghwa Baek<sup>1</sup>. <sup>1</sup>National Marine Biodiversity Institute of Korea, <sup>2</sup>Division of Biotechnology and Advanced Institute of Environmental and Bioscience, College of Environmental and Bioresource Sciences, Jeonbuk National University
- P08-180 Tyrosinase inhibitory and antioxidant potential of eckmaxol isolated from the brown seaweed *Ecklonia maxima***  
Gun-Woo Oh\*, Seok-Chun Ko, Jeong Min Lee, Mi-Jin Yim, Ji-Yul Kim, Kyunghwa Baek, Dae-Sung Lee, Hyun-Soo Kim. National Marine Biodiversity Institute of Korea
- P08-181 Allium Hookeri Root Extract Inhibits Melanogenesis in B16F10 Mouse Melanoma Cells**  
Ha-Rin Moon\*, Ha-Yun Jeong, Jung-Mi Yun. Department of Food and Nutrition, Chonnam National University
- P08-182 시설 재배 머위의 부위 및 시기별 기능성분 분석**  
이중근\*, 이승규, 정은정, 강주원, 이주영, 서향임. (재)전북바이오융합산업진흥원
- P08-183 Potential Use of Jeju Lava Sea Water in Extraction from *Ecklonia Cava***  
Yeon-Ji Lee\*, Nalae Kang, Areumi Park, Ji-Yeon Hyeon, Soo-Jin Heo. Jeju Marine Research Center, Korea Institute of Ocean Science & Technology
- P08-184 Cotreatment with Jeju Lava Seawater enhances anti-inflammatory activity of *Litsea japonica* fruit through suppressing iNOS and COX2 in RAW 264.7 cells**  
Boram Go<sup>1\*</sup>, Hyejin Hyeon<sup>1</sup>, Young-Kyu Lee<sup>2</sup>, Min-Jung Seo<sup>2</sup>, Ki-Ju Kim<sup>2</sup>, Young-Min Ham<sup>1</sup>, Yong-Hwan Jung<sup>1</sup>. <sup>1</sup>Biodiversity Research Institute, Jeju Technopark, Korea, <sup>2</sup>Lava Water Center, Jeju Technopark
- P08-185 Ethyl Acetate Fraction from *Dendropanax morbiifera* Leaves Increases T cell Growth by Upregulating NF-AT-Mediated IL-2 Secretion**

- Jung Up Park\*, Bohyun Yun, Hyeon Jeong Lee, Go Kyoung Na, Wonwoo Lee. Honam National Institute of Biological Resources
- P08-186 **Anti-Inflammatory Effects of Natural Materials in LPS-stimulated BV2 Cells**  
Soo-Yeon Cho\*, Hyeon-Jeong Kim, In-Guk Hwang, Hwan-Hee Jang. Functional Food and Nutrition Division, National Institute of Agricultural Sciences, Rural Development Administration
- P08-187 **Oenanthe javanica extract Alleviates DSS-induced colitis via regulation of Nrf2/NF-kB signaling pathway and modifying gut microbiota**  
Ui-Jin Bae<sup>1\*</sup>, Ha-Na Jang<sup>2</sup>, Gi-Chang Kim<sup>3</sup>. <sup>1</sup>Department of Agrofood Resources, National Institute of Agricultural Science, Rural Development Administration, <sup>2</sup>Department of Agrofood Resources, National Institute of Agricultural Science, Rural Development Administration, <sup>3</sup>Department of Agrofood Resources, National Institute of Agricultural Science, Rural Development Administration
- P08-188 **Probiotics isolated from fermented foods that are effective in enhancing immunity**  
Bohyun Yun, Jung Up Park\*, Hyeon Jeong Lee, Go Kyoung Na, Wonwoo Lee. Honam National Institute of Biological Resources
- P08-189 **Extrusion of Plant-based meat increases Immune-modulation effect in RAW264. 7 macrophages cells.**  
Jun-Pyo Hong<sup>1\*</sup>, Bo-Gyeong Yoo<sup>1</sup>, Eui-Hong Byun<sup>1,2</sup>, Gi-Hyung Ryu<sup>1</sup>, Bon-Jae Gu<sup>1</sup>, Mi-Hwan Kim<sup>1</sup>. <sup>1</sup>Department of Food Science and Technology, Kongju National University, <sup>2</sup>Food Science Research Institute, Kongju National University
- P08-190 **LPS로 유도된 RAW 264.7 cell에서 *Bambusae Caulis in Taeniam*와 *Terminalia chebula* (Gaertner) Retz. 혼합물의 항염증 효능**  
이은정\*, 이재학, 유근형. (주)에드바이오텍 식의약사업본부 기능성소재개발팀
- P08-191 **Anti-inflammatory activities of ginger(*Zingiber officinale* Roscoe) prepared by enzyme treatment**  
Ye Eun Lee\*, Ha Kyoung Choi, Tae Young Kim, Dae Il Hwang. Institute of Jinan Red Ginseng
- P08-192 **Nutritional Analysis of Three Thistle Species and Comparison of Biologically Active Substance**  
Jiwon Ha\*, Minju Kim, Minhui Oh, Sojung Kim. Marine Industry Research institute for East sea rim
- P08-193 **The effect of *Colocasia esculenta* extracts on the skin proliferation in HaCaT cells**  
Ha Kyoung Choi\*, Ye Eun Lee, Tae Young Kim, Dae Il Hwang. Institute of Jinan Red Ginseng
- P08-194 **LDIQK peptide Ameliorates Muscle Atrophy Induced by Immobilization via Regulating the PI3K/Akt Pathway in C57BL/6 Mice**  
So Hyun Jeon<sup>1</sup>, A-Hyun Jeong<sup>2\*</sup>, Hyoung Su Park<sup>2</sup>, Hye Jin Kim<sup>2</sup>, Se-Young Choung<sup>1,3</sup>. <sup>1</sup>Department of Biomedical and Pharmaceutical Sciences, Graduate School, Kyung Hee University, <sup>2</sup>R&D Group, Maeil Health & Nutrition Co., Ltd., <sup>3</sup>Department of Pharmacy, College of Pharmacy, Dankook University
- P08-195 **Anti-cancer effects and molecular mechanisms of Gossypin in human non-small cell lung cancer, A549 cell**  
Seong-Uk Lee\*, Yoon-Hee Kim. Department of Food and Nutrition, Daegu University
- P08-196 ***Artemisia gmelinii* extract Ameliorates Immune dysfunction in Forced Swim Test-induced Chronic stress murine model**  
Kyungmin Lim<sup>1,2\*</sup>, Eun Yeong Lim<sup>2</sup>, Ju Hye Song<sup>1,2</sup>, Young In Kim<sup>2</sup>, Dong-Uk Shin<sup>1,2</sup>, Hyeon-Ji Song<sup>1,3</sup>, Ha-Jung Kim<sup>1,3</sup>, Ji-Eun Eom<sup>4</sup>, Gun-Dong Kim<sup>1</sup>, So-Young Lee<sup>1</sup>, Hee Soon Shin<sup>1</sup>. <sup>1</sup>Age and Metabolism Research Group, Korea Food Research Institute, <sup>2</sup>Department of Food Biotechnology, Korea University of Science and Technology, <sup>3</sup>Department of Food Science and Technology, Jeonbuk National University, <sup>4</sup>Food Function Infrastructure Team, Korea Food Research Institute
- P08-197 ***Phyllanthus emblica* Regulated the Adipogenesis in 3T3-L1 Adipocytes as a Histone Acetyltransferase Inhibitor**  
Seon Kyeong Park<sup>1\*</sup>, Jae-In Lee<sup>1,2</sup>, Min-Sun Kim<sup>1</sup>, Seung Min Yu<sup>1</sup>, Jae Ho Park<sup>1</sup>, Min-Yu Chung<sup>1</sup>. <sup>1</sup>Korea Food Research Institute, <sup>2</sup>Department of Food Science and Technology, College of Agriculture and Life Sciences, Jeonbuk National University
- P08-198 **Hydroethanolic extract of *Cirsium setidens* (CSE) protects against doxorubicin-induced cardiotoxicity via modulating AMPK/SIRT1/PGC-1 $\alpha$  signaling pathway mediated mitochondrial function, apoptosis**  
Ji-Hye Song\*, Yuhui Jeong, Jangho Lee, Hyo-Kyoung Choi. Korea Food Research Institute
- P08-199 **Health Benefit Effect of *Porphyra tenera* in the PM<sub>2.5</sub>-exposed mice**  
Seon Kyeong Park<sup>1,2\*</sup>, Jin Yong Kang<sup>1,3</sup>, Jong Min Kim<sup>1</sup>, Min Ji Kim<sup>1,3</sup>, Hyo Lim Lee<sup>1</sup>, Jong Hyun Moon<sup>1</sup>, Hye Rin Jeong<sup>1</sup>, Hyun-Jin Kim<sup>1</sup>, Min-Yu Chung<sup>2</sup>, Ho Jin Heo<sup>1</sup>. <sup>1</sup>Division of Applied Life Science (BK21), Institute of Agriculture and Life Science, Gyeongsang National University, <sup>2</sup>Korea Food Research Institute, <sup>3</sup>Fermentation Regulation Research Group, World Institute of Kimchi
- P08-200 **당근의 재배 방법에 따른 *in vitro* HT-29 인체암세포에서의 항암효과와 *ex vivo*에서 cytokines 및 NK 세포 활성 연구**

이연준<sup>1\*</sup>, 반연예<sup>1</sup>, 신신일<sup>2</sup>, 장정주<sup>2</sup>, 박건영<sup>3</sup>. <sup>1</sup>차의과학대학교 식품생명공학과, <sup>2</sup>탄소치유농업연구소, <sup>3</sup>차의과학대학교 통합의학대학원

- P08-201 Physicochemical Characteristics and Antioxidant Activity of Xylitol Candies Containing Yuzu (*Citrus junos*) Peels or Juice**  
Ju-Hye Im\*, Soo-Young Choi, Jisu Han, Sungjin Kim, Jihyeon Jeon, Changhyun Jeon, Changhyun Gu, Juri Ham, Jiyeong Yun, Mi-Kyung Lee, Hae-In Lee. Department of Food and Nutrition, Sunchon National University
- P08-202 Comparison of the efficacy in physiological activities of 47 kinds of soybean leaves according to the seed coat color**  
Mi-Kyoung Seo\*, Eun-Sook Jung, Han-Na Chu, Su-Koung Lee, Kyeong-A Jang, Haeng-Ran Kim. Department of Agrofood Resources, National Institute of Agricultural Sciences, RDA
- P08-203 Protective Effect of *Euonymus alatus* Leaf Extract against Alzheimer's Disease Progression**  
Yoonsu Kim<sup>1\*</sup>, Jisun Oh<sup>2</sup>, Jihyung Chae<sup>3</sup>, Chan Ho Jang<sup>3</sup>, Jeong Soon Lee<sup>5</sup>, Jong-Sang Kim<sup>1,3,4</sup>. <sup>1</sup>Department of Integrative Biology, Kyungpook National University, <sup>2</sup>New Drug Development Center, Daegu-Gyeongbuk Medical Innovation Foundation, <sup>3</sup>Institute of Agricultural Science and Technology, Kyungpook National University, <sup>4</sup>Department of Food Science and Biotechnology, Kyungpook National University, <sup>5</sup>Forest Environment Research Institute
- P08-204 Anti-oxidative Activity and Moisturizing Effect of *Enteromorpha prolifera* Extract**  
Eun Ju Hwang<sup>1\*</sup>, Jin Kim<sup>1</sup>, Chun Sung Kim<sup>1</sup>, Seung-Ho Ohk<sup>2</sup>, Sook-Young Lee<sup>1</sup>. <sup>1</sup>Marine Healthcare Research & Evaluation Center, Chosun University, <sup>2</sup>Department of Oral Microbiology, School of Dentistry, Chonnam National University
- P08-205 Discovery of high value-added ingredients from agricultural by-products: skin whitening effect of pumpkin tendril in  $\alpha$ -MSH-Stimulated Murine Melanoma Cell Line B16F10**  
Sujung Hong<sup>1\*</sup>, Wonchul Lim<sup>2</sup>, Tae-Gye Lim<sup>1,2</sup>. <sup>1</sup>Department of Food Science & Biotechnology, Sejong University, <sup>2</sup>Department of Food Science & Biotechnology, and Carbohydrate Bioproduct Research Center, Sejong University
- P08-206 Structure-based Virtual Screening of Marine Aldehyde Derivatives from Seaweeds to Identify Potential SARS-CoV-2 Inhibitors**  
Nalae Kang\*, Seong-Yeong Heo, Eun-A Kim, Junseong Kim, Areumi Park, Yeon-Ji Lee, Soo-Jin Heo. Korea Institute of Ocean Science and Technology
- P08-207 Effect of Beneficial Bacteria and Hazardous Substances on the Functionality of Traditional *Gochujang***  
So-Won Jang\*, Hwa-Young You, Hyun-Wang Kim, Geun-Seoup Song. Department of Food Science and Technology, Jeonbuk National University
- P08-208 *Ecklonia cava* Regulated the Gut Health against Fine Dust (PM<sub>2.5</sub>)**  
Seon Kyeong Park<sup>1,2\*</sup>, Jin Yong Kang<sup>1,3</sup>, Jong Min Kim<sup>1</sup>, Min Ji Kim<sup>1,3</sup>, Hyo Lim Lee<sup>1</sup>, Jong Hyun Moon<sup>1</sup>, Hye Rin Jeong<sup>1</sup>, Hyun-Jin Kim<sup>1</sup>, Ho Jin Heo<sup>1</sup>. <sup>1</sup>Division of Applied Life Science (BK21), Institute of Agriculture and Life Science, Gyeongsang National University, <sup>2</sup>Korea Food Research institute, <sup>3</sup>Fermentation Regulation Research Group, World Institute of Kimchi
- P08-209 Effect of *P. Mume* fruit sugar extract on LPS-Induced Inflammatory Responses in RAW264.7 Macrophages**  
Sunghee Jeon<sup>1\*</sup>, Minji Shin<sup>1</sup>, Seonhwa Song<sup>1</sup>, Geum-Hwa Lee<sup>2</sup>, Young Youn<sup>1</sup>. <sup>1</sup>Imsil Cheese and Food Research Institute, <sup>2</sup>Jeonbuk National University Hospital
- P08-210 Anti-Obesity Effect of Sodium Selenite in 3T3-L1 Adipocytes through the Inhibition of Epigenetic Regulatory Enzyme**  
Jae-In Lee<sup>1,2\*</sup>, Seon Kyeong Park<sup>1</sup>, Seul-Min Hong<sup>1,2</sup>, Jae Ho Park<sup>1</sup>, Min-Yu Chung<sup>1</sup>. <sup>1</sup>Research Group of Personalized Diet, Korea Food Research Institute, <sup>2</sup>Department of Food Science and Technology, College of Agriculture and Life Sciences, Jeonbuk National University
- P08-211 Anti-inflammatory effect from viscera of *Turbo cornutus* extract against lipopolysaccharide-stimulated inflammatory response through regulating MAPK and NF- $\kappa$ B signaling pathways in RAW 264.7 macrophages and zebrafish model**  
Eun-A Kim\*, Nalae Kang, Seong-Yeong Heo, Junseong Kim, Areumi Park, Yeon-Ji Lee, Soeon Ahn, Soo-Jin Heo. Jeju Marine Research Center, Korea Institute of Ocean Science and Technology
- P08-212 브라질 발효커피 효모 발효물의 발효특성 및 Raw 264.7 세포주에 대한 항염증 효과**  
박소현\*, 온지현, 오현화, 김영수. 전북대학교 식품공학과
- P08-213 Antioxidant Effect from the Viscera peptides of *Turbo cornutus***  
Junseong Kim\*, Eun-A Kim, Narae Kang, Seong-Yeong Heo, Soo-Jin Heo. Jeju Research institute, Korea Institute of Ocean Science & Technology
- P08-214 Physicochemical characteristics of major domestic garlic varieties and changes in physiologically**

active substances during aged

Seung Hee Yoo\*, Gun Su Cha, Dong-Gyu Kim, Min Jung Kang. Namhae Garlic Research Institute

- P08-215 **Effect of Beneficial Bacteria and Harmful Components on the Functionality of Domestic Traditional *Cheonggukjang***  
Byung-Min Oh\*, Kyung Eun Moon, Hyeon Hwa Oh, Geun-Seoup Song. Department of Food Science and Technology
- P08-216 **죽여 및 가자육 추출물의 총 페놀성분 함량 및 항산화 활성**  
이재학\*, 이은정, 유근형. (주)에드바이오텍 식의약사업본부 기능성소재개발팀
- P08-217 **Antioxidant and Antidiabetic Activity of Extracts from Medicinal Plants**  
Seul-Ki Park<sup>1\*</sup>, Hee-Won Lee<sup>1</sup>, Sung-Hyen Lee<sup>2</sup>, Bo-Ram Park<sup>1</sup>, Chan-Soon Park<sup>1</sup>, Shin-Young Park<sup>1</sup>.  
<sup>1</sup>Fermented Processing Food Science Division, National Institute of Agricultural Sciences, RDA, <sup>2</sup>Functional Food Division, National Institute of Agricultural Sciences, RDA
- P08-218 **Immune-enhancing Effect of *Artemisia gmelinii* in Immunosuppressed Mice following Cyclophosphamide Treatment**  
Ju Hye Song<sup>1,2\*</sup>, Kyungmin Lim<sup>1,2</sup>, Gun-Dong Kim<sup>2</sup>, So-Young Lee<sup>1,2</sup>, Hee Soon Shin<sup>1,2</sup>. <sup>1</sup>Department of Food Biotechnology, Korea University of Science and Technology, <sup>2</sup>Aging and Metabolism Research Group, Korea Food Research Institute
- P08-219 ***Camellia sinensis* L. extracts alleviate inflammation *in vitro* and *in vivo* chronic obstructive pulmonary disease model**  
Dong-Uk Shin<sup>1,2\*</sup>, Ji-Eun Eom<sup>3</sup>, Hyeon-Ji Song<sup>2,4</sup>, Sun Young Jung<sup>1,2</sup>, Thi Van Nguyen<sup>5</sup>, Kyung Min Lim<sup>1,2</sup>, Ok Hee Chai<sup>5</sup>, Hyun-Jin Kim<sup>6,7</sup>, Gun-Dong Kim<sup>2</sup>, Hee Soon Shin<sup>1,2</sup>, So-Young Lee<sup>1,2</sup>. <sup>1</sup>Department of Food Biotechnology, Korea University of Science and Technology, <sup>2</sup>Division of Food Functionality Research, Korea Food Research Institute, <sup>3</sup>Food Function Infrastructure Team, Korea Food Research Institute, <sup>4</sup>Department of Food Science and Technology, Jeonbuk National University, <sup>5</sup>Department of Anatomy, Institute of Medical Science, Jeonbuk National University Medical School, <sup>6</sup>Division of Applied Life Science (BK21 Four), Department of Food Science and Technology, Institute of Agriculture and Life Science, Gyeongsang National University, <sup>7</sup>EZmass. Co., Ltd.
- P08-220 **Anti-obesity Effect of Burdock Extracts Prepared by Different Treatment Methods on High Fat Diet-induced Obesity in C57BL/6J Mice**  
Jae Ran Kang<sup>1\*</sup>, Min Jung Kang<sup>1</sup>, Shin Jea Park<sup>2</sup>, Dong Min Chung<sup>2</sup>, Da Won Kang<sup>3</sup>, Jung Hye Shin<sup>1</sup>.  
<sup>1</sup>Namhae Garlic Research Institute, <sup>2</sup>ShinWoo co., <sup>3</sup>Department of Physiology, College of Medicine, Gyeongsang National University
- P08-221 ***Phaseolus radiatus* extract increases nitric oxide production in human endothelial cells**  
Seonhwa Song<sup>1\*</sup>, Minji Shin<sup>1</sup>, Sunghee Jeon<sup>1</sup>, Geum-Hwa Lee<sup>2</sup>, Young Youn<sup>1</sup>. <sup>1</sup>Imsil Cheese & Food Research Institute, <sup>2</sup>Jeonbuk National University Hospital
- P08-222 **Comparison of Physiological Activities of Burdock Ethanol Extracts with Different Treatment Methods**  
Jae Ran Kang<sup>1\*</sup>, Shin Jea Park<sup>2</sup>, Dong Min Chung<sup>2</sup>, Jung Hye Shin<sup>1</sup>. <sup>1</sup>Namhae Garlic Research Institute, <sup>2</sup>ShinWoo Co.
- P08-223 **Exploring the Possibility of Maintaining Freshness of Abalone using Water Extract from Medicinal Herbs**  
Jae Ran Kang\*, Gyeong Min Kim, Jung Hye Shin. Namhae Garlic Research Institute
- P08-224 **Phlorofucofuroeckol A isolated from *Ecklonia cava* inhibited fibrotic responses to block TGF- $\beta$  receptor and their downstream signaling**  
Seong-Yeong Heo\*, Nalae Kang, Eun-A Kim, Junseong Kim, Areumi Park, Yeon-Ji Lee, Ji-Yeon Hyeon, Soo-Jin Heo. Jeju Marine Research Center, Korea Institute of Ocean Science & Technology
- P08-225 **Antimicrobial and Antioxidant Activities of *Dendropanax morbiferus* Extracts with Different Ethanol Concentrations**  
Gyeong Min Kim\*, Jae Ran Kang, Jung Hye Shin. Namhae Garlic Research Institute
- P08-226 **Antioxidant and Antiinflammatory Activities of Polysaccharides Isolated from *Aloe saponaria* Haw Grown in Namhae**  
Gyeong Min Kim\*, Jae Ran Kang, Jung Hye Shin. Namhae Garlic Research Institute
- P08-227 **Glycolaldehyde, an Advanced Glycation End Products Precursor, Induces Apoptosis via ROS-Mediated Mitochondrial Dysfunction in Renal Mesangial Cells**  
Min Ji Gu<sup>1,2\*</sup>, Ju-Young Hyon<sup>3</sup>, Hee-Weon Lee<sup>1</sup>, Eun Hee Han<sup>3</sup>, Yoonsook Kim<sup>1</sup>, Youn-Soo Cha<sup>2</sup>, Sang Keun Ha<sup>1,4</sup>. <sup>1</sup>Division of Food Functionality Research, Korea Food Research Institute, <sup>2</sup>Department of Food Science and Human Nutrition, Jeonbuk National University, <sup>3</sup>Research Center for Bioconvergence Analysis, Korea Basic Science Institute, <sup>4</sup>Division of Food Biotechnology, University of Science and Technology

- P08-228 **Solubilization of  $\beta$ -glucan and assessment of its cognitive effects as a dietary supplement in offspring of C57BL/6J mice**  
Dorsilla Anono Katimbwa\*, Jinkyu Lim. School of Food Science and Biotechnology, College of Agriculture and Biotechnology, Kyungpook National University.
- P08-229 **Fermented Extracts of *Tenebrio molitor* larvae Replacement for Casein Alters Hepatic Proteomic Profiles in Type 2 Diabetic Mice**  
Asli Turkyilmaz, Hae-In Lee, Mi-Kyung Lee\*. Department of Food and Nutrition, Sunchon National University
- P08-230 **Biological Activity of Sea Cucumbers According to Extraction Methods**  
Minhui Oh<sup>1\*</sup>, Jiwon Ha<sup>1</sup>, Haeun Joo<sup>1</sup>, Seoyeon Lee<sup>1</sup>, Kyungyoung Yoon<sup>2</sup>, Jaemin Seo<sup>2</sup>, Sojung Kim<sup>1</sup>.  
<sup>1</sup>Marine Industry Research institute for East sea rim, <sup>2</sup>Department of Food and Nutrition, Yeungnam University
- P08-231 **Anti-inflammatory effect of Cinnamic acid on dextran sulfate sodium-induced colitis in mice**  
Soyeon Hong\*, Chu Won Nho, Gyhye Yoo. Smart Farm Research Center, Gangneung Institute of Natural Products Korea Institute of Science and Technology
- P08-232 ***Pediococcus pentosaceus* KF159 ameliorates house dust mite induced-atopic dermatitis-like clinical symptoms through promotes regulatory T cell-mediated IL10 production**  
Ji-Eun Eom<sup>1\*</sup>, Dong-Uk Shin<sup>2,3</sup>, Hyeon-Ji Song<sup>2,4</sup>, Kyungmin Lim<sup>2,3</sup>, Gun-Dong Kim<sup>2</sup>, Hee Soon Shin<sup>2,3</sup>, So-Young Lee<sup>2,3</sup>. <sup>1</sup>Food Functionality Infrastructure Team, Korea Food Research Institute, <sup>2</sup>Aging and Metabolism Research Group, Korea Food Research Institute, <sup>3</sup>Department of Food Biotechnology, Korea University of Science and Technology, <sup>4</sup>Department of Food Science and Technology, Jeonbuk National University
- P08-233 **Sleep-promoting effects of a major marine polyphenol triphlorethol A**  
Minseok Yoon<sup>1\*</sup>, Min Young Um<sup>1</sup>, Suengmok Cho<sup>2</sup>. <sup>1</sup>Korea Food Research Institute, <sup>2</sup>Department of Food Science and Technology/Institute of Food Science, Pukyong National University
- P08-234 ***Lithospermum erythrorhizon* complexes extract prevents dexamethasone-induced muscle atrophy in mice**  
Ahyoung Yoo, Tae-Youl Ha, Jiyun Ahn\*. Aging and Metabolism Research Group, Korea Food Research Institute
- P08-235 **Ginseng berry improves hyperglycemia by changing liver metabolites related with mitochondrial function and glucose metabolisms in diet-induced obese mice**  
Kyunhee Lee<sup>1,2\*</sup>, Moonju Hong<sup>1,2</sup>, Haeng Jeon Hur<sup>1</sup>, Myung-Sunny Kim<sup>1,2</sup>. <sup>1</sup>Research group of Personalized Diet, Korea Food Research Institute, <sup>2</sup>Department of Food Biotechnology, University of Science & Technology
- P08-236 **Inhibitory Effects of HT080 on Testosterone Propionate-Induced Benign Prostatic Hyperplasia in Rats**  
Myunghee Kim<sup>1\*</sup>, Jun Yin<sup>1</sup>, Chang-Won Pyun<sup>1</sup>, Mi-Yeon Kim<sup>1</sup>, Jungbin Song<sup>2</sup>, Hocheol Kim<sup>2</sup>. <sup>1</sup>NEUMED R&BD Institute, NeuMed Inc., <sup>2</sup>Department of Herbal Pharmacology, College of Korean Medicine, Kyung Hee University,
- P08-237 **Ginger Extract Ameliorates Lipid Accumulation and Endoplasmic Reticulum Stress of Adipose Tissues by SIRT-1-PGC-1 $\alpha$  Signaling via AMPK Activation in ob/ob mice**  
Hwa-Jin Kim\*, Han-Jung Chae, Geum-Hwa Lee, Soon-Yeon Jeong, Seon-Ah Park, Hwa-Young Lee, The-Hiep Hoang, Young-Je Lim, Ji-Hyun Kim. Non-Clinical Evaluation Center, Biomedical Research Institute, Jeonbuk National University Hospital
- P08-238 **Isoquercetin ameliorates benign prostatic hyperplasia via IGF-1/PI3K/Akt/mTOR pathway**  
Young-Jin Choi<sup>1,2,3\*</sup>, Meiqi Fan<sup>4</sup>, Nishala Erandi Wedamulla<sup>1,2,3,5</sup>, Zhang Qun<sup>1,2</sup>, Eun-Kyung Kim<sup>1,2,3,6</sup>.  
<sup>1</sup>Department of Food Science and Nutrition, Dong-A University, Korea, <sup>2</sup>Department of Health Sciences, The Graduate School of Dong-A University, <sup>3</sup>Center for Silver-targeted Biomaterials, Brain Busan 21 Plus program, Dong-A University, <sup>4</sup>Division of Food Bioscience, Konkuk University, <sup>5</sup>Department of Export Agriculture, Faculty of Animal Science and Export Agriculture, Uva Wellassa University, Sri Lanka, <sup>6</sup>Center for Food & Bio Innovation, Dong-A University
- P08-239 **레몬머틀 단일 소재 및 복합 소재의 뇌 염증에 관한 영향**  
신동현, 방호정, 공미란\*. 주식회사 코지랩
- P08-240 ***Codonopsis lanceolate* Root Extract Inhibits  $\alpha$ -MSH-induced Tyrosinase Activity and Melanin Production in B16F10 Melanoma Cells**  
Jisoo Nam<sup>1\*</sup>, Wonchul Lim<sup>2</sup>, Tae-Gye Lim<sup>1,2</sup>. <sup>1</sup>Department of Food Science & Biotechnology, Sejong University, <sup>2</sup>Department of Food Science & Biotechnology, and Carbohydrate Bioproduct Research Center, Sejong University
- P08-241 **Glyoxal-Lysine Dimer, an Advanced Glycation End Product, Induces Oxidative Damage and**

### Inflammatory Response by Interacting with RAGE

Hee-Weon Lee<sup>1\*</sup>, Min Ji Gu<sup>1</sup>, Yoonsook Kim<sup>1</sup>, Jee-Young Lee<sup>3</sup>, Seungju Lee<sup>3</sup>, In-Wook Choi<sup>1</sup>, Sang Keun Ha<sup>1,2</sup>. <sup>1</sup>Division of Food Functionality Research, Korea Food Research Institute, <sup>2</sup>Division of Food Biotechnology, University of Science and Technology, <sup>3</sup>Molecular Design Team, New Drug Development Center, Daegu Gyeongbuk Medical Innovation Foundation

- P08-242 **Blended extract of sorghum, adzuki bean, and finger millet attenuates hypertension in spontaneously hypertensive rats**  
Damin Yun<sup>1</sup>, Eun Woo Jeong<sup>1</sup>, Byungkwon Han<sup>1</sup>, Hyun Joo Kim<sup>2</sup>, Hyeon Gyu Lee<sup>1\*</sup>. <sup>1</sup>Department of Food and Nutrition, Hanyang University, <sup>2</sup>Department of Central Area Crop Science, National Institute of Crop Science
- P08-243 **Screening and Evaluation of Active Compounds in Polyphenol Mixtures by Offline-HPLC and its Application**  
Zhaoyang Wu<sup>1\*</sup>, Soo Kyeong Lee<sup>1,2</sup>, Sungmo Kang<sup>1</sup>, Sangyoon Lee<sup>1</sup>, Saba Noreen<sup>1</sup>, Soon Sung Lim<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Nutrition, Hallym University, <sup>2</sup>Institute of Korean Nutrition, Hallym University
- P08-244 **The activity alcohol dehydrogenase and acetaldehyde dehydrogenase of white ginseng, red ginseng, black ginseng**  
Ji Hye Lee<sup>\*</sup>, Ye Jeong Jeon, Tae Young Kim, Bo Hee Park. Institute of Jinan Red Ginseng
- P08-245 **Combination Therapy of Probiotics with Anti-PD-1 Treatment Improves Anti-Tumor Efficacy and Immune-Related Adverse Events in Breast Cancer**  
Hyeoon Kim<sup>1\*</sup>, Ji-Won Heo<sup>1</sup>, Rira Oh<sup>1</sup>, Sangjun Park<sup>2</sup>, Myeong Soo Park<sup>2</sup>, Sung-Eun Kim<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Sookmyung Women's University, <sup>2</sup>Research Center, BIFIDO Co., Ltd.
- P08-246 **Therapeutic Effects of *Chaenomeles sinensis* (Thouin) Koehene Extracts on Mouse Models of Respiratory Disorders.**  
Eun Yeong Lim<sup>1\*</sup>, Dong-Uk Shin<sup>1,2</sup>, Gun-Dong Kim<sup>1</sup>, So-Young Lee<sup>1,2</sup>, Hee Soon Shin<sup>1,2</sup>. <sup>1</sup>Division of Food Functionality Research, Korea Food Research Institute, <sup>2</sup>University of Science and Technology
- P08-247 **Effect of LPS-induced RAW 264.7 cells on IL-6, TNF- $\alpha$ , and NO production of *Cephalotaxus harringtonia* leaf extract**  
Yun-Seo Oh<sup>1\*</sup>, Kyung-Yun Kang<sup>1,2</sup>, Beom-Gyun Jeong<sup>1</sup>, Jeong-Ho Kim<sup>1</sup>, Jun-Ki Park<sup>1</sup>, Ho-Yeol Jang<sup>1</sup>, Jin-Yeong Choi<sup>2</sup>, Kyung-Wuk Park<sup>1</sup>. <sup>1</sup>Suncheon Research Center For Bio Health Care, <sup>2</sup>FON Co., Ltd.
- P08-248 **Effect of different processing methods on the anti-diabetic activity of blended grains in streptozotocin-nicotinamide induced type 2 diabetic rats.**  
Damin Yun<sup>1</sup>, Eun Woo Jeong<sup>1</sup>, Areum Han<sup>1</sup>, Hyun Joo Kim<sup>2</sup>, Hyeon Gyu Lee<sup>1\*</sup>. <sup>1</sup>Department of Food and Nutrition, Hanyang University, <sup>2</sup>Department of Central Area Crop Science, National Institute of Crop Science
- P08-249 **Comparison of antioxidant efficacy of lava seawater using Jeju plant extracts**  
Areumi Park<sup>\*</sup>, Nalae Kang, Yeon-Ji Lee, Ji-Yeon Hyeon, Soo-Jin Heo. Jeju Marine Research Center, Korea Institute of Ocean Science & Technology
- P08-250 **재배조건에 따른 스마트팜 새싹인삼의 유효성분 함량 변화**  
양재훈\*, 김희정, 박민화, 윤나래, 정이형, 장한수. (재)전북바이오융합산업진흥원
- P08-251 **Ameliorative Effect of Wasp Venom on Alzheimer's Phenotypes in 5xFAD Transgenic Mice**  
Yoon Ah Jeong<sup>1</sup>, Hyun Seok Yun<sup>2</sup>, Yoonsu Kim<sup>3</sup>, Ji Hyeong Chae<sup>4\*</sup>, Chan Ho Jang<sup>4</sup>, Ji Sun Lim<sup>5</sup>, Hyo Jung Kim<sup>1</sup>, Jisun Oh<sup>6</sup>, Jong-Sang Kim<sup>2,3,4</sup>. <sup>1</sup>Department of Korean Medicine Development, National Institute for Korean Medicine Development, <sup>2</sup>School of Food Science and Biotechnology, Kyungpook National University, <sup>3</sup>Department of Integrative Biology, Kyungpook National University, <sup>4</sup>Institute of Agricultural Science and Technology, Kyungpook National University, <sup>5</sup>Department of Nuclear Medicine, Keimyung University Dongsan Hospital, <sup>6</sup>New Drug Development Center, Daegu-Gyeongbuk Medical Innovation Foundation
- P08-252 **Optimization of Enzyme-Assisted Extraction for Ginger (*Zingiber officinale*) Leaf using Response Surface method and its of Immunomodulating activity Effects**  
Han Bi Kim<sup>\*</sup>, Hee Sun Yang, Ae-Jin Choi, Jeong-Sook Choe. Functional Food & Nutrition Division, National Academy of Agricultural Science, Rural Development Administration
- P08-253 **월계수 잎의 추출 조건에 따른 지표물질 함량 분석**  
김희정\*, 양재훈, 박민화, 정이형. (재)전북바이오융합산업진흥원
- P08-254 **우리나라와 유럽, 캐나다의 건강기능식품 기능성 내용 비교 연구**  
최원희\*, 우혜란, 이미영, 권광일, 이해영. 식품의약품안전평가원
- P08-255 **Antioxidant and Prebiotic Activity of Pectic Polysaccharides from Apple**  
Jeong Jin Hong<sup>\*</sup>, So Hee Gu, Jin Hyang Son, Hyun Su Kim, Ju Youl Oh, Eun Ho Jeong. Apple Utilization Research Institute, Gyeongsangnam-Do Agricultural Research and Extension Services



- P08-256 UVB로 손상된 피부섬유아세포에서 니코틴아마이드와 배초향 추출물의 보호작용에 대한 상승효과  
백승주<sup>1\*</sup>, 허희진<sup>1</sup>, 김영화<sup>2</sup>, 이준수<sup>1</sup>. <sup>1</sup>충북대학교 식품생명공학과, <sup>2</sup>경성대학교 식품응용공학부
- P08-257 꾸지뽕 가지 에탄올 추출물이 지방분화에 미치는 영향  
박성준, 조영임, 공미란\*. 주식회사 코지랩
- P08-258 Inhibitory Effects of Saucerneol D Isolated from *Saururus chinensis* on Osteoclastogenesis  
Rira Oh\*, Ji-Won Heo, Sung-Eun Kim. Department of Food and Nutrition, Sookmyung Women's University
- P08-259 감태 및 감태복합추출물의 항균 활성  
박성준, 방호정, 한정희, 공미란\*. 주식회사 코지랩
- P08-260 HepG2 세포에서 프로바이오틱스 균주의 비알코올성 지질축적 개선 효과  
안민주<sup>1\*</sup>, 허희진<sup>1</sup>, 이지연<sup>2</sup>, 강창호<sup>2</sup>, 이준수<sup>1</sup>. <sup>1</sup>충북대학교 식품생명공학과, <sup>2</sup>(주)메디오젠
- P08-261 수국 추출물을 활용한 반려동물의 수면 개선 및 기억력 개선 활성  
신동현, 방호정, 조영임, 공미란\*. 주식회사 코지랩
- P08-262 *Amomi Fructus* Extract Improves Dextran Sulfate Sodium-Induced Colitis in C57BL/6 mice  
Hyeon-Ji Song<sup>1,2\*</sup>, Young In Kim<sup>1</sup>, Gun-Dong Kim<sup>1</sup>, So-Young Lee<sup>1,3</sup>, Hee Soon Shin<sup>1,3</sup>. <sup>1</sup>Aging and Metabolism Research Group, Korea Food Research Institute, <sup>2</sup>Department of Food Science and Technology, Jeonbuk National University, <sup>3</sup>Department of Food Biotechnology, Korea University of Science and Technology
- P08-263 Preventive Effects of Corni Fructus Water Extract on Oxidative Stress-Mediated Muscle Atrophy in C2C12 Mouse Skeletal Muscle Myotubes  
Sung Ok Kim<sup>1,6\*</sup>, Ji Myung Choi<sup>1,2</sup>, Ji-Suk Jeung<sup>3</sup>, Yung Hyun Choi<sup>4,5</sup>, Eunjoo H. Lee<sup>6</sup>. <sup>1</sup>Department of Food and Nutrition, College of Life and Health, Kyungsung University, <sup>2</sup>Department of Food Science and Nutrition, Pusan National University, <sup>3</sup>Gurye-gun Agricultural Center and Gurye Wild Flower Institute, <sup>4</sup>Anti-Aging Research Center, Dong-eui University, <sup>5</sup>Department of Biochemistry, College of Korean Medicine, Dong-eui University, <sup>6</sup>Graduate School of East-West Medical Science, Kyung Hee University
- P08-264 Humulone promotes collagen synthesis by activating the TGF- $\beta$ /Smad signaling pathway in the human dermal fibroblast  
Yurim Lee<sup>1</sup>, Taewon Kim<sup>1\*</sup>, Minae Kim<sup>1</sup>, Hunseong Kim<sup>1</sup>, Chae-Eun Yeo<sup>1</sup>, Dongyup Hahn<sup>1,2</sup>, Nam Joo Kang<sup>3</sup>. <sup>1</sup>School of Food Science and Biotechnology, Kyungpook National University, <sup>2</sup>Department of Integrative Biology, Kyungpook National University, <sup>3</sup>Department of Biotechnology, The Catholic University of Korea,
- P08-265 Mycoproteins protect chemical-induced inflammatory signals: in vitro studies  
Daseul Lee\*, Jun Heo, Seung-Beom Hong. National Institute of Agricultural Sciences
- P08-266 *Podocarpus macrophyllus* Extract Relieves Cigarette Smoke Extract- and Porcine Pancreas Elastase-Induced Chronic Obstructive Pulmonary Disease  
Ha-Jung Kim<sup>1,2\*</sup>, Eun-Yeong Lim<sup>1</sup>, Ji-Eun Eom<sup>3</sup>, Gun-Dong Kim<sup>1</sup>, So-Young Lee<sup>1</sup>, Hee-Soon Shin<sup>1</sup>. <sup>1</sup>Aging and Metabolism Research Group, Korea Food Research Institute, <sup>2</sup>Department of Food Science and Technology, Jeonbuk National University, <sup>3</sup>Food functionality Infrastructure Team, Korea Food Research Institute
- P08-267 Hepatoprotective Effect of Fermented *Protaetia brevitarsis* on Ethanol-Induced C57BL/6 Mice  
Hyo Lim Lee\*, Jong Min Kim, Min Ji Go, Tae Yoon Kim, Seum Gyum Joo, Ju Hui Kim, Han Su Lee, Ho Jin Heo. Division of Applied Life Science (BK21), Institute of Agriculture and Life Science, Gyeongsang National University
- P08-268 Effect of the Red Ginseng against PM<sub>2.5</sub>-induced Pulmonary Dysfunction in BALB/C Mice  
Ju Hui Kim\*, Jong Min Kim, Hyo Lim Lee, Min Ji Go, Tae Yoon Kim, Seung Gyum Joo, Han Su Lee, Ho Jin Heo. Division of Applied Life Science (BK21), Institute of Agriculture and Life Science, Gyeongsang National University
- P08-269 Anti-amnestic Effect of Korean Red Pine Bark Extract on TMT-induced Cognitive Impairment Mice  
Min Ji Go<sup>1\*</sup>, Jong Min Kim<sup>1</sup>, Hyo Lim Lee<sup>1</sup>, Tae Yoon Kim<sup>1</sup>, Seung Gyum Joo<sup>1</sup>, Ju Hui Kim<sup>1</sup>, Han Su Lee<sup>1</sup>, Dea-Ok Kim<sup>2</sup>, Ho Jin Heo<sup>1</sup>. <sup>1</sup>Division of Applied Life Science (BK21), Institute of Agriculture and Life Science, Gyeongsang National University, <sup>2</sup>Department of Food Science and Biotechnology, Kyung Hee University
- P08-270 *In vitro* Efficacy Evaluation of *Eucommia ulmoides* Leaves  
Han Su Lee\*, Jong Min Kim<sup>1</sup>, Hyo Lim Lee<sup>1</sup>, Min Ji Go<sup>1</sup>, Tae Yoon Kim<sup>1</sup>, Seung Gyum Joo<sup>1</sup>, Ju Hui Kim<sup>1</sup>, Uk Lee<sup>2</sup>, Ho Jin Heo<sup>1</sup>. <sup>1</sup>Division of Applied Life Science (BK21), Institute of Agriculture and Life Science, Gyeongsang National University, <sup>2</sup>Division of Special Forest Resources, Department of Forest Bio-resources, National Institute of Forest Science
- P08-271 Comprehensive assessment of the estrogenic activity in resin based dental composites

Yu-Jin Ahn<sup>1\*</sup>, Hyeyeong Seo<sup>2</sup>, Huiwon Seo<sup>2</sup>, Seok-Hee Lee<sup>2</sup>, Won-Jun Shon<sup>1</sup>, Yooheon Park<sup>2</sup>. <sup>1</sup>Department of Conservative Dentistry, Dental research Institute and School of Dentistry, Seoul National University, <sup>2</sup>Department of Food Science and Biotechnology, Dongguk University

- P08-272 The screening of biomarkers in chronic kidney disease**  
Heejung Park<sup>1\*</sup>, Bumsik Kim<sup>2</sup>, Woogyung Kim<sup>3</sup>. <sup>1</sup>Dept. of Food and Nutrition, Sangmyung University, <sup>2</sup>Dept. of Food and Nutrition, Yeonsung University, <sup>3</sup>Dept. of Food and Nutrition, Dankook University
- P08-273 Gender differences in gut health and immunity of aged mice fed high salt diet**  
Saoraya Chanmuang<sup>1\*</sup>, Quynh-An Nguyen<sup>2</sup>, Sun Lee<sup>2</sup>, Hee Soon Shin<sup>3</sup>, So-Young Lee<sup>3</sup>, Gun-Dong Kim<sup>3</sup>, Young-Do Nam<sup>3</sup>, Eun-Ji Song<sup>3</sup>, Mi-Jeong Sung<sup>3</sup>, Kyung-Sik Ham<sup>4</sup>, Hyun-Jin Kim<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Technology, Gyeongsang National University, <sup>2</sup>Division of Applied Life Sciences (BK21 Four), Gyeongsang National University, <sup>3</sup>Korea Food Research Institute, <sup>4</sup>Department of Food Engineering, Mokpo National University
- P08-274 Antioxidant Activities and anti-Hepatitis A Virus Activity of Extracts from *Ecklonia cava***  
Ye-Sol Kim<sup>1</sup>, Ki An Kim<sup>2</sup>, Hee Min Lee<sup>1\*</sup>. <sup>1</sup>World Institute of Kimchi, <sup>2</sup>Marine Biotechnology Research Center
- P08-275 Inhibition of COX-2, iNOS and Cytokine Inflammation Signaling Pathway by Protocatechuic acid on Proinflammatory Responses in LPS-Stimulated Raw 264.7 Macrophages**  
Hye-Jin Park<sup>1</sup>, Da-Eun Jeong<sup>1</sup>, Chae-Won Han<sup>1</sup>, Gi-Un Cho<sup>1</sup>, Jong-Seok Kim<sup>1</sup>, Myung-Uk Kim<sup>2</sup>, Young-Je Cho<sup>1\*</sup>. <sup>1</sup>School of Food Science & Biotechnology/Specialty Food Institute, Kyungpook National University, <sup>2</sup>Marine Industry Research institute for East sea rim
- P08-276 Inhibition of p-65, COX-2, iNOS and Cytokine Inflammation Signaling Pathway by Purified iso-orientin from *Oplismenus undulatifolius* on Proinflammatory Responses in LPS-Stimulated Raw 264.7 Macrophages**  
Eun-Ho Lee<sup>1</sup>, Hye-Jin Park<sup>1</sup>, Da-Eun Jeong<sup>1</sup>, Chae-Won Han<sup>1</sup>, Gi-Un Cho<sup>1</sup>, In-Kyu Kang<sup>2</sup>, Young-Je Cho<sup>1\*</sup>. <sup>1</sup>School of Food Science & Biotechnology/Specialty Food Institute, Kyungpook National University, <sup>2</sup>Department of Horticultural Science, Kyungpook National University
- P08-277 Antimelanogenic effects of kaempferol from *Pyrrosia lingua* as oriental medicine by down-regulation of MITF mediated melanogenesis signaling pathway in αMSH stimulated B16F10 mouse melanoma cells**  
Shin-Hyup Hong, Eun-Ho Lee, Hye-Jin Park, Da-Eun Jeong, Chae-Won Han, Jong-Seok Kim, Byung-Oh Kim, Young-Je Cho\*. School of Food Science & Biotechnology/Specialty Food Institute, Kyungpook National University
- P08-278 The anti-wrinkle activity by regulating MMPs, TGFβ/Smad, and NF-κB signaling in UVB-irradiated human dermal fibroblast of extracts from *Pyrrosia lingua***  
Shin-Hyup Hong, Eun-Ho Lee, Hye-Jin Park, Da-Eun Jeong, Chae-Won Han, Jong-Seok Kim, Byung-Oh Kim, Young-Je Cho\*. School of Food Science & Biotechnology/Specialty Food Institute, Kyungpook National University
- P08-279 The elevation on anti-wrinkle activity in human skin Fibroblasts cell (CCD-986sk) of *Oplismenus undulatifolius* by elicitor treatment**  
Eun-Ho Lee<sup>1</sup>, Hye-Jin Park<sup>1</sup>, Da-Eun Jeong<sup>1</sup>, Chae-Won Han<sup>1</sup>, Gi-Un Cho<sup>1</sup>, Jong-Seok Kim<sup>1</sup>, Myung-Uk Kim<sup>2</sup>, Young-Je Cho<sup>1\*</sup>. <sup>1</sup>School of Food Science & Biotechnology/Specialty Food Institute, Kyungpook National University, <sup>2</sup>Marine Industry Research institute for East sea rim
- P08-280 Anti-oxidation, Anti-wrinkle and Pore-tightening activities of phenolics compounds from *Selaginella martensii***  
Hee-Taek Won, Geun-A Kim, Jung-Ha Kim, Bo-Hwa Lee, Hye-Jeong Lee, Hye-Jin Park, Young-Je Cho\*. School of Food Science & Biotechnology/Specialty Food Institute, Kyungpook National University
- P08-281 Effects of *Gastrodia elata* Extract on Antioxidant, Anti-inflammation *in vitro* in Human skin Keratinocyte and RAW264.7 Cells**  
Hyunhee Kim\*, Seung-Ho Park, Ji-Hoon Jeong, Min-Jeong Kong, Jihyun Son, Jieun Jung, Kyung-Chul Choi. Department of Biomedical Sciences, Asan Medical Institute of Convergence Science and Technology, Asan Medical Center, University of Ulsan College of Medicine
- P08-282 Celluclast extracts from *Saccharina japonica* alleviate skin photoaging in UVB-exposed HaCaT cells**  
Si Won Yoo<sup>1\*</sup>, Ban Seok Ahn<sup>1</sup>, Jong Min Choi<sup>1</sup>, Eui Jeong Han<sup>2</sup>, Kirinde Gedara Isuru Sandanuwan Kirindage<sup>3</sup>, Arachchige Maheshika Kumari Jayasinghe<sup>3</sup>, Ginnae Ahn<sup>1,3</sup>. <sup>1</sup>Department of Marine Bio-Food Sciences, Chonnam National University, <sup>2</sup>Research Center for Healthcare and Biomedical Engineering, Chonnam National University, <sup>3</sup>Department of Food Technology and Nutrition, Chonnam National University
- P08-283 Anti-Proliferating Effect of Brown Algae Extracts against Oral Carcinoma Cell Lines**  
Seo Yun Jung<sup>1</sup>, Sook-Young Lee<sup>1</sup>, Seul Ah Lee<sup>1</sup>, Eunseo Choi<sup>2</sup>, Chun Sung Kim<sup>1\*</sup>. <sup>1</sup>Marine Healthcare

Research & Evaluation Center, Chosun University, <sup>2</sup>DAEYOUNG GLOBAL Co.

- P08-284 **Anti-diabetic, Anti-obesity and Antioxidant effect of *Meretrix lusoria* Protamex Hydrolysate in cultured L-6 Myocytes, 3T3-L1 Adipocytes and RIN-5F Cells**  
Ramakrishna Chilakala\*, Min-Ju Kim, Sun Hee Cheong. Department of Marine Bio Food Science, College of Fisheries and Ocean Science, Chonnam National University
- P08-285 **Anti-inflammatory activities in whole, flesh, and peels of *Codonopsis lanceolata* roots**  
In Guk Hwang\*, Hee Sun Yang, Ji Yeong Kim, Hae Ju Kang. Department of Agrofood Resources, National Institute of Agricultural Sciences, Rural Development Administration
- P08-286 **Anti-inflammatory Activities of *Codonopsis Lanceolata* Trautv. Buds Extract**  
Chae Won Lee\*, Ji Yeong Kim, Hae Ju Kang, In Guk Hwang. Department of Agrofood Resources, National Institute of Agricultural Sciences, Rural Development Administration
- P08-287 ***In-vitro* Anti-diabetic, Anti-obesity and Antioxidant effect of Flavourzyme Enzymatic Hydrolysate prepared from *Meretrix lusoria***  
Min-Ju Kim\*, Ramakrishna Chilakala, Sun Hee Cheong. Department of Marine Bio Food Science, College of Fisheries and Ocean Science, Chonnam National University
- P08-288 **Ameliorated effect of *Meretrix lusoria* Protamex Enzymatic Hydrolysate (ML-Pro) on Hyperglycemia and Obesity disorders in *ob/ob* mice**  
Min-Ju Kim\*, Ramakrishna Chilakala, Sun Hee Cheong. Department of Marine Bio Food Science, College of Fisheries and Ocean Science, Chonnam National University
- P08-289 **Laxative Effects of Gochujang Containing Different Bacterial Composition Against Loperamide-Induced Constipation in ICR Mice**  
Na-Yeon Kim<sup>1</sup>, Anna-Han<sup>1,2</sup>, Kyung-Ah Kim<sup>3</sup>, Su-Ji Jeong<sup>4</sup>, Hee-Jong Yang<sup>4</sup>, Youn-Soo Cha<sup>1,2\*</sup>. <sup>1</sup>Department of Food Science and Human Nutrition & Obesity Research Center, Jeonbuk National University, <sup>2</sup>K-Food Research Center, Jeonbuk National University, <sup>3</sup>Department of Food and Nutrition, Chungnam National University, <sup>4</sup>Microbial Institute for Fermentation Industry
- P08-290 **Comparison of different extraction solvents for characterization of antioxidant activity of *Inula helenium* root**  
Ji-Hyun Park\*, Chang-Hwan Jeon, Syng-Ook Lee. Department of Food science and Technology, Keimyung University
- P08-291 **Comparison of different extraction solvents for characterization of anti-inflammatory activity of *Inula helenium* root**  
Hyo-Seon Lee, Hyeon-Ji Yoon\*, Syng-Ook Lee. Department of Food science and Technology, Keimyung University
- P08-292 **A Study on the Biological Activity of *Nelumbo nucifera* Byproducts Mixed Extract**  
Yang-Suk Lee<sup>1</sup>, Nam-Woo Kim<sup>1</sup>, Ju-Yeon Hong<sup>2</sup>, Su-Jeong Seo<sup>1\*</sup>. <sup>1</sup>Department of Herbal Biotechnology, Daegu Haany University, <sup>2</sup>Department of food and nutrition, Daegu Haany University
- P08-293 **Ingredients and physiological activities of *Nelumbo nucifera* Sprout, Leaves, Seedpod Mixed Extract**  
Su-Jeong Seo<sup>1</sup>, Tae-Gyung Sung<sup>1</sup>, Ga-Eun Park<sup>2</sup>, Yang-Suk Lee<sup>1\*</sup>. <sup>1</sup>Department of Herbal Biotechnology, Daegu Haany University, <sup>2</sup>Human Cosmetic Co., Ltd.
- P08-294 **서동마를 활용한 고기능성 증숙 마 분말 제조**  
서영호<sup>1\*</sup>, 이서미<sup>1</sup>, 이가연<sup>1</sup>, 박성민<sup>2</sup>, 김혜지<sup>2</sup>. <sup>1</sup>원광보건대학교 산학협력단, <sup>2</sup>업지식품
- P08-295 **Antioxidant Activity of Methanol Extract from *Phragmites communis* Rhizomes as a Functional Materials**  
Yang-Suk Lee<sup>1\*</sup>, Jong-Jin Cho<sup>1</sup>, Min-Jung Jang<sup>2</sup>, Ju-Yeon Hong<sup>3</sup>, Nam-Woo Kim<sup>1</sup>. <sup>1</sup>Department of Herbal Biotechnology, Daegu Haany University, <sup>2</sup>Department of Cosmetics and Advanced Materials, Dongseo University, <sup>3</sup>Department of Food and nutrition, Daegu Haany University
- P08-296 **곤충을 이용한 여드름균(*Cutibacterium acnes*)에 대한 항균 활성**  
장다현\*, 박주완, 박나운, 배성문, 유병만, 정경희, 김종원, 이슬비, 이영한, 김영광. 경상남도농업기술원 유용곤충연구소
- P08-297 **Useful Ingredients and Antioxidant Activity of Magnolia Flower Tea Infusions Prepared under Different Infusion Conditions**  
Yang-Suk Lee<sup>1\*</sup>, Hak-Yeon Jeon<sup>2</sup>, Dong-Gyu Ha<sup>2</sup>, Tae-Gyung Sung<sup>1</sup>, Su-Jeong Seo<sup>1</sup>. <sup>1</sup>Department of Herbal Biotechnology, Daegu Haany University, <sup>2</sup>Hanmoe Native Grass & Flower Tea Institute
- P08-298 **Pinocembrin Prevents A $\beta$ -Induced Neuronal Apoptosis *via* GSK-3 $\beta$ /Wnt/ $\beta$ -Catenin Axis Regulated Mitochondrial Function**  
Jeong-Hyun Yoon<sup>1\*</sup>, Mira Jun<sup>1,2,3</sup>, Kumju Youn<sup>2</sup>. <sup>1</sup>Department of Health Sciences, The graduate School of Dong-A University, <sup>2</sup>Department of Food Science and Nutrition, Dong-A University, <sup>3</sup>Center for Food & Bio Innovation, Dong-A University

- P08-299 Inhibitory Effects of Fucoxanthin on Self Aggregation of A $\beta$  via Regulating Glutaminy Cyclase and Acetylcholinesterase Enzymes**  
Nayoung Lee<sup>1\*</sup>, Mira Jun<sup>1,2,3</sup>. <sup>1</sup>Department of Health Sciences, The graduate School of Dong-A University, <sup>2</sup>Department of Food Science and Nutrition, Dong-A University, <sup>3</sup>Center for Food & Bio Innovation, Dong-A University
- P08-300 Quercetin normalizes pulmonary pathophysiologies and behavioral abnormalities against diesel exhaust particles exposure**  
Sunyoung Jeong<sup>1,2\*</sup>, Sungryong Bae<sup>3</sup>, Jong-Hwa Lee<sup>1,2</sup>, Jung-Heun Ha<sup>4,5</sup>. <sup>1</sup>Department of Human and Environmental Toxicology, University of Science and Technology, <sup>2</sup>Bioanalytical and Pharmacokinetic Research Group, Korea Institute of Toxicology, <sup>3</sup>Department of Fire Protection and Disaster Management, Chosun University, <sup>4</sup>Department of Food Science and Nutrition, Dankook University, <sup>5</sup>Research Center for Industrialization of Natural Neutralization, Dankook University
- P08-301 Discovery of Novel Dual Inhibitor of Cholinesterases from Brown Algae: *in Vitro* Studies Supported with *in Silico* Analysis**  
Seungeun Lee<sup>1\*</sup>, Hyelim Kim<sup>2</sup>, Eun-Kyung Kim<sup>2,3</sup>, Bokyung Lee<sup>2,3</sup>, Oh Yoen Kim<sup>1,3</sup>, Eunju Yoon<sup>2,3</sup>, Mok-Ryeon Ahn<sup>2,3</sup>, Mira Jun<sup>1,3,4</sup>. <sup>1</sup>Department of Health Sciences, The graduate School of Dong-A University, <sup>2</sup>Center for Silver-Targeted Biomaterials, Brain Busan 21 Plus Program, Graduate School, Dong-A University, <sup>3</sup>Department of Food Science and Nutrition, Dong-A University, <sup>4</sup>Center for Food & Bio Innovation, Dong-A University
- P08-302 Biological Activities of Bran Water Extract from Various Wheat (*Triticum aestivum* L.) Cultivars**  
Mina Kim<sup>\*</sup>, Kyeong-Hoon Kim, Jin Hee Park, Kyeong-Min Kim, Go Eun Lee, Yurim Kim, Chon-Sik Kang, Jiyoung Shon, Jong Min Ko. Wheat Research Team, National Institute of Crop Science, Rural Development Administration
- P08-303 Protective Effect of *Cuscuta Chinensis* Lam. against Glucose and Lipid Metabolism Disorders in Hyperglycemic Mice Receiving an Intracerebral Amyloid Beta<sub>25-35</sub> Injection**  
Hyo Jeong Seo<sup>1</sup>, Ji-Hyun Kim<sup>1</sup>, Byeong Wook Noh<sup>1</sup>, Mei Tong He<sup>1</sup>, Yong Hyun Choi<sup>2</sup>, Eun Ju Cho<sup>1</sup>, Jeong Sook Noh<sup>3\*</sup>. <sup>1</sup>Department of Food Nutrition and Science, Pusan National University, <sup>2</sup>Department of Biochemistry, Dong-Eui University College of Korean Medicine, <sup>3</sup>Department of Food Science and Nutrition, Tongmyong University
- P08-304 Lipid extracted from *Arctoscopus japonicus* eggs enhance immunosuppression in cyclophosphamide-treated mice**  
Jeong Un Choi<sup>1\*</sup>, Yun Gu Gwon<sup>2</sup>, Seul Gi Lee<sup>2</sup>, One Jun Kim<sup>2</sup>, Zhang Yutung<sup>1</sup>, Kou Fang<sup>1</sup>, A-Yeong Jang<sup>1</sup>, Weerawan Ron-In<sup>1</sup>, Woo Jung Park<sup>1,2</sup>. <sup>1</sup>Department of Marine Food Science and Technology, Gangneung-Wonju National University, <sup>2</sup>Department of Wellness-Bio Industry, Gangneung-Wonju National University
- P08-305 Anti-inflammatory activities of lipid extracted from *Oncorhynchus mykiss* eggs in LPS-induced RAW264.7 cells via NF- $\kappa$ B and MAPK signaling pathways**  
Yun Gu Gwon<sup>1\*</sup>, Ha Jun Lee<sup>1</sup>, Nattharini Sanprasert<sup>2</sup>, Jeong Un Choi<sup>2</sup>, A-Yeong Jang<sup>2</sup>, Weerawan Rod-In<sup>2</sup>, Woo Jung Park<sup>1,2</sup>. <sup>1</sup>Department of Wellness-Bio Industry, Gangneung-Wonju National University, <sup>2</sup>Department of Marine Food Science and Technology, Gangneung-Wonju National University
- P08-306 Sleep deprived Central fatigue can be improved by Korean red ginseng via modulation of 5-HT and corticosterone in a mouse model**  
Ji-Yun Kang<sup>1</sup>, Geon-Ho Kim<sup>2</sup>, Sun-Hee Hyun<sup>3</sup>, Chang-Gue Son<sup>1\*</sup>. <sup>1</sup>Institute of Bioscience & Integrative Medicine, Daejeon Oriental Hospital of Daejeon University, <sup>2</sup>Department of Korean Medicine, Korean Medical College of Daejeon University, <sup>3</sup>R&D Headquarters, Korean Ginseng cooperation
- P08-307 Physicochemical Properties and Biological Activities of Red Beet (*Beta vulgaris* L.)**  
Kwan Woo Jeon<sup>1\*</sup>, Min Gun Kim<sup>2</sup>, Su Hyeong Heo<sup>1</sup>, Jung Sun Kim<sup>3</sup>, Jung Ho Yu<sup>3</sup>, Jae-Hong Park<sup>3</sup>, Kyung Hwan Boo<sup>1,2</sup>, Chang Sook Kim<sup>1,2</sup>. <sup>1</sup>Residual Pesticide Analysis Center, <sup>2</sup>Faculty of Biotechnology, Jeju National University, <sup>3</sup>Jeju Agricultural Research & Extension Services
- P08-308 Lipid extracts from *Eumicrotremus orbis* eggs inhibit inflammatory responses in LPS-stimulated RAW264.7 macrophages**  
Seul Gi Lee<sup>1\*</sup>, Min Ji Kim<sup>1</sup>, Hyung Jun Lee<sup>1</sup>, Jeong Un Choi<sup>2</sup>, Ge Yunfei<sup>2</sup>, Zhang Peng<sup>2</sup>, A-Yeong Jang<sup>2</sup>, Weerawan Rod-In<sup>2</sup>, Woo Jung Park<sup>1,2</sup>. <sup>1</sup>Department of Wellness-Bio Industry, Gangneung-Wonju National University, <sup>2</sup>Department of Marine Food Science and Technology, Gangneung-Wonju National University
- P08-309 Young Sword bean (*Canavalia gladiata*) pod extract attenuates allergic lung damage in an OVA-induced asthma mice model**  
Seong Ju Oh<sup>1\*</sup>, Sang Hoon Lee<sup>2,3</sup>, Hyeock Yoon<sup>1</sup>, Wen Yan Huang<sup>2,3</sup>, Mi Jeong Kim<sup>2,3</sup>, Bok Kyung Han<sup>1,2</sup>, Yu Jin Hwang<sup>4</sup>, Kyung-A Hwang<sup>4</sup>, Young Jun Kim<sup>1,2,3</sup>. <sup>1</sup>Department of Food and Regulatory Science, Korea University, <sup>2</sup>Department of Food and Biotechnology, Korea University, <sup>3</sup>BK21 FOUR Research

Education Team for Omics-based Bio-health in Food Industry, Korea University, <sup>4</sup>Department of Agrofood Resources, National Institute of Agricultural Sciences, Rural Development Administration

- P08-310 A study on the potential anti-inflammatory and anti-proliferative effects of wheat by-products**  
Lee Hui Jeong<sup>1\*</sup>, Se Won Park<sup>1</sup>, Sunita Ranjit Gaikwad<sup>1</sup>, Yang Soo Byeon<sup>3</sup>, Sang Sook Kim<sup>3</sup>, Mi Jeong Kim<sup>1,2</sup>. <sup>1</sup>Interdisciplinary Program in Senior Human Ecology, Changwon National University, <sup>2</sup>Department of Food and Nutrition, Changwon National University, <sup>3</sup>Research Group of Food Processing, Korea Food Research Institute
- P08-311 IDH2 can be a potential target for skeletal muscle anti-atrophic study using functional food materials**  
Jeong Hoon Pan<sup>1\*</sup>, Jae Kyeom Kim<sup>2</sup>. <sup>1</sup>Department of Food and Nutrition, Chosun University, <sup>2</sup>Department of Behavioral Health and Nutrition, University of Delaware, USA
- P08-312 Effect of Omega-3 Fatty Acids on Major Adverse Cardiovascular Events (MACE) Outcomes: A Systematic Review and Meta-analysis**  
Moon Seong Kim<sup>1\*</sup>, You Jin Yang<sup>1</sup>, Wen Yan Huang<sup>2,3</sup>, Sang Hoon Lee<sup>2,3</sup>, Hyeock Yoon<sup>1</sup>, Sang Gyeong Lee<sup>1</sup>, Ji Youn Hong<sup>1,2</sup>, Young Jun Kim<sup>1,2,3</sup>. <sup>1</sup>Department of Food and Regulatory Science, Korea University, <sup>2</sup>Department of Food and Biotechnology, Korea University, <sup>3</sup>BK21 FOUR Research Education Team for Omics-based Bio-health on Food Industry, Korea University
- P08-313 Clinical Efficacy of Herbal Remedies on Osteoporosis: Systematic Review and Meta-Analysis**  
Su Min Hong<sup>1</sup>, Dong-Cheol Baek<sup>2</sup>, Eun-Jung Lee<sup>1\*</sup>. <sup>1</sup>Department of Korean Rehabilitation Medicine, College of Korean Medicine, Daejeon University, <sup>2</sup>Institute of Bioscience and Integrative Medicine and, Dunsan Hospital of Daejeon University
- P08-314 Influence of Harvest Season and Cultivation Plot on Functional Component Contents and Anti-inflammatory Effect of *Aster yomena***  
Hye-Jeong Hwang<sup>1,2\*</sup>, Kyung-A Hwang<sup>1</sup>. <sup>1</sup>Department of Agrofood Resources, National Institute of Agricultural Sciences, RDA, <sup>2</sup>Department of Food and Biotechnology, Korea University
- P08-315 Anti-Inflammatory and Anti-Allergic Effects of Sword Bean (*Canavalia gladiata*) Pod through modulation of NF- $\kappa$ B and STAT1/6 molecular mechanism**  
Kyung-A Hwang<sup>1\*</sup>, Yujin Hwang<sup>1</sup>, Hye-Jeong Hwang<sup>1,2</sup>. <sup>1</sup>Department of Agrofood Resources, National Institute of Agricultural Sciences, RDA, <sup>2</sup>Department of Food and Biotechnology, Korea University
- P08-316 Hepatoprotective Effects of Radish (*Raphanus Sativus* L.) through Antioxidant Mechanisms on Acetaminophen-Induced Liver Damage**  
Kyung-A Hwang<sup>1\*</sup>, Yujin Hwang<sup>1</sup>, Hye-Jeong Hwang<sup>1,2</sup>, Nayeong Park<sup>1</sup>. <sup>1</sup>Department of Agrofood Resources, National Institute of Agricultural Sciences, RDA, <sup>2</sup>Department of Food and Biotechnology, Korea University
- P08-317 Human Milk Oligosaccharide, 2'-Fucosyllactose, Ameliorates Dexamethasone-Induced Muscle Atrophy (Glucocorticoid-Related Sarcopenia) by Regulating Mitochondrial Biogenesis**  
Seon-Min Jeon<sup>1\*</sup>, Yeon-Ji Kim<sup>2</sup>, Jangmi Yun<sup>2</sup>, Chul Soo Shin<sup>1</sup>, Jong-Won Yoon<sup>1</sup>, Young-Ha Song<sup>1</sup>, Kyungho Kim<sup>2</sup>. <sup>1</sup>Advanced Protein Technologies Corp., Research Center, <sup>2</sup>Korean Medicine-Application Center, Korea Institute of Oriental Medicine
- P08-318 Studies on changes in amino acid composition and C2C12 cell protective activity of *Tenebrio molitor* larvae hydrolysates by various hydrolases**  
Chulmin Kim<sup>1\*</sup>, Won-Young Jeong<sup>1</sup>, An-Na Kim<sup>1</sup>, Younggi Choi<sup>1</sup>, Myoung-Su Jeong<sup>1</sup>, Eun-Jung Park<sup>2</sup>, Hae-Jeung Lee<sup>2</sup>, Heung Youl Lim<sup>3</sup>, Joong-Hark Kim<sup>1</sup>, Jongrae Kim<sup>1</sup>. <sup>1</sup>Hanmi Natural Nutrition LTD, <sup>2</sup>Department of Food and Nutrition, Gachon University, <sup>3</sup>Korea Health Supplements Association sub. Korea Health Supplements Institute
- P08-319 2'-Fucosyllactose and 3-Fucosyllactose Alleviates Interleukin-6-induced Barrier Dysfunction and Dextran Sodium Sulfate-induced Colitis by Improving Intestinal Barrier Function and Inflammation**  
Seon-Min Jeon<sup>1\*</sup>, Kwang-Youn Kim<sup>2</sup>, Chul Soo Shin<sup>1</sup>, Jong-Won Yoon<sup>1</sup>, Young-Ha Song<sup>1</sup>, Kyungho Kim<sup>2</sup>. <sup>1</sup>Advanced Protein Technologies Corp., Research Center, <sup>2</sup>Korean Medicine Application Center, Korea Institute of Oriental Medicine
- P08-320 L-Theanine governs MPTP-induced Parkinson's disease by interacting with the Wnt/ $\beta$ -catenin signaling pathway**  
Da Hye Song<sup>1,4\*</sup>, Jeong Hee Hong<sup>2</sup>, Kwon-Jai Lee<sup>3</sup>, Jeung Hee An<sup>4</sup>. <sup>1</sup>Department of Biotechnology, College of Life Science and Biotechnology, Korea University, <sup>2</sup>Research Institute of S&P International, <sup>3</sup>Department of H-Lac, Daejeon University, <sup>4</sup>Department of Food Science and Nutrition, Gangseo University
- P08-321 울무를 함유한 약선레시피가 강제수영 능력에 미치는 영향**  
김미림<sup>1\*</sup>, 김민주<sup>2</sup>, 유강완<sup>1</sup>, 신미래<sup>2</sup>, 노성수<sup>2</sup>, 박순애<sup>1</sup>, 박해진<sup>3</sup>. <sup>1</sup>대구한의대학교 푸드케어약선학과, <sup>2</sup>대구한의대학교 한의학과 본초학교실, <sup>3</sup>대구한의대학교 바이오융복합시험센터

- P08-322 **Effects of *Lactobacillus rhamnosus* IDCC3201 on Dexamethasone-induced C2C12 cells and C57BL/6 mice muscle atrophy**  
Minkyong Kang<sup>1\*</sup>, Juyeon Lee<sup>1</sup>, Jiseon Yoo<sup>1</sup>, Sujeong Lee<sup>1</sup>, Bohyun Yun<sup>2</sup>, Younghoon Kim<sup>3</sup>, Sangnam Oh<sup>4</sup>. <sup>1</sup>Department of Environmental Biotechnology and Food Science, Jeonju University, <sup>2</sup>Division of Practical Application, Honam National Institute of Biological Resources, <sup>3</sup>Department of Agricultural Biotechnology and Research Institute of Agriculture and Life Science, Seoul National University, <sup>4</sup>Department of Functional Food and Biotechnology, Jeonju University
- P08-323 **Preventive Effect of Probiotics *Lactobacillus rhamnosus* JY02 on Dexamethasone-induced Muscle Atrophy**  
Juyeon Lee<sup>1\*</sup>, Minkyong Kang<sup>1</sup>, Sujeong Lee<sup>1</sup>, Jiseon Yoo<sup>1</sup>, Bohyun Yun<sup>2</sup>, Sangnam Oh<sup>3</sup>. <sup>1</sup>Department of Environmental Biotechnology and Food Science, Jeonju University, <sup>2</sup>Division of Practical Application, Honam National Institute of Biological Resources, <sup>3</sup>Department of Functional Food and Biotechnology, Jeonju University
- P08-324 **Anti-inflammatory Effect of Benzyl Caffate in Lipopolysacchride (LPS)-Stimulated RAW 264.7 Macrophages**  
Jeong Eun Kwak<sup>1,2\*</sup>, Mok-Ryeon Ahn<sup>1,2</sup>. <sup>1</sup>Department of Health Sciences (Food Science and Nutrition), Dong-A University, <sup>2</sup>Center for Silver-Targeted Biomaterials, Brain Busan 21 Plus Program, Graduate School, Dong-A University
- P08-325 **Anti-inflammatory Activities of Korean Bee Pollen through Blocking ERK, JNK and NF- $\kappa$ B Signaling Pathways in LPS-Activated RAW 264.7 Cells**  
Ji Yoon Baek<sup>1,2\*</sup>, Jeong Eun Kwak<sup>1,2</sup>, Katsuko Kajiya<sup>3</sup>, Mok-Ryeon Ahn<sup>1,2</sup>. <sup>1</sup>Department of Health Sciences (Food Science and Nutrition), Dong-A University, <sup>2</sup>Center for Silver-Targeted Biomaterials, Brain Busan 21 Plus Program, Graduate School, Dong-A University, <sup>3</sup>Department of Food Science & Biotechnology, Kagoshima University, Japan
- P08-326 **Fructose induces hepatic fibrogenesis and MA inhibits it.**  
So Young Park<sup>1\*</sup>, Eun-Hee Cho<sup>2</sup>. <sup>1</sup>Institute of medical science, Kangwon national university, <sup>2</sup>internal medicine, medical school, Kangwon national university
- P08-327 **우리나라와 호주, 유럽의 건강기능식품 기능성 자료의 검토절차 비교 연구**  
우혜란\*, 최원희, 이미영, 권광일, 이혜영. 식품의약품안전평가원
- P08-328 **Evaluation of *In-vitro* Anti-diabetic Effects of Arginyl-Fructose Enriched Korea Red Ginseng (*Panax ginseng Meyer*) Extract**  
Ye Lim Jang<sup>1\*</sup>, Gi Jung Kim<sup>1</sup>, Ji-Yoon Hong<sup>1</sup>, Cheong-Weon Cho<sup>2</sup>, Byung-Ryul Sun<sup>3</sup>, Young-In Kwon<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Hannam University, <sup>2</sup>College of Pharmacy and Institute of Drug Research and Development, Chungnam National University, <sup>3</sup>Agricultural corporation Green Life Co., Ltd.
- P08-329 **Dopamine and muscarinic acetylcholine receptor regulatory effect of active metabolite of icariin**  
Su Hui Seong<sup>1\*</sup>, Seo Hyun Kim<sup>2</sup>, Hyun Ah Jung<sup>3</sup>, Jae Sue Choi<sup>4</sup>. <sup>1</sup>Division of Natural Products Research, Honam National Institute of Biological Resource, <sup>2</sup>Division of Commercialization Support, Honam National Institute of Biological Resource, <sup>3</sup>Department of Food Science and Human Nutrition, Jeonbuk National University, <sup>4</sup>Department of Food and Life Science, Pukyong National University
- P08-330 ***In-vitro* and *In-vivo* Anti-hyperglycemic Effects of Nipa palm (*Nypa fruticans* Wurmb.) Extracts**  
Su-Young Lee<sup>1\*</sup>, Kyung-Tae Kwon<sup>1</sup>, Gi Jung Kim<sup>2</sup>, Ji-Yoon Hong<sup>2</sup>, Ye Lim Jang<sup>2</sup>, Young-In Kwon<sup>2</sup>. <sup>1</sup>Hangaram B&F Co., Ltd., <sup>2</sup>Department of Food and Nutrition, Hannam University
- P08-331 **Qualitative characteristics and nutritional components according to the drying method of Locust migratoria as Novel Foods**  
Nayeon Kim<sup>1\*</sup>, Myoung-Su Jeong<sup>1</sup>, Won-Young Jeong<sup>1,2</sup>, Ju-Young Jeong<sup>1</sup>, Jong-Cheol Lee<sup>1</sup>, Chulmin Kim<sup>1</sup>, An-Na Kim<sup>1</sup>, Younggi Choi<sup>1</sup>, Yoonhwa Jeong<sup>2</sup>, Joong-Hark Kim<sup>1</sup>. <sup>1</sup>Hanmi Natural Nutrition LTD, <sup>2</sup>Department of Food Science and Nutrition, Dankook University
- P08-332 **Quality characteristics and nutritional components of Locusta migratoria as Novel Foods**  
An-Na Kim<sup>1\*</sup>, Won-Young Jeong<sup>1,2</sup>, Chulmin Kim<sup>1</sup>, Younggi Choi<sup>1</sup>, Nayeon Kim<sup>1</sup>, Jong-Cheol Lee<sup>1</sup>, Myoung-Su Jeong<sup>1</sup>, Yoonhwa Jeong<sup>2</sup>, Joong-Hark Kim<sup>1</sup>. <sup>1</sup>Hanmi Natural Nutrition LTD, <sup>2</sup>Department of Food Science and Nutrition, Dankook University
- P08-333 **Isolation and identification active peptides of *Tenebrio Molitor* larvae hydrolysates.**  
Younggi Choi<sup>1\*</sup>, An-Na Kim<sup>1</sup>, Nayeon Kim<sup>1</sup>, Heung-Youl Lim<sup>2</sup>, Young-Kyoung Kim<sup>2</sup>, Jae-Myeong Yoo<sup>2</sup>, Myoung-Su Jeong<sup>1</sup>, Jong-Cheol Lee<sup>1</sup>, Joong-Hark Kim<sup>1</sup>, Jongrae Kim<sup>1</sup>. <sup>1</sup>Hanmi Natural Nutrition LTD., <sup>2</sup>Korea Health Supplements Association sub. Korea Health Supplements Institute
- P08-334 **Inhibitory effects of extract and solvent fractions from *Rosa rugosa* on 3T3-L1 adipocyte differentiation**  
Hyunjung Lee<sup>1</sup>, Jiho Yang<sup>1</sup>, Fatih Karadeniz<sup>2</sup>, Jung Hwan Oh<sup>2,3</sup>, Mi-Na Choi<sup>3</sup>, Seongeun Jeon<sup>3</sup>, Xianrong Zhou<sup>4</sup>, Youngwan Seo<sup>5</sup>, Chang-Suk Kong<sup>1,2,4\*</sup>. <sup>1</sup>Department of Food and Nutrition, Silla University,



<sup>2</sup>Marine Biotechnology Center for Pharmaceuticals and Foods, Silla University, <sup>3</sup>Nutritional education, Graduate School of Education, Silla University, <sup>4</sup>Department of Bioscience, Silla University, <sup>5</sup>Division of Marine Bioscience, Korea Maritime and Ocean University

- P08-335 Anti-melanogenic Effect of *Ligustrum japonicum* Extracts on B16F10 Murine Melanoma Cells**  
Xianrong Zhou<sup>1\*</sup>, Jiho Yang<sup>2</sup>, Hyunjung Lee<sup>2</sup>, Jung Hwan Oh<sup>3,4</sup>, Fatih Karadeniz<sup>3</sup>, Youngwan Seo<sup>5</sup>, Chang-Suk Kong<sup>1,2,3</sup>. <sup>1</sup>Department of Bioscience, Silla University, <sup>2</sup>Department of Food and Nutrition, Silla University, <sup>3</sup>Marine Biotechnology Center for Pharmaceuticals and Foods, Silla University, <sup>4</sup>Nutritional education, Graduate School of Education, Silla University, <sup>5</sup>Division of Marine Bioscience, Korea Maritime and Ocean University
- P08-336 Prohibitin 1 affects cell cycle signaling associated with hydrogen peroxide oxidative stress**  
Hyunseo Go\*, Soohan Jung, Hyeonju Yu, Hyemi Kim, Kwang Suk Ko. Department of Nutritional Science and Food Management, Ewha Womans University
- P08-337 Chemical and Structural Properties of Immunostimulatory Polysaccharide Isolated from Sea Lettuce**  
Seung-U Son<sup>1,2\*</sup>, Min Seung Park<sup>1</sup>, Kwang-Soon Shin<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Kyonggi University, <sup>2</sup>Transdisciplinary Major in Learning Health System, Department of Integrated Biomedical and Life Science, Korea University
- P08-338 Effect of *Artemisia littorica* Extracts on Melanogenesis in Mouse Melanoma Cells**  
Jiho Yang<sup>1</sup>, Hyunjung Lee<sup>1</sup>, Mi-Na Choi<sup>2</sup>, Seongeun Jeon<sup>2</sup>, Jung Hwan Oh<sup>2,3</sup>, Fatih Karadeniz<sup>3</sup>, Xianrong Zhou<sup>4</sup>, Youngwan Seo<sup>5</sup>, Chang-Suk Kong<sup>1,3,4\*</sup>. <sup>1</sup>Department of Food and Nutrition, Silla University, <sup>2</sup>Nutritional education, Graduate School of Education, Silla University, <sup>3</sup>Marine Biotechnology Center for Pharmaceuticals and Foods, Silla University, <sup>4</sup>Department of Bioscience, Silla University, <sup>5</sup>Division of Marine Bioscience, Korea Maritime and Ocean University
- P08-339 Alleviation of Metabolic Disturbance by Substituting Kanjang High in Bacillus for Salt through Modulation of Gut Microbiota in Estrogen-Deficient Rats**  
Ji-Won Seo<sup>1\*</sup>, Sunmin Park<sup>2</sup>, Ting Zhang<sup>3</sup>, Yu Yue<sup>2</sup>, Su-Ji Jeong<sup>1</sup>, Myeong Seon Ryu<sup>1</sup>, Xuangao Wu<sup>2</sup>, Hee-Jong Yang<sup>1</sup>, Do-Yeon Jeong<sup>1</sup>. <sup>1</sup>Microbial Institute for Fermentation Industry, <sup>2</sup>Department of Food and Nutrition, Obesity/Diabetes Research Center, Hoseo University, <sup>3</sup>Department of Bioconvergence, Hoseo University
- P08-340 Anti-adipogenesis Effects of Crude Extract and Solvent Fractions from *Artemisia littorica***  
Mi-Na Choi<sup>1\*</sup>, Seongeun Jeon<sup>1</sup>, Hyunjung Lee<sup>2</sup>, Jiho Yang<sup>2</sup>, Jung Hwan Oh<sup>1,3</sup>, Fatih Karadeniz<sup>3</sup>, Xianrong Zhou<sup>4</sup>, Youngwan Seo<sup>5</sup>, Chang-Suk Kong<sup>2,3,4</sup>. <sup>1</sup>Nutritional education, Graduate School of Education, Silla University, <sup>2</sup>Department of Food and Nutrition, Silla University, <sup>3</sup>Marine Biotechnology Center for Pharmaceuticals and Foods, Silla University, <sup>4</sup>Department of Bioscience, Silla University, <sup>5</sup>Division of Marine Bioscience, Korea Maritime and Ocean University
- P08-341 Effect of *Artemisia littorica* Extracts on UVA Induced Photo-Aging in Human Dermal Fibroblasts**  
Seongeun Jeon<sup>1\*</sup>, Mi-Na Choi<sup>1</sup>, Hyunjung Lee<sup>2</sup>, Jiho Yang<sup>2</sup>, Jung Hwan Oh<sup>1,3</sup>, Fatih Karadeniz<sup>3</sup>, Xianrong Zhou<sup>4</sup>, Youngwan Seo<sup>5</sup>, Chang-Suk Kong<sup>2,3,4</sup>. <sup>1</sup>Nutritional education, Graduate School of Education, Silla University, <sup>2</sup>Department of Food and Nutrition, Silla University, <sup>3</sup>Marine Biotechnology Center for Pharmaceuticals and Foods, Silla University, <sup>4</sup>Department of Bioscience, Silla University, <sup>5</sup>Division of Marine Bioscience, Korea Maritime and Ocean University
- P08-342 Elucidation of Structural Features of Rhamnogalacturonan-I Type Polysaccharide Purified from *Cheongkyool* Peels**  
Seung-U Son<sup>1,2\*</sup>, Su Bin Lim<sup>1</sup>, So Min Kim<sup>1</sup>, Kwang-Soon Shin<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Kyonggi University, <sup>2</sup>Transdisciplinary Major in Learning Health System, Department of Integrated Biomedical and Life Science, Korea University
- P08-343 Water extract of *Fragaria Orientalis* Suppresses lipid accumulation in 3T3-L1 cells and Diet-induced Obese Mice**  
Moon-Yeol Choi, So Young Kim\*, Mi Hyeong Kim, Mi Ryeo Kim. Dept. of Herbal pharmacology, Coll. of Korean Medicine, Daegu Haany Univ.
- P08-344 Protective Effect of Traditional Korean Fermented Soybean Food(*Doenjang*) on a Dextran Sulfate Sodium-induced Colitis Mouse Model**  
Myeong Seon Ryu<sup>1\*</sup>, Su-Ji Jeong<sup>1</sup>, Gwangsu Ha<sup>1</sup>, Hee-Jong Yang<sup>1</sup>, Young Mi Park<sup>2</sup>, Hak Yong Lee<sup>2</sup>, Do-Youn Jeong<sup>1</sup>. <sup>1</sup>Microbial Institute for Fermentation Industry, <sup>2</sup>INVINO Co. Ltd.
- P08-345 Improvement Effects of Ulvan Polysaccharide Isolated from Sea Lettuce on Dextran Sulfate Sodium-Induced Ulcerative Colitis in BALB/c Mice**  
Seung-U Son<sup>1,2\*</sup>, Ju Hyeon Park<sup>1</sup>, Kwang-Soon Shin<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Kyonggi University, <sup>2</sup>Transdisciplinary Major in Learning Health System, Department of Integrated

Biomedical and Life Science, Korea University

- P08-346 Cold plasma treatment of oat (*Avena sativa* L.) sprouts enhances bioactive phytochemical content, induces GAD65 expression and AMPK phosphorylation**  
Mi Ja Lee\*, Hyun-Jin Lee, Han Gyeol Lee, Hyung Jae Ahn, Ji Yeong Yang, Hyun Young Kim, Seung-Yeob Song, Woo Duck Seo. Division of Crop Foundation, National Institute of Crop Science, Rural Development Administration
- P08-347 Changes in the content of components according to the growth period after sowing of barley grain**  
Mi Ja Lee\*, Hyun-Jin Lee, Han Gyeol Lee, Hyung Jae Ahn, Ji Yeong Yang, Hyun Young Kim, Seung-Yeob Song, Woo Duck Seo. Division of Crop Foundation, National Institute of Crop Science, Rural Development Administration
- P08-348 Manufacturing Process of Low-Molecular Weight Peptide Mixture from Fish Scales-Derived Collagen through Sequential Enzymatic Hydrolysis**  
Seung-U Son<sup>1,2\*</sup>, Dong-Jun Choi<sup>1</sup>, Min Seung Park<sup>1</sup>, Chan Woong Park<sup>3</sup>, Sung Hwan Lim<sup>3</sup>, Kwang-Soon Shin<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Kyonggi University, <sup>2</sup>Transdisciplinary Major in Learning Health System, Department of Integrated Biomedical and Life Science, Korea University, <sup>3</sup>Amorepacific Research and Innovation Center
- P08-349 Improvement Effects of Pectic Polysaccharide Isolated from Turmeric on Dextran Sulfate Sodium-Induced Ulcerative Colitis Mice Model**  
Eun Hye Choi\*, Kwang-Soon Shin. Department of Food Science and Biotechnology, Kyonggi University
- P08-350 Polysaccharides Isolated from Turmeric (*Curcuma longa* L.) Inhibit Lung Cancer Metastasis via Activation of Macrophages, NK cells, and Cytotoxic T Lymphocytes**  
Eun Hye Choi\*, Tae Eun Kim, Kwang-Soon Shin. Department of Food Science and Biotechnology, Kyonggi University
- P08-351 Structural and Chemical Properties of Anti-metastatic Polysaccharide Purified from Turmeric (*Curcuma longa* L.)**  
Eun Hye Choi\*, Kwang-Soon Shin. Department of Food Science and Biotechnology, Kyonggi University
- P08-352 Effects of drying methods and extract solvents on the antioxidant, anti-proliferative, and anti-inflammatory activities of *Melosira nummuloides***  
Do Manh Cuong\*, Dae Kyeong Kim<sup>1</sup>, Somi Kim Cho<sup>1,2</sup>. <sup>1</sup>Interdisciplinary Graduate Program in Advanced Convergence Technology and Science, Jeju National University, <sup>2</sup>Subtropical/Tropical Organism Gene Bank, Jeju National University
- P08-353 Comparative analysis of biological activities of various solvent extracts from *Saccharina japonica* and *Costaria costata***  
Hyun-Hwa Lee<sup>1</sup>, Jin-Sol Kim<sup>1\*</sup>, Jun-Han Jeong<sup>2</sup>, Sook Young Lee<sup>2</sup>, Chun Sung Kim<sup>3</sup>. <sup>1</sup>Department of Biology, Chosun University, <sup>2</sup>Marine Healthcare Research & Evaluation Center, Chosun University, <sup>3</sup>Department of Oral Biochemistry, Chosun University
- P08-354 The immune enhancement effect of *Curcuma aromatica* Salisb. extract (CSE) in murine macrophage RAW264.7 cells**  
Se Jeong Kim<sup>1\*</sup>, San Kim<sup>1</sup>, Se Hyeon Jang<sup>1</sup>, Bo Ram So<sup>2</sup>, Jung A Ryu<sup>2</sup>, Jeong Min Park<sup>2</sup>, Sung Ran Yoon<sup>2</sup>, Sung Keun Jung<sup>1</sup>. <sup>1</sup>School of Food Science and Biotechnology, Kyungpook National University, <sup>2</sup>Division of Agricultural Environment Research, Gyeongsangbuk-do Agricultural Research & Extension services
- P08-355 Quality Characteristics and Antioxidant Activity of Comparison to Domestic Malt (Hopum and Gwangmaeg Barley) and Foreign Malts**  
Seung Min Yu<sup>1,4\*</sup>, Yu-Rim Lee<sup>4</sup>, Da Hye Song<sup>2,4</sup>, Kwon-Jai Lee<sup>3</sup>, Jeung Hee An<sup>4</sup>. <sup>1</sup>Department of Food and Nutrition, Daejeon University, <sup>2</sup>Department of Biotechnology, College of Life Science and Biotechnology, Korea University, <sup>3</sup>Department of H-LAC, Daejeon University, <sup>4</sup>Department of Food Science and Nutrition, Gangseo University
- P08-356 Probiotic bacteria를 이용한 와송(*Orostachys japonica* A. Berger) 추출물 발효의 항산화 및 미백 효과**  
배연지\*, 정우식. 경북대학교 식품공학부
- P08-357 Neuroprotective effects of fermented tea on MPTP-induced Parkinson's disease mouse model via MAPK kinase signaling-mediated regulation of inflammation and antioxidant activity**  
Yu-Rim Lee<sup>1,6</sup>, Da Hye Song<sup>2</sup>, Doobo Shim<sup>3</sup>, Jong Cheol Kim<sup>3</sup>, Kwon-Jai Lee<sup>4</sup>, Jeung Hee Hong<sup>5</sup>, Jeung Hee An<sup>6\*</sup>. <sup>1</sup>Department of Food Science and Technology, Seoul National University of Science & Technology, <sup>2</sup>Department of Biotechnology, College of Life Science and Biotechnology, Korea University, <sup>3</sup>Institute of Hadong Green Tea, <sup>4</sup>Department of H-Lac, Daejeon University, <sup>5</sup>Research Institute of S&P International, <sup>6</sup>Department of Food Science and Nutrition, Gangseo University

- P08-358 **Immunomodulatory effect of *Cudrania tricuspidata* leaf extract on mouse model**  
Seung-Jin Yoo<sup>1</sup>, Kwontack Hwang<sup>2\*</sup>. <sup>1</sup>Chang-eok., Ltd, <sup>2</sup>Nambu university
- P08-359 **Upregulation of Glutathione Biosynthesis Stimulates Sulforaphane-induced Proliferation of Colorectal Cancer Cells**  
Chan Ho Jang<sup>1\*</sup>, Yoonsu Kim<sup>2</sup>, Ji Hyeong Chae<sup>1</sup>, Jisun Oh<sup>3</sup>, Jong-Sang Kim<sup>1,2,4</sup>. <sup>1</sup>Institute of Agricultural Science and Technology, Kyungpook National University, <sup>2</sup>Department of Integrative Biotechnology, Kyungpook National University, <sup>3</sup>New Drug Development Center, Daegu-Gyeongbuk Medical Innovation Foundation, <sup>4</sup>School of Food Science and Biotechnology, Kyungpook National University
- P08-360 **Effect of various extraction conditions of antioxidant, anti-aging and phenolic compounds from *Sargassum fusiforme***  
Hyun-Hwa Lee<sup>1</sup>, Jin-Sol Kim<sup>1</sup>, Jun-Han Jeong<sup>2\*</sup>, Sook Young Lee<sup>2</sup>, Chun Sung Kim<sup>3</sup>. <sup>1</sup>Department of Biology, Chosun University, <sup>2</sup>Marine Healthcare Research & Evaluation Center, Chosun University, <sup>3</sup>Department of Oral Biochemistry, Chosun University
- P08-361 **Anti-Inflammatory and Anti-Pruritic Effect of *Peucedanum japonicum* Root Extract in *in vitro***  
Eun Seo Kang<sup>1</sup>, Ji Hyeon Park<sup>1</sup>, Jae Young Shin<sup>1</sup>, Jang Hoon Kim<sup>2</sup>, Byoung Ok Cho<sup>1\*</sup>. <sup>1</sup>Institute of Health Science, Jeonju University, <sup>2</sup>Department of Herbal Crop Research, National Institute of Horticultural & Herbal Science, RDA
- P08-362 **Effect of a mixture extract of *Aralia elata* and citrus peel on acetaminophen-induced hepatotoxicity and liver injury induced by choline-deficient diet *in vivo***  
Woo Kwon Jung\*, Su-Bin Park, Hwa Young Yoo, Yong Hwan Kim, Junghyun Kim. Department of Oral Pathology, School of Dentistry, Jeonbuk National University
- P08-362 **Effect of a mixture extract of *Aralia elata* and citrus peel on acetaminophen-induced hepatotoxicity and liver injury induced by choline-deficient diet *in vivo***  
Woo Kwon Jung\*, Su-Bin Park, Hwa Young Yoo, Yong Hwan Kim, Junghyun Kim. Department of Oral Pathology, School of Dentistry, Jeonbuk National University
- P08-363 **Neuroprotective effects of the Puerarin in corticosterone-induced hippocampal cells via activation of the CREB and BDNF pathway**  
Mi Jeong Kim<sup>1,2\*</sup>, Jung-Yoon Yoo<sup>5</sup>, Wen Yan Huang<sup>1,3</sup>, Ji Youn Hong<sup>1,4</sup>, Bok Kyung Han<sup>1,4</sup>, Young Jun Kim<sup>1,3,4</sup>. <sup>1</sup>Department of Food and Biotechnology, Korea University, <sup>2</sup>Institutes of Natural Sciences, Korea University, <sup>3</sup>Brain Korea 21 FOUR Research Education Team for Omics-based Bio-health in Food Industry, Korea University, <sup>4</sup>Department of Food and Regulatory Science, Korea University, <sup>5</sup>Department of Biomedical Laboratory Science, Yonsei University Mirae Campus
- P08-364 **The Regulatory Effects of Fermented *Dendropanax morbifera* on the Astrocytic Function in Differentiated C6 Cells**  
Eun-Hye Kim<sup>1\*</sup>, Yeong-Jun Jeon<sup>2</sup>, Min-Ju Kim<sup>1</sup>, Seun-Ah Yang<sup>1</sup>. <sup>1</sup>Department of Food Science and Technology, Keimyung University, <sup>2</sup>Department of Applied Chemistry, Kumoh National Institute of Technology
- P08-365 **Anti-Inflammatory Effects of *Broussonetia kazinoki* Extract in Human Keratinocyte HaCaT Cells**  
Won-Bin Bae, Eun-Hye Kim\*, Seun-Ah Yang. Department of Food Science and Technology, Keimyung University
- P08-366 **Characteristics and biological activities of polysaccharides and novel oligosaccharides from Korean yam *Dioscorea japonica***  
Yoo-Jin Na<sup>1\*</sup>, Ibukunoluwa Fola Olawuyi<sup>1</sup>, Ha-Seong Cho<sup>1</sup>, Gwang-Deok Park<sup>1</sup>, Lena Chiamaka Okonkwo<sup>1</sup>, Jong-Jin Park<sup>1,2</sup>, Won-Young Lee<sup>1,3</sup>. <sup>1</sup>School of Food Science and Technology, Kyungpook National University, <sup>2</sup>Coastal Agricultural Research Institute, Kyungpook National University, <sup>3</sup>Research Institute of Tailored Food Technology, Kyungpook National University
- P08-367 **Effect of Pinoresinol on Intestinal Barrier Enhancement in Caco-2 Cell Monolayers**  
Soo-Bin Shin<sup>1,2\*</sup>, Young-Min Kim<sup>2</sup>, Ha-Young Park<sup>1</sup>. <sup>1</sup>Advanced Radiation Technology Institute, Korea Atomic Energy Research Institute, <sup>2</sup>Department of Integrative Food, Bioscience and Biotechnology
- P08-368 **Optimal extraction conditions for improving polyphenolic contents of ethanol extracts of *Opuntia humifusa***  
Inyong Kim<sup>1\*</sup>, Kihun Sung<sup>2</sup>, Jiwoo Kim<sup>2</sup>, Hyung-Jae Lim<sup>2</sup>, Jung-Heun Ha<sup>2</sup>, Yoonhwa Jeong<sup>2</sup>. <sup>1</sup>Department of Food and Nutrition, Suncheon National University, <sup>2</sup>Department of Food Science and Nutrition, Dankook University
- P08-369 **흰점박이꽃무지 유충과 분리대두단백을 활용한 단백질 보충 식품 품질특성 및 항산화 활성 연구**  
조은채<sup>1\*</sup>, 안수린<sup>2</sup>, 박수진<sup>2</sup>, 신경옥<sup>3</sup>, 황효정<sup>3</sup>, 최연정<sup>3</sup>. <sup>1</sup>삼육대학교 융합과학과, <sup>2</sup>삼육대학교 식품생명산업학과, <sup>3</sup>삼육대학교 식품영양학과
- P08-370 **Fermented oyster extract attenuates dexamethasone-induced muscle atrophy via PI3K/Akt/**

**mTOR pathway in C2C12 myoblasts.**

Young-Jin Choi<sup>1,2,3\*</sup>, Nishala Erandi Wedamulla<sup>1,2,3,4</sup>, Meiqi Fan<sup>5</sup>, Zhang Qun<sup>1,2</sup>, Bae-Jin Lee<sup>6</sup>, Eun-Kyung Kim<sup>7</sup>. <sup>1</sup>Department of Food Science and Nutrition, Dong-A University, <sup>2</sup>Department of Health Sciences, The Graduate School of Dong-A University, <sup>3</sup>Center for Silver-targeted Biomaterials, Brain Busan 21 Plus program, Dong-A University, <sup>4</sup>Department of Export Agriculture, Faculty of Animal Science and Export Agriculture, Uva Wellassa University, Sri Lanka, <sup>5</sup>Division of Food Bioscience, College of Biomedical and Health Sciences, Konkuk University, <sup>6</sup>Marine Bioprocess Co., Ltd., <sup>7</sup>Center for Food & Bio Innovation, Dong-A University

- P08-371 Magnoliae Flos extract attenuated LPS-induced inflammatory response and RANKL-induced osteoclastogenesis in RAW 264.7 cells**  
Ju-Hyoung Park<sup>1\*</sup>, Do Hun Lee<sup>1</sup>, Dong-Ryung Lee<sup>2</sup>, Bong-Keun Choi<sup>2</sup>, Joa Sub Oh<sup>1</sup>. <sup>1</sup>College of Pharmacy, Dankook University, <sup>2</sup>NUON Co., Ltd.
- P08-372 Effects of Solar Salts Aged for Different Periods on Oxidative Stress in Sprague-Dawley Rat**  
Doyoung Song\*, Kyung-Sik Ham. Department of Food engineering and Solar Salt Research Center, Mokpo National University
- P08-373 흰점박이꽃무지(*Protaetia brevitarsis seulensis*) 유충 분말의 첨가비율에 따른 비건 쿠키의 품질특성 연구**  
이유진<sup>1\*</sup>, 박선영<sup>1</sup>, 정태환<sup>2</sup>, 황효정<sup>2</sup>, 신경옥<sup>2</sup>, 최연정<sup>2</sup>. <sup>1</sup>삼육대학교 식품생명산업학과, <sup>2</sup>삼육대학교 식품영양학과
- P08-374 Chemical stability of curcuminoids and their effects on the growth of skin cells under different LED lights**  
Heejeong Kim\*, Jungil Hong. Department of Food Science and Technology, College of Natural Science, Seoul Women's University
- P08-375 Effects of various edible salts on tight junctions of blood-brain barrier and gut**  
Doyoung Song\*, Sangar Madhuri, Neeracha Sangpreecha, Kyung-Sik Ham. Department of Food Engineering and Solar Salt Research Center
- P08-376 Effects of various salts on ligature-induced periodontitis in rats**  
Neeracha Sangpreecha<sup>1\*</sup>, Saoraya Chanmuang<sup>2</sup>, Doyoung Song<sup>1</sup>, Kyung-Hee Park<sup>1</sup>, Kyung-Sik Ham<sup>1</sup>. <sup>1</sup>Department of Food Engineering and Solar Salt Research Center, Mokpo National University, <sup>2</sup>Department of Food Science and Technology, Institute of Agriculture and Life Science, Gyeongsang National University
- P08-377 Immunostimulatory Effects of Fermented Barley Sprout by Lactic Acid Bacteria on RAW264.7 Macrophages**  
Sang-Hyun Kim<sup>1</sup>, Soojung Lee<sup>2</sup>, Yu Ra Bae<sup>2</sup>, Dohyun Cho<sup>3</sup>, Yung Gi Ryu<sup>3</sup>, Mi Ja Chung<sup>2\*</sup>. <sup>1</sup>College of Veterinary Medicine, Gyeongsang National University, <sup>2</sup>Department of Food Science and Nutrition, Gwangju University, <sup>3</sup>Sangha Farm R&D Center, Sangha Farm L.C.
- P08-378 The enhancing immune response of *Agrimonia pilosa* Ledeb. aqueous extract in RAW264.7 macrophages**  
Mi Jang<sup>1\*</sup>, Soon Ho Choi<sup>2</sup>, Kyoung Mi Kim<sup>2</sup>, Min-Jung Bae<sup>1</sup>. <sup>1</sup>The Food Industry Promotional Agency of Korea, <sup>2</sup>APPG Inc.
- P08-379 Ameliorative effect of LBE on DSS-induced colitis mice**  
Mi Jang\*, Jung Min Bae, Ju Hee Jung, Kwang Eun Yeo, Won Jae Lee, Yun Jeong Shin, Hye-Rin Cho, Jun Soo Song, Sang Hoon Park, Min-Jung Bae. The Food Industry Promotional Agency of Korea
- P08-380 The Immune-stimulating Effect of Soybean Sprouts Extract on RAW264.7 Macrophages**  
Hyun Young Kim\*, Hangyeol Lee, Seung-Yeob Song, Mi Ja Lee, Woo Duck Seo, Ji Yeong Yang. Crop Foundation Research Division, National Institute of Crop Science, Rural Development Administration
- P08-381 Physicochemical Characteristics and Antioxidant Activities of Edible Insect Hydrolysates by Various Proteases**  
Hyung-Jae Lim<sup>1,2\*</sup>, Eun-Byeol Jo<sup>1,2</sup>, Kihun Sung<sup>1,2</sup>, Jiwoo Kim<sup>1,2</sup>, Jiayang Zheng<sup>1,2</sup>, Yeun Kim<sup>1,2</sup>, Sunyoon Jung<sup>1,2</sup>, Jung-Heun Ha<sup>1,2</sup>, Yoonhwa Jeong<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Nutrition, Dankook University, <sup>2</sup>Research Center for Industrialization of Natural Nutraceuticals, Dankook University
- P08-382 2'-fucosyllactose and 3-fucosyllactose alleviates dextran sodium sulfate-induced colitis by modulating intestinal microbiome**  
Seon-Min Jeon<sup>1\*</sup>, Baeki E. Kang<sup>2</sup>, Dongryeol Ryu<sup>2</sup>, Chul Soo Shin<sup>1</sup>, Jong-Won Yoon<sup>1</sup>, Young-Ha Song<sup>1</sup>, Kyungho Kim<sup>3</sup>. <sup>1</sup>Advanced Protein Technologies Corp., Research Center, <sup>2</sup>Molecular and Integrative Biology Lab, School of Medicine, Sungkyunkwan University, <sup>3</sup>Korean Medicine-Application Center, Korea Institute of Oriental Medicine
- P08-383 Characteristics of *Locusta migratoria* hrydrolysates by various proteases**  
Jiayang Zheng<sup>1,2\*</sup>, Kihun Sung<sup>1,2</sup>, Hyung-Jae Lim<sup>1,2</sup>, Eun-Byeol Jo<sup>1,2</sup>, Jiwoo Kim<sup>1,2</sup>, Chaewon No<sup>1,2</sup>, Sebin

Won<sup>1,2</sup>, Sunyoon Jung<sup>1,2</sup>, Jung-Heun Ha<sup>1,2</sup>, Misook Kim<sup>1,2</sup>, Youngseung Lee<sup>1,2</sup>, Myoung-Su Jeong<sup>3</sup>, Joong-Hark Kim<sup>3</sup>, Won-Young Jeong<sup>3</sup>, Yoonhwa Jeong<sup>1,2</sup>. <sup>1</sup>Department of Food Science and Nutrition, Dankook University, <sup>2</sup>Research Center for Industrialization of Natural Nutraceuticals, Dankook University, <sup>3</sup>R&D, Hanmi Natural Nutrition Co., Ltd.

- P08-384 **Fucose-rich polysaccharide extracted from *Ishige okamurae* ameliorates high-fructose diet-induced fatty liver by dual-regulation of lipogenesis and gut microbiota**  
Seung Tae Im<sup>1\*</sup>, Hyeon Kang<sup>1</sup>, Wook Chul Kim<sup>2</sup>, Seung-Hong Lee<sup>1,2</sup>. <sup>1</sup>Department of Medical Science, Soonchunhyang University, <sup>2</sup>Department of Pharmaceutical Engineering, Soonchunhyang University
- P08-385 **Antibacterial and wrinkle-improving activity of *Sophora Flavescens* AIT and tissue culture *Sophora Flavescens* AIT Callus**  
Won Jin Lee<sup>1\*</sup>, Eun Bi Han<sup>1</sup>, Se In Park<sup>1</sup>, Juhye Kim<sup>1</sup>, Byung Ho Oh<sup>1</sup>, Subin Kim<sup>1</sup>, You Jin Yoon<sup>1</sup>, Song Namgung<sup>1</sup>, Do Hyeong Kim<sup>2</sup>, Hyojin Lee<sup>3</sup>, Hwa Jin Lee<sup>1</sup>, Yong Kook Shin<sup>1</sup>, Byung Wook Yang<sup>1</sup>. <sup>1</sup>School of Industrial Bio-Pharmaceutical Science, Semyung University, <sup>2</sup>Department of Oriental Medical Food & Nutrition, Semyung University, <sup>3</sup>Dept. of Biomedical, Daewon University College
- P08-386 ***Bacillus Licheniformis* CP6 Fermented *Abelmoschus Manihot* Jinhuakui Ameliorates Bone Loss in Ovariectomized Rats and Promotes Osteoblast Differentiation Through BMP Signaling Pathway**  
Mihyang Kim<sup>1</sup>, Sang-Jae Lee<sup>2</sup>, Mi Hwa Park<sup>1\*</sup>. <sup>1</sup>Department of Food and Nutrition, Silla University, <sup>2</sup>Department of Food Biotechnology and Research Center for Extremophiles & Marine Microbiology, Silla University
- P08-387 **Antioxidant and Anti-inflammation Activities of Kale (*Brassica oleracea L*) extracted with Hot water and ethanol**  
Seungju Jung<sup>\*</sup>, Eunju Park, Jae-Hee Park. Department of Food and Nutrition, Kyungnam University
- P08-388 **Antioxidant and Anti-diabetic Activity of Sumi Potato According to Different Cooking Methods**  
Seul-Bi Im<sup>\*</sup>, Ji-Young Hwang, Ju-Ha Baek, Min-Hye Won, Da-Soul Shin, Jae-Hee Park, Eunju Park. Department of Food and Nutrition, Kyungnam University
- P08-389 **Comparison of component contents of and *Codonopsis lanceolata* callus and experiments on intracellular activity**  
Se In Park<sup>1\*</sup>, Won Jin Lee<sup>1</sup>, Eun Bi Han<sup>1</sup>, Juhye Kim<sup>1</sup>, Byung Ho Oh<sup>1</sup>, Subin Kim<sup>1</sup>, You Jin Yoon<sup>1</sup>, Song Namgung<sup>1</sup>, Do Hyeong Kim<sup>2</sup>, Hyojin Lee<sup>3</sup>, Hwa Jin Lee<sup>1</sup>, Yong Kook Shin<sup>1</sup>, Byung Wook Yang<sup>1</sup>. <sup>1</sup>School of Industrial Bio-Pharmaceutical Science, Semyung University, <sup>2</sup>Department of Oriental Medical Food & Nutrition, Semyung University, <sup>3</sup>Dept. of Biomedical, Daewon University College
- P08-390 **Improvement Effect of Hesperidin on Intestinal Barrier in Radiation-induced Intestinal Barrier Dysfunction Caco-2 cells**  
Ha-Young Park<sup>\*</sup>, Jin-Hee Yu. Advanced Radiation Technology Institute, Korea Atomic Energy Research Institute
- P08-391 **Anti-oxidant, Anti-diabetes, Anti-aging, and Anti-genotoxic Activities of Red Beetroot as affected by Dry and Dry Roast**  
Nayoung Kim<sup>\*</sup>, Mijoo Choi, Eunju Park. Department of Food Nutrition, Kyungnam University
- P08-392 ***Ishige foliacea* ameliorates corticosterone-induced neurotoxicity and depressive-like behaviors via ERK-CREB-BDNF signaling**  
Minji Kim<sup>1,2\*</sup>, Sueongmok Cho<sup>3</sup>, Min Young Um<sup>1,2</sup>. <sup>1</sup>Division of Functional Food Research, Korea Food Research Institute, <sup>2</sup>Division of Food Biotechnology, University of Science & Technology, <sup>3</sup>Department of Food Science and Technology/ Institute of Food Science, Pukyong National University
- P08-393 **Protective Effects of Fermented Hydroponic-Cultured Ginseng Extracts Against Scopolamine-Induced Memory Impairment in Mice**  
Jiyoung Hwang, Yunjung Lee<sup>\*</sup>, Eunju Park. Department of Food and Nutrition, Kyungnam University
- P08-394 **Antioxidant and Anti-Neurotoxic Effects of Ethanol Extracts from Medicinal Plants Mainly Cultivated in Korea**  
Heesoo Jeong<sup>\*</sup>, Mijoo Choi, Yunjung Lee, Eunju Park. Department of Food and Nutrition, Kyungnam University
- P08-395 **Search for variety and germination period of peanut sprout for the development of nutraceutical and cosmeceutical ingredients**  
Seunghyun Kim<sup>\*</sup>, Dabin Lee, Minho Jeong, Susung Jin, Sunggyu Hwang, Seunghwan Lee, Taewan Kim. Department of Food Science and Biotechnology, Andong National University
- P08-396 **Anti-Oxidative and Neuroprotective Activities of Multi-enzyme Hydrolysate from *Scutellaria Baicalensis***  
Heesoo Jeong<sup>\*</sup>, Mijoo Choi, Yunjung Lee, Eunju Park. Department of Food and Nutrition, Kyungnam University
- P08-397 **Anti-Obesity Effects of *Lactobacillus Plantarum* Strain Ln4 on Obese Mice Induced by High-**



## Fat Diet

Seungju Jung<sup>1\*</sup>, Yunjung Lee<sup>1</sup>, Hyun-Dong Paik<sup>2</sup>, Eunju Park<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Kyungnam University, <sup>2</sup>Department of Food Science and Biotechnology of Animal Resources, Konkuk University

- P08-398 **Anti-melanogenic Effect of Unripened Apple Mango (*Mangifera indica* L. cv. Irwin) Extracts**  
Hee-Bin Ku<sup>1\*</sup>, Su-Hyeon Hwang<sup>1</sup>, Ju-Hyeon Park<sup>1</sup>, Soo-A Lee<sup>1</sup>, Kyoungmi Park<sup>2</sup>, Gyo-Nam Kim<sup>1</sup>.  
<sup>1</sup>Department of Pharmaceutical Engineering, Kyungnam University, <sup>2</sup>Gyeongnam Agricultural Research and Extension Services
- P08-399 **Anti-oxidant activity of unripened *Mangifera indica* L. cv. Irwin extracts**  
Hee-Bin Ku<sup>1\*</sup>, Su-Hyeon Hwang<sup>1</sup>, Soo-A Lee<sup>1</sup>, Ju-Hyeon Park<sup>1</sup>, Kyoungmi Park<sup>2</sup>, Gyo-Nam Kim<sup>1</sup>.  
<sup>1</sup>Department of Pharmaceutical Engineering, Kyungnam University, <sup>2</sup>Gyeongnam Agricultural Research and Extension Services
- P08-400 **In vitro anti-oxidant activity of Schizandra chinensis extract**  
Gyo-Nam Kim<sup>1\*</sup>, Hee-Bin Ku<sup>1</sup>, Su-Hyeon Hwang<sup>1</sup>, Ji-Hyeon Kim<sup>2</sup>, Eui-Su Kim<sup>2</sup>. <sup>1</sup>Department of Pharmaceutical Engineering, Kyungnam University, <sup>2</sup>K Bridge Insight Co. Ltd.
- P08-401 **Analysis of biological and chemical components between the extract of *Hibiscus mutabilis* and callus of *H. mutabilis***  
Eun Bi Han<sup>1\*</sup>, Se In Park<sup>1</sup>, Won Jin Lee<sup>1</sup>, Juhye Kim<sup>1</sup>, Byung Ho Oh<sup>1</sup>, Subin Kim<sup>1</sup>, You Jin Yoon<sup>1</sup>, Song Namgung<sup>1</sup>, Do Hyeong Kim<sup>2</sup>, Hyojin Lee<sup>3</sup>, Hwa Jin Lee<sup>1</sup>, Yong Kook Shin<sup>1</sup>, Byung Wook Yang<sup>1</sup>. <sup>1</sup>School of Industrial Bio-Pharmaceutical Science, Semyung University, <sup>2</sup>Department of Oriental Medical Food & Nutrition, Semyung University, <sup>3</sup>Dept. of Biomedical, Daewon University College
- P08-402 **Acacetin increased skin health through CCN2 signaling pathway *in vivo* HRM-2 mice model**  
Gyo-Nam Kim<sup>\*</sup>, Hee-Bin Ku, Su-Hyeon Hwang. Department of Pharmaceutical Engineering, Kyungnam University
- P08-403 **Effects of Probiotic *Lactococcus Lactis* Strains on Memory Impairment in Scopolamine-Induced Mouse Model**  
Jiyoun Hwang<sup>1</sup>, Yunjung Lee<sup>1\*</sup>, Hyun-Tak Han<sup>2</sup>, Tae-Rahk Kim<sup>2</sup>, Eunju Park<sup>1</sup>. <sup>1</sup>Department of Food and Nutrition, Kyungnam University, <sup>2</sup>Center for Research and Development, Lactomason Co., Ltd.
- P08-404 **Antioxidant Activities of Various Parts of Sky Yam (*Dioscorea bulbifera* L.) with Different Extraction Solvent**  
Da-Soul Shin, Min-Hye Won, Ju-Ha Beak, Hyeon-Bi Kim, Jae-Hee Park, Eunju Park\*. Department of Food and Nutrition, Kyungnam University
- P08-405 **Effect of *Eriobotrya japonica* Lindl. leaves Extract on Benign Prostatic Hyperplasia *in vitro***  
Hyung Gu Son\*, Jeong Yoon Lee, Yoo-Hyun Lee. Department of Food and Nutrition, The University of Suwon
- P08-406 **The Intestinal Function and Constipation Improvement Effect of Kombucha Added with Purun Concentrate**  
Da-Bin Lee\*, Seung-Hyun Kim, Ha-Neul Kim, Da-Yeong Kim, Tae-Wan Kim. Department of Food Science and Biotechnology, Andong National University
- P08-407 **대마씨앗박을 활용한 이너뷰티 기능성의 스틱젤리 제품 개발 및 품질 분석**  
최승현<sup>1,3\*</sup>, 박화정<sup>1,3</sup>, 김태윤<sup>2</sup>, 윤의상<sup>2</sup>, 김태완<sup>3</sup>. <sup>1</sup>주식회사 젠푸드 기업부설연구소, <sup>2</sup>주식회사 젠푸드, <sup>3</sup>안동대학교 식품생명공학과
- P08-408 **Evaluation of Natural Pigments for Their Health Promotion Efficacy as a Functional Ingredients**  
Hwa-Jeong Park\*, Hwi-Je Jeong, Seung-Hyeon Choi, Tae-Wan Kim. Department of Food Science and Biotechnology, Andong National University
- P08-409 ***Pinus koraiensis* Leaf Extract has Anti-Fatigue Potential in an Acute Exercise-Treated Mouse Model**  
Bo-Ram Lee\*, Mi Young Lee. KM Convergence Research Division, Korea Institute of Oriental Medicine
- P08-410 **대마 부산물 자원 에탄올 추출물의 항염증 및 항아토피 효과**  
김다영<sup>1\*</sup>, 이다빈<sup>1</sup>, 박현제<sup>1</sup>, 송애리<sup>1</sup>, 김태완<sup>2</sup>. <sup>1</sup>(주)유한건강생활, <sup>2</sup>안동대학교 식품생명공학과
- P08-411 **Krill oil inhibits the proliferation and migration of bladder cancer via regulating G1-phase cell cycle arrest, PI3K/AKT and MAPK signaling, and MMP-9 expression**  
Soobin Kim\*, Hoon Kim, Byungdo Hwang, Tonog Genevieve, Sung-Kwon Moon. Department of Food and Nutrition, Chung-Ang University
- P08-412 **Antioxidant Activity and Antihypertensive Effects of Canola Meal Enzymatic Hydrolysate *in vitro* and *in vivo***  
Seung-Ju Lee<sup>1\*</sup>, Inil Lee<sup>2</sup>, Jisuk Yun<sup>2</sup>, Sung-Ho Ham<sup>2</sup>, Dae-Ok Kim<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, Kyung Hee University, <sup>2</sup>Re&C Bio Co. Inc.
- P08-413 **Krill oil inhibits angiogenesis by inhibiting VEGF-mediated eNOS/ERK/AKT signaling path-**



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Byungdo Hwang\*, Hoon Kim, Soobin Kim, Tonog Genevieve, Sung-Kwon Moon. Department of Food and Nutrition, Chung-Ang University

- P08-414 **Effect of *Wasabia Japonica* extract on lipid accumulation in hepatocyte induced by FFA in vitro**  
Jiyoung Bang\*, Jeong Yoon Lee, Yoo-Hyun Lee. Department of Food and Nutrition, The University of Suwon
- P08-415 **Effects of a Mixture of *Astragalus membranaceus*, *Cinnamomum aromaticum*, and *Bacillus* sp. on MC3T3-E1 Cells Proliferation, Differentiation and Bone Mineralized Formation**  
Ho Bin Kim<sup>1\*</sup>, Le Ha Minh<sup>2</sup>, Jeong-Eun Huh<sup>2</sup>, Jong Heon Kim<sup>1</sup>, Moon Seok Choi<sup>1</sup>, Mi Jung Kim<sup>1</sup>, Hyo Jun Lee<sup>2</sup>, Yeon Ju Kim<sup>2</sup>. <sup>1</sup>Woongjin Foods Co., Ltd., <sup>2</sup>Department of Biotechnology, Kyung Hee University
- P08-416 **Antioxidant activity and total phenolic contents of eggplant core collection**  
Nayoung Ro\*, Mesfin Haile Kebede, Bitsam Kim, Gyu-Taek Cho, Munsup Yoon, Jungro Lee, Yoon-Jung Lee. National Institute of Agricultural Sciences
- P08-417 **Assessment of the Differences in New Strawberry Cultivars (*Fragaria* × *ananassa*) and Their Anti-inflammatory Effect in RAW264.7 macrophages**  
Elsa Easter Justine<sup>1\*</sup>, Seo-Woo Jang<sup>2</sup>, Sun-Gook Kim<sup>2</sup>, Hyo-Jun Lee<sup>1</sup>, Ha-Minh Le<sup>1</sup>, Yeon-Ju Kim<sup>1</sup>. <sup>1</sup>Department of Biotechnology, College of Life Science, Kyung Hee University, <sup>2</sup>Horticultural Research Institute, Jeollanamdo Agricultural Research and Extension Service
- P08-418 **Development of fermented sprouted ginseng material fortified with functional ingredients using lactic acid bacteria and premium dog food manufacturing using the fermented sprouted ginseng material**  
Jisu Mun<sup>1\*</sup>, Haeju Moon<sup>1</sup>, Seungwoo Baek<sup>1</sup>, Hyeonji Kim<sup>1</sup>, Sehyen Byen<sup>1</sup>, Jeheon Oh<sup>1</sup>, Seongjin Park<sup>2</sup>, Hyuna Park<sup>2</sup>, Junhyeong Kim<sup>1</sup>, Sugon Kim<sup>1</sup>, Sukheung Oh<sup>1</sup>. <sup>1</sup>Department of Food and Biotechnology, Woosuk University, <sup>2</sup>Let's Farm
- P08-419 **Anti-glycolytic and cytotoxic role of apigenin in malignant mesothelioma cells**  
Sang-Han Lee\*, Yoon-Jin Lee. Department of Biochemistry, College of Medicine, Soonchunhyang University
- P08-420 **Effect of rice bran extract on melanogenesis-related gene expression on B16F0 melanoma cells**  
Jinwoo Kim\*, Hayoung Park, Junhee Kim, Jiwoo Hong, Suhhee Yeom, Sohee Kim. Department of Food Science, Sun-Moon University
- P08-421 **Effects of GHX02 on OVA-PM10D induced Asthma-Rhinitis Mice Model**  
Won-Kyung Yang<sup>1,2</sup>, Jae Jun Park<sup>1</sup>, Su-Won Lee<sup>1</sup>, Yee Ran Lyu<sup>3</sup>, In Chul Jung<sup>4</sup>, Seung-Hyung Kim<sup>2</sup>, Yang-Chun Park<sup>1\*</sup>. <sup>1</sup>Division of Respiratory Medicine, Department of Internal Medicine, College of Korean Medicine, Daejeon University, <sup>2</sup>Institute of Traditional Medicine & Bioscience, Daejeon University, <sup>3</sup>Korean Medicine Science Research Division, Korea Institute of Oriental Medicine, <sup>4</sup>Department of Neuropsychiatry, College of Korean Medicine, Daejeon University
- P08-422 **Serum-free media for promoting proliferation of Hanwoo satellite cells**  
Min Jung Kim<sup>1\*</sup>, Jungseok Choi<sup>2</sup>. <sup>1</sup>Research Group of Aging and Metabolism, Korea Food Research Institute, Wanju, 55365, Korea, <sup>2</sup>Department of Animal Science, Chungbuk National University
- P08-423 **Protective effect of JYG-T on muscle atrophy and inflammation in sciatic nerve injury rat models**  
Young Sook Kim<sup>1\*</sup>, Yun Mi Lee<sup>2</sup>, Heung Joo Yuk<sup>2</sup>, Eungjung Son<sup>2</sup>, Yoon-Young Sung<sup>2</sup>, Dong-Seon Kim<sup>2</sup>. <sup>1</sup>Korean Medicine Convergence Research Division, Korea Institute Of Oriental Medicine, <sup>2</sup>Korean Medicine Science Research Division, Korea Institute of Oriental Medicine
- P08-424 **평거루트의 천연·유기농 화장품 소재개발을 위한 이취저감 공정에 따른 향기성분 및 기능성물질 변화 연구**  
이수인\*, 최우석, 최진석, 이창현. 한국화학융합시험연구원
- P08-425 **Green Tea Extract Exhibits Antidiabetic Effects Partly Through Regulating Dipeptidyl Peptidase-4 Expression in Adipose Tissue**  
Cheoljun Choi\*, Juhyeong Han, Yeonho Son, Sungug Joo, Yun-Hee Lee. College of Pharmacy and Research Institute of Pharmaceutical Sciences, Seoul National University
- P08-426 **Fermented Sorghum Improves Type 2 Diabetes Remission by Modulating Gut Microbiota and their Related Metabolites**  
Fred Kwame Ofosu<sup>1\*</sup>, Fazle Elahi<sup>1</sup>, Eric Bannan-Mwine Daliri<sup>2</sup>, Ramachandran Chelliah<sup>1</sup>, Deog-Hwan Oh<sup>1</sup>. <sup>1</sup>Department of Food Science and Biotechnology, College of Agriculture and Life Sciences, Kangwon National University, <sup>2</sup>Department of Biological Models, Institute of Biochemistry, Life Science Center, Vilnius University, Lithuania
- P08-427 **Quality Characteristics of Citrus Peel Jelly for Improving Women's Health**  
Jin Ju Baek<sup>1\*</sup>, Soo In Ryu<sup>2</sup>, Jean Kyung Paik<sup>1</sup>. <sup>1</sup>Dept. of Food and Nutrition, Eulji University, <sup>2</sup>Seongnam Food R&D Support Center

- P08-428** 3-Bromo-4,5-dihydroxybenzaldehyde isolated from *Polysiphonia morrowii* attenuates inflammation and skin barrier deterioration in TNF- $\alpha$ /IFN- $\gamma$ -stimulated HaCaT keratinocytes  
Arachchige Maheshika Kumari Jayasinghe<sup>1\*</sup>, Eui-Jeong Han<sup>1</sup>, Kirinde Gedara Isuru Sandanuwan Kirindage<sup>1</sup>, Ilekkuttige Priyan Shanura Fernando<sup>2</sup>, Eun-A Kim<sup>3</sup>, Junseong Kim<sup>3</sup>, Kyungsook Jung<sup>4</sup>, Kil-Nam Kim<sup>5</sup>, Soo-Jin Heo<sup>3</sup>, Ginnae Ahn<sup>1,2</sup>. <sup>1</sup>Department of Food Technology and Nutrition, Chonnam National University, <sup>2</sup>Department of Marine Bio-Food Sciences, Chonnam National University, <sup>3</sup>Jeju International Marine Science Center for Research & Education, Korea Institute of Ocean Science & Technology, <sup>4</sup>Functional Biomaterials Research Center, Korea Research Institute of Bioscience and Biotechnology, <sup>5</sup>Chuncheon Center, Korea Basic Science Institute
- P08-429** Antioxidant effects of polysaccharide from *Gelidium amansii* against hydrogen peroxide induced oxidative stress  
Jeong Heon Kim<sup>1,2\*</sup>, Min-Cheol Kang<sup>1</sup>, Kyung-Mo Song<sup>1</sup>. <sup>1</sup>Research Group of Process Engineering, Korea Food Research Institute, <sup>2</sup>Department of Biotechnology, Korea University
- P08-430** Ethanol Extract of *Sargassum Macrocarpum* Alters Transcriptome and Secretome Profile toward Reducing Inflammatory Cytokines and Chemokines in LPS-Stimulated Macrophages  
Heeyeon Ryu<sup>\*</sup>, Bonggi Lee. Department of Food Science and Nutrition, Pukyong National University
- P08-431** Anti-atrophic effect of Korean variety wheat sprout extracts on dexamethasone-induced atrophy in mouse model  
Mi Jeong Kim<sup>1,4\*</sup>, Hyun Sun Jo<sup>1,2</sup>, Wen Yan Huang<sup>1,2</sup>, Ji Youn Hong<sup>1,3</sup>, Bok Kyung Han<sup>1,3</sup>, Young Jun Kim<sup>1,2,3</sup>. <sup>1</sup>Department of Food and Biotechnology, Korea University, <sup>2</sup>BK21 FOUR Research Education Team for Omics-based Bio-health on Food Industry, Korea University, <sup>3</sup>Department of Food and Regulatory Science, Korea University, <sup>4</sup>Institutes of Natural Sciences, Korea University

## Sensory and Consumer Sciences

- P09-01** Comparative Evaluation of the Volatile Profiles and Taste Properties of tofu made from Korean Soybean cultivars Using Electric Nose, Electric Tongues, and GC/MSD  
Eunyeong Sim<sup>\*</sup>, Hong-Sik Kim, Hye-Young Park, Hye-Sun Choi. Crop Post-Harvest Technology Division, Department of Central Area Crop Science National Institute of Crop Science, Rural Development Administration
- P09-02** A Study on the Derivation of Representative Korean Food and Flavor based on the Image and Emotional Elements of Korean Food-Focusing on In-depth Interviews by Korean and Foreign Experts  
Youngkyung Kim<sup>1</sup>, Hyojae Jung<sup>1\*</sup>, Jieun Oh<sup>2</sup>. <sup>1</sup>Department of Nutritional Science and Food Management, Ewha Womans University, <sup>2</sup>College of Science and Industry Convergence, Ewha Womans University
- P09-03** Comparison of consumer acceptance, sensory profile and emotions of brewed coffee in central location test (CLT), and controlled (C-HUT) and no-contact (N-HUT) home-use tests  
Seyoung Park<sup>1,2\*</sup>, Jeongae Heo<sup>3</sup>, Jeongmin Oh<sup>4</sup>, Han Sub Kwak<sup>1</sup>. <sup>1</sup>Food Processing Research Group, Korea Food Research Institute, <sup>2</sup>Department of Food and Nutritional Science, Ewha Women's University, <sup>3</sup>Food Convergence Infrastructure Team, Korea Food Research Institute, <sup>4</sup>Enterprise Solution Research Center, Korea Food Research Institute
- P09-04** Qualitative Consumer Preference Studies on *Ongshimi* Fortified with Textured Vegetable Protein  
Bo Ram Kim<sup>1\*</sup>, Han Sub Kwak<sup>1</sup>, Jung Min Oh<sup>2</sup>. <sup>1</sup>Food Processing Research Group, Korea Food Research Institute, <sup>2</sup>Enterprise Solution Research Center, Korea Food Research Institute
- P09-05** Food Neophobia Scale and Willingness to Try Food Items from Familiar to Disgusting Menu in Korean Adults  
Ji-Sun Hwang<sup>1\*</sup>, Jeongae Heo<sup>2</sup>, Jungmin Oh<sup>3</sup>, Han Sub Kwak<sup>1</sup>. <sup>1</sup>Food Processing Research Group, Korea Food Research Institute, <sup>2</sup>Food Convergence Infrastructure Team, Korea Food Research Institute, <sup>3</sup>Enterprise Solution Research Center, Korea Food Research Institute
- P09-06** Comparison of CATA, RATA, Flash Profile, Free listing, and Conventional Profiling for the Sensory Profiling of Ready-To-Drink (RTD) Coffee Beverages  
Yoojin Jeong<sup>\*</sup>, Gyeonghye Yoon, Daeun Kim, Giho Kim, Soa Lee, Juhee Kim, Woonseo Baik, Youngseung Lee. Department of Food Science and Nutrition, Dankook University
- P09-07** L-글루탐산나트륨의 농도 및 천연조미료 사용에 따른 소비자 기호도 분석  
이호진<sup>\*</sup>, 유현준, 이은지, 이경주, 현희선. 한국교통대학교 식품생명학부 식품영양학전공
- P09-08** Influences of product salinity on the retronasal threshold values of nine kokumi peptides isolated from soybean fermented food

- Yewon Kim<sup>1\*</sup>, Yejin Shin<sup>2</sup>, Tackhyun Park<sup>1</sup>, Mina K. Kim<sup>1</sup>. <sup>1</sup>Department of Food Science and Human Nutrition, and K-Food Research Center, Jeonbuk National University, <sup>2</sup>Daesang InnoPark
- P09-09 Influences of product pH on the retronasal threshold values of nine kokumi peptides commonly found in soybean fermented food**  
Juyeon Lee<sup>1\*</sup>, Yejin Shin<sup>1</sup>, Tackhyun Park<sup>2</sup>, Mina K Kim<sup>1</sup>. <sup>1</sup>Department of Food Science and Human Nutrition, and K-Food Research Center, Jeonbuk National University, <sup>2</sup>Daesang InnoPark
- P09-10 Analysis of differences in flavor and sensory characteristics of *doenjang* and Korean-style *doenjang***  
Yejin Shin<sup>1\*</sup>, Tackhyun Park<sup>2</sup>, Woobong Lee<sup>2</sup>, Mina K. Kim<sup>1</sup>. <sup>1</sup>Department of Food Science and Human Nutrition, Jeonbuk National University, <sup>2</sup>Daesang InnoPark
- P09-11 Correlating Volatile Aroma Compounds Identified in Traditional *Doenjang* Produced in Gyeonggi Region to its Sensory Characteristics**  
In-Seo Hwang<sup>\*</sup>, Mina K. Kim. Department of Food Science and Human Nutrition, Jeonbuk National University
- P09-12 Effect of calcium fertilization on bitter taste and glucosinoid content of Kimchi cabbage**  
Seo-Young Chon<sup>\*</sup>, Ye-Sol Kim, Hye-Young Seo. World Institute of Kimchi
- P09-13 Consumer acceptance according to the just-about-right (JAR) scales of commercial *Makgeolli***  
Dahye Kim<sup>\*</sup>, Bora Lim, Ji-Eun Kang, Heui-Yun Kang. Fermented & Processed Food Science Division, National Institute of Agricultural Science, RDA
- P09-14 Sensory profiling method with superior product discrimination: a two-step rating-based 'double-faced' applicability (DFA) test with quantitative output measure (*d'*)**  
Ye-Jin Lee<sup>1\*</sup>, Min-A Kim<sup>1,2</sup>, Hye-Seong Lee<sup>1</sup>. <sup>1</sup>Department of Food Science and Technology, College of Engineering, Ewha Womans University, <sup>2</sup>Division of Food and Nutrition, Chonnam National University
- P09-15 완자의 소비자 기호도 조사 - 아이트래킹을 활용하여**  
강혜연<sup>\*</sup>, 이보라, 김예지, 정라나. 경희대학교 일반대학원 조리외식경영학과

## Food Service Management / Others

- P10-01 Standardization of Receptor-Oriented Integrated Risk Assessment Methods and Study on cases**  
Ga Young Song<sup>\*</sup>, Yong-Kook Kwon, Do Kyeong Yong, Yongmu Kim, Haejung Yoon, Kangbong Lee. Food Safety Risk Assessment Division, Food Safety Evaluation department, National Institute of Food and Drug Safety Evaluation, Ministry of Food and Drug Safety
- P10-02 매실 당절임 가공 전과정 자동화 시스템 구축 및 현장평가**  
정보미<sup>\*</sup>, 박희만, 서영욱. 국립농업과학원 농업공학부
- P10-03 Multi-functional marine carbon nanodots and their applications**  
Kyung Woo Kim<sup>\*</sup>, Kyunghwa Baek. National Marine Biodiversity Institute of Korea
- P10-04 Evaluation of the effect of salt, vinegar, and temperature on the ochratoxin A production by *Penicillium verrucosum*: A response surface methodology approach**  
Ashutosh Bahuguna<sup>\*</sup>, Sumi Lee, Vishal Kumar, Yunjin Na, Eunchan Lee, Myeongju Nam, Siva Subramanian, Gajanan A. Bodkhe, Myunghee Kim. Department of Food Science and Technology, Yeungnam University
- P10-05 K-40 농도계측에 의한 국내 천일염 생산년도 추정**  
김희선. 한국수력원자력(주) 중앙연구원 방사선해체연구소 방사선화학그룹
- P10-06 Food image dataset for AI based food recognition and volume estimation**  
Yu Jin Lim<sup>1\*</sup>, Hwagyeong Shin<sup>1</sup>, Yosik Yoo<sup>2</sup>, Eung Joo Kim<sup>2</sup>, Hyunjin Park<sup>1</sup>. <sup>1</sup>Amazing Food Solution, Inc., <sup>2</sup>NES, Inc.
- P10-07 Growth Characteristics and Coixol Content of *Coix lacryma-jobi* L. var. *ma-yuem* (Rom.Caill.) Stapf**  
Jun Yong Kim<sup>1\*</sup>, Ryu Dam Kim<sup>1</sup>, Doo Ywan Kim<sup>1</sup>, Eun Ae Yoo<sup>2</sup>, Jun Hwan Yeo<sup>1</sup>. <sup>1</sup>Department of Industry Promotion, NIKOM, Jangheung, 59338, Korea, <sup>2</sup>National Agrobiodiversity Center, NIAS, RDA
- P10-08 Evaluation of Crude Oil Contents and Agro Morphological Characters including shattering tolerance of Germplasm**  
Eunae Yoo, Gi-An Lee<sup>\*</sup>, Sojeong Hwang, Sookyeong Lee, Weilan Li, Ina Yum, Jungsook Sung. National Agrobiodiversity Center, National Institute of Agricultural Sciences, Rural Development Administration
- P10-09 BRET-AhR/ARNT fusion protein expression system to detect PAHs *in chemico***  
Ahreum Seo<sup>\*</sup>, Seok-Hee Lee, Yooheon Park. Department of Food Science and Biotechnology, Dongguk University

- P10-10 **Effects of weaning food recognition and market-selling weaning food preference factors on the selection properties of customized weaning foods**  
Myeong-Ju Ryu, Min Young Chong, Ji-Hyun Kim\*. Department of Food and Nutrition, Kwangju Women's University
- P10-11 **In depth evaluation of activity of phytoestrogens by *in vitro* BRET-based ER $\alpha$  and ER $\beta$  dimerization assay and ER transactivation assay**  
Huiwon Seo\*, Hyeyeong Seo, Ahreum Seo, Ha-Yeon Lee, Seok-Hee Lee, Yooheon Park. Department of Food Science and Biotechnology, Dongguk University
- P10-12 **Assessment of androgen-related endocrine disrupting risk of bisphenols and phthalates by *in vitro* BRET-based AR dimerization assay and AR transactivation assay**  
Ha-Yeon Lee\*, Hyeyeong Seo, Huiwon Seo, Ahreum Seo, Seok-Hee Lee, Yooheon Park. Department of Food Science and Biotechnology, Dongguk University
- P10-13 **An update of animal food material information in domestic regulation**  
Seoyeon Lee\*, Seoyeon Park, Heejung Park. Dept. of Food and Nutrition, Sangmyung University
- P10-14 **Comparison of analysis methods for human blood peptides**  
Seong-Ho Jo<sup>1\*</sup>, Bo-Min Kim<sup>2</sup>, Jae-Ho Park<sup>3</sup>, Hyun-Jin Kim<sup>1,2</sup>. <sup>1</sup>Division of Applied Life Science (BK21 Plus), Gyeongsang National University, <sup>2</sup>EZmass Co., Ltd., <sup>3</sup>Korea Food Research Institute
- P10-15 **Impacts of cooking efficacy and food-related environmental concerns on sustainable eating practices among young Korean adults in their 20s**  
So-Young Kim. Department of Food Science and Nutrition, Soonchunhyang University
- P10-16 **노인의 식품첨가물에 대한 인식 및 정보 활용에 관한 조사 연구**  
황효정<sup>1\*</sup>, 박선영<sup>2</sup>, 안수린<sup>2</sup>, 유준화<sup>3</sup>, 이현정<sup>3</sup>, 김혜영<sup>4</sup>, 신재욱<sup>5</sup>, 이정숙<sup>3</sup>. <sup>1</sup>삼육대학교 식품영양학과, <sup>2</sup>삼육대학교 식품생명산업학과, <sup>3</sup>국민대학교 식품영양학과, <sup>4</sup>용인대학교 식품영양학과, <sup>5</sup>한국식품과학연구원
- P10-17 **Analysis of motivation to learn how to cook among young Korean adults**  
So-Young Kim<sup>1\*</sup>, Ji Yu Choi<sup>2</sup>. <sup>1</sup>Department of Food Science and Nutrition, Soonchunhyang University, <sup>2</sup>Division of Culinary Arts Japanese, Sol International School, Woosong College
- P10-18 **국내·외 특수의료용도식품의 분류 및 영양기준 비교**  
임효정<sup>1,2\*</sup>, 서정민<sup>3</sup>, 박유경<sup>4</sup>, 박치민<sup>5</sup>, 이상훈<sup>3</sup>, 임희숙<sup>6</sup>, 왕승혜<sup>7</sup>. <sup>1</sup>성균관대학교 의학연구소, <sup>2</sup>동국대학교 일반대학원 식품·의료제품규제정책학과, <sup>3</sup>성균관대학교 의과대학 삼성서울병원 소아외과, <sup>4</sup>경희대학교 동서의학대학원 의학영양학과, <sup>5</sup>성균관대학교 의과대학 삼성서울병원 중환자의학과, <sup>6</sup>경희대학교 동서의학대학원 노인학과, <sup>7</sup>한국법제연구원
- P10-19 **2-weeks Repeated Oral Toxicity Study of the Agaricus blazei mycelial liquid culture extract Mixture in SD Rats**  
Yeongyu Moon\*, Juhong Lee, Kwanghyun Hwang, Jeong Doo Heo. Gyeongnam Biohealth Research Center, Bioenvironmental Science & Toxicology Division, Gyeongnam Branch Institute, Korea Institute of Toxicology
- P10-20 **Hygiene Factual Survey and Microbial Assessment of Food Truck Product**  
Ziyun Zhu, Jun-Won Lee\*, Hyun-Duk Ryu, Joy Lim, Jin-Sook Cheong, Ae-Son Om. Department of Food and Nutrition, Hanyang University
- P10-21 **당근 시즈닝 개발 및 소비자 기호도 연구**  
황보협\*, 도주석, 조영은. 안동대학교 식품영양학과
- P10-22 **정밀영양추천식단을 위한 Glycemic Index(GI) 및 Glycemic Load(GL)-DB 구축의 문제점**  
김옥현<sup>1</sup>, 주영은<sup>1</sup>, 김나래<sup>2</sup>, 이명숙<sup>1,2\*</sup>. <sup>1</sup>성신여자대학교 비만과학연구소, <sup>2</sup>성신여자대학교 식품영양학과