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Detection of adulterated red pepper powder by red dye and red pepper seed using hyperspectral technology

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Effects of CA containerized export on the quality and metabolites of strawberries during distribution

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Science, Rural Development Administration

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침엽수 추출물 처리에 따른 무화과 선도 유지 특성 연구

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⁵국립원예특작과학원

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지역농업네트워크 협동조합

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Measurement and analysis of physical environmental load during handling and distribution of domestic fruits - focused on Seongju melon

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경상남도농업기술원단감연구소

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Chae Wan Baek*, Ha Yun Kim, Yong Sik Cho, Hyun Wook Jang
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Plant-based alternative foods labeling standards for international harmonization

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Yonghyun Kim*, Hyun Ji Eo, and Uk Lee

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Pue Hee Park*, Ji Hyun Lee, Min-Sun Chang, Haejo Yang, Hyang Lan Eum, Me-Hea Park
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Korea

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적색종 용과("Da Hong", 대홍) 저장온도에 따른 품질특성 조사

이린아*, 오명협, 김효정

제주특별자치도농업기술원

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Seul-Ki Park², Jeong-Ho Lim^{1,2}, Kee-Jai Park²

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Min-Sun Chang*, Bu-Hee Park, Ji Hyun Lee, Haejo Yang, Ji Weon Choi, Jae Han Cho
Postharvest Technology Division, National Institute of Horticultural and Herbal
Science, RDA, Korea

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Min-Sun Chang*, Bu-Hee Park, Ji Hyun Lee, Haejo Yang, Ji Weon Choi, Jae Han Cho
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Science, RDA, Korea

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⁴Dept. of Bio-system Engineering, Seoul National University

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양해조*, 장민선, 이지현, 박부희
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최한률*, 임수연*, 최지원, 이지현, 엄향란, 윤여은
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²한국농수산물유통공사

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Donghyeok Shin^{*1,2}, Dae-Yong Yun², Jeong-Seok Cho^{2,3}, Seul-Ki Park³, Gyu seok Lee³, Jeong-Ho Lim^{2,3}, Jeong Hee Choi², Ji hyun Lee¹, Kee-Jai Park³

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김은아*
(주)클린힐

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전라북도농업기술원

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Characterization of pectin from dragon fruit peel by using different extraction methods

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Mogroside V content and antioxidant properties of monk fruit extract using natural deep eutectic solvents

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Characterization of pectin from dragon fruit peel by using different extraction methods

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Quality characteristics of different flavor vegan protein bar comprised of sweet potato and rice protein isolate

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Haseong-Cho¹, Nurul Saadah Said¹, Youjin-Na¹, Huimin Du¹, Yunju-Jang¹,
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Quality characteristics of sauces with different additions of fermented jujube and lemon extracts

Hyun-Ju Eom*, Hye Jin Park, Hye Jeong Kang, Yoon jin Jeong, Ju-Hyoung Kim,
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Quality characteristics of sauces with different additions of fermented jujube and several nuts

Hyun-Ju Eom*, Hye Jin Park, Hye Jeong Kang, Yoon jin Jeong, Ju-Hyoung Kim,
Hyunman Shin

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Hye Jin Park*, Hyun-Ju Eom, Nu Ri Gwon, Ju-Hyoung Kim, Hyunman Shin
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Inhibitory effect of DU-145 prostate cancer cell proliferation of colored wheat '*Arriheuk*' extract

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Processability study for the development of colored wheat '*Arriheuk*' waffle with enhanced protein content

Jisu Lee*, Minkyong Park, Young Yoon
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최은지*, 박지운, 우승혜, 성정민, 박종대

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Comparison of physicochemical characteristics of raw rice and mash prepared for selection of rice varieties suitable for distilled spirits

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쌍별귀뚜라미 분말 비율을 달리하여 제조한 수삼 첨가 머핀의 이취 저감 및 품질 특성

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Development of plant-based complex polysaccharides of κ-carrageenan/konjac glucomannan/rice flour for 3D-printable meat analogs

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Quality characteristics of Korean traditional wheat-based *Nuruk* according to grinding ratio and inoculated strain

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전처리 방법에 따른 양배추 분말의 품질특성 변화

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김표현*, 이유석, 이선경, 강현주, 마경철, 이진우

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과즙 종류에 따른 강황 젤리 품질 및 curcuminoids 함량

이유석*, 이선경, 지수현, 김표현, 조한라, 마경철, 이진우

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이유석*, 이선경, 지수현, 김표현, 김현주, 마경철, 이진우
전라남도농업기술원 친환경농업연구소

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전라남도농업기술원 친환경농업연구소

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가루쌀 '바로미2'의 이화학적 및 호화특성

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전라남도농업기술원 친환경농업연구소

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토란 전처리에 따른 아린 맛 성분 변화

이선경*, 이유석, 지수현, 김표현, 강혜원, 윤영애, 마경철, 이진우
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이선경*, 이유석, 지수현, 김표현, 신정엽, 윤영애, 마경철, 이진우
전라남도농업기술원 친환경농업연구소

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이선경*, 이유석, 지수현, 김표현, 강혜원, 마경철, 이진우
전라남도농업기술원 친환경농업연구소

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Characteristics of accelerated aging brandy by adding each type of oak

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Sciences

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Effect of high hydrostatic pressure (HHP) treatment of soaked rice grain on quality characteristics of garaeduk

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Quality characteristics of fruit wine according to *Daehong* peach pretreatment

Young-Mi Kim*, Ju-Eun Lee, Bo-Ra Lim, Ji-Ho Choi, Gwi-Jeung Han, Ji-Eun Kang
Fermented & Processed Food Science Division, National Institute of Agricultural Sciences

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Characteristics of beer produced from *Gunsan* malt with the addition of Korean wheat (*Hwanggeumal*, *Saegeumgang*, *Baeggang*)

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Effects of storage temperature and duration of *Daehong* peach wine on physicochemical properties.

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블렌칭 조건별 산마늘 분말의 품질특성 비교

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강원도특별자치도농업기술원 농식품연구소

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**염 농도를 달리한 블렌칭 처리와 건조 방법에 따른 울릉도산 명이나물, 눈개
송마, 참고비의 색상 변화**

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**설탕대체제 및 난소화성말토덱스트린을 첨가한 닭강정 소소의 개발과
품질특성에 관한 연구**

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³(주)진성바이오

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기능성 연구**

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³(주)진성바이오

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**Investigating the impact of different starch types on meat analogues
produced through low moisture extrusion**

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Exploring the influence of garlic on off-flavors in soy protein-based meat analog

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Changes in quality characteristics of pickled purple radish during storage

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남해 '섬애썩' 첨가 썩맥주 품질특성

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Effect of hydrostatic high pressure treatment of dry-milled rice ("Baromi2") flour

Hyeonbin Oh*, Jung-Hyun Nam, Hyun Wook Jang, Ha Yun Kim, Yong Sik Cho
Fermented & Processed Food Science Division, Department of Agrofood Resources,
National Institute of Agricultural Science

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증자시간에 따른 천마의 품질 변화

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천마 가공향상을 위한 전처리방법별 품질변화

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Antioxidant activity evaluation of *Platycodon grandiflorum* roots juice

Park Jeong Been*, Kim Dong Ho, Yang So young

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Effect of anaerobic fermentation conditions to skate (*Raja kenoei*) muscles on enzyme activity and myoglobin redox forms

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Change of Physicochemical Characteristics and Functional Components in the Mugwort (*Artemisia dubia* Wall.) by Different Drying Methods

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Dong-Hyeon Shin², Jong-Bang Eun^{1,2}

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블랜칭 조건별 더덕, 도라지, 땅두릅순의 품질특성 비교

권혜정*, 임재길, 박지선, 엄남용, 권향, 김선영, 박한울
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돼지 적내장의 이화학적 및 단백질 가수분해 특성

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Protein recovery from soybeans using extrusion and enzyme treatment

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²Department of Food and Life Science, Inje University

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Physicochemical characteristics of hamburger patty added with different flour as binding agents

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Changes of useful components in *Polygonum multiflorum* thunberg root by different dry methods

Young-Woo Koh¹, Kyung-Je Kim¹, Seong-Woo Jin¹, Seung-bin Im¹,
Neul I Ha, Hee-Gyeong Jeong¹, Sang-Wook Jeong¹, Tae-Young Park²,
Jae-Heoi Hong², Kyeong-Won Yun³, Yu Jin Choi⁴, and Kyoung-Sun Seo^{1*}

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Comparisons of the nutrient components from fermented mycelia and fruiting bodies of *Tuber borchii*

Seung-Bin Im^{1*}, Kyung-Je Kim¹, Seong-Woo Jin¹, Young-Woo Koh¹, Neul-i Ha¹,
Sang-Wook Jeong¹, Hee-Kyung Jeong¹, Dong Uk Kim¹, Dong Hyeon Lee¹,
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Charcteristics of brown rice for manufacturing rice Gangjung according to process conditions

Min Su Jung*, Dong Ho Kim , Hyun Joo Lee
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Development of 3D printed hybrid chicken with improved structural characteristics using plant-based proteins and transglutaminase

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Quality characteristics of Makgeolli using Seolgitteok from Icheon rice

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Investigation of quality characteristics of commercial rice flour premix

Dongho Kim^{1*}, Yoonhee Jo¹, Eunkyeong Lee¹, Jeongbeen Park¹, Minsu Jung¹,
Jungjin Lee²
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Investigation of the characteristics of powder by rice variety produced by jet mill

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Characteristics of Dried and Air-fried Apple Chips Coated with Superfine Rice Powders

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Carbon dioxide treatment alleviates chilling injury by influencing membrane-related process in paprika

Malka Siva Kumar*, Hyung Lan Eum, Jae Han Cho, Me-Hea Park

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Changes in physical properties of protein sources by adding vegetable protein sources and seaweed and treating with transglutaminase (TGase)

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Isolation of proteins from Cricket(*Gryllus bimaculatus*) using enzymes and microorganisms and investigation of the characteristics of the isolated proteins

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김병태*, 김재관, 손미희, 조영선, 한나은, 최종철, 이성남, 박명기, 박용배
경기도보건환경연구원

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김지은*, 김양희, 박신희, 김대환, 윤수정, 최영주, 강효정, 민지현, 이명진
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식용곤충과 현미를 이용한 동충하초(*Cordyceps militaris*)의 이화학적 특성 비교

이원희^{1*}, 장혜미³, 최유리¹, 이동훈¹, 이채윤¹, 조형우¹, 김은혜¹, 김환희¹, 정재희¹,
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Analytical method development and monitoring in instant noodles of ethylene oxide and its metabolite 2-Chloroethanol by the QuOil or the QuEChERS method and GC-MS/MS.

Seonghwan Moon*, Euna Chong, Yechan Kim, Kwangsoo Jeon, Chulhan Park,
Dooho Park, Bongpyo Hong
SGS Korea

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Variations on phytochemical component and antioxidant activities by season and plant parts in *Daphne jejudensis*

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유전자 종판별 기술을 이용한 식품접객업소조리식품의 수산물 원재료 진위 판별 모니터링

김대환*, 김양희, 윤수정, 김지은, 최영주, 강효정, 민지현, 이명진
경기도보건환경연구원 식품의약품연구부

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채정우*, 조희선
경기도산림환경연구소

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Androgen receptor-mediated endocrine disrupting potential of environmental phenolic compounds in food and house products

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이다움*, 임정호, 박기재, 최정희
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김민현^{1*}, 성진수^{1*}, 김정수¹, 김지윤¹, 조정석², 임정호², 문광덕^{1,3}
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Chemical and biological profiles of dendrobium in two different species on LC-QToF MS and cytotoxicity analysis

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Structural determination of cyanidin 3-O-(2-O-xylosyl)galactoside in fruits of *Eleutherococcus sessiliflorus*

Seo-Jin Lee^{1*}, Si-Hun Song¹, Jae-Hak Moon¹, Heon-Woong Kim,²
Jeong-Yong Cho¹

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Development of an analytical method for the determination of benzotriazole UV stabilizers in food

Adebayo J. Akinboye*, Ki-Yun Kim, Jung-a Lee, Hong-Jo Park, Ji-Hun Jeong, Hye-Gyeong Lee, Jun-Hyeong Park, Joon-Goo Lee

Department of Food Biotechnology, Dong-A University, Busan

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Development and validation of analytical method for determination of polycyclic aromatic hydrocarbons in livestock products

Ji-Hun Jeong*, Jung-A Lee, Hong-Jo Park, Jun-Hyeong Park, Hye-Gyeong Lee, Ki-Yun Kim, Adebayo J. Akinboye, Joon-Goo Lee

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Development of analytical method for the determination of trichlorobenzenes (TCBs) in food

Hye-Gyeong Lee*, Jun-Hyeong Park, Jung-a Lee, Hong-Jo Park, Ji-Hun Jeong, Adebayo J. Akinboye, Ki-Yun Kim, Joon-Goo Lee

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Development of analysis method for pentachlorothiophenol (PCTP) in food using GC-MS

Jun-Hyeong Park*, Hye-Gyeong Lee, Jung-a Lee, Hong-Jo Park, Ji-Hun Jeong, Adebayo J. Akinboye, Ki-Yun Kim, Joon-Goo Lee

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마른김 아임계추출물의 LC-MS 기반 대사체 분석 및 항산화 활성

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Image analysis of Kimchi cabbage penetrated with brine and seasoning using a serial block face scanning electron microscope and energy dispersive X-ray spectroscopy

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A comparative study of cell wall soluble polysaccharide between Brewer's spent yeast and yeast strains on sugar composition and antioxidant enzyme activities

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황해쑥(*Artemisia argyi*)의 추출 조건에 따른 항산화활성 및 대사체 분석

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초분광 영상을 이용한 비파괴적 젤라틴 젤 농도 분류

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P3-24

Development and validation of an analytical method for determining per- and polyfluoroalkyl substances in agricultural products using LC-MS/MS

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Ministry of Food and Drug Safety, Korea

P3-25

Development and validation of per- and polyfluoroalkyl substances (PFASs) analytical method in aquatic products

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Soonho Lee
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Ministry of Food and Drug Safety, Korea

P3-26

Pre-gelatinized rice improves rheological properties and 3D printability of mealworm powder

Legesse Shiferaw Chewaka*, Bo-Ram Park, Chan Soon Park, Shin-Young Park
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P3-27

Development of multi-analytical method for alkenylbenzenes in food using GC-MS/MS

Su-jin Oh*, Young Woon Kang, Min Woo Choi, Junghyuck Suh, Soon Ho Lee
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Ministry of Food and Drug Safety, Korea

P3-28

꾸지뽕 열매의 단백질 가수분해 활성

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P3-29

Identification of taste-activity value (TAV) on the taste-active compounds in commercial *Makgeolli*

Dahye Kim*, Ji-Eun Kang, Ji-Ho Choi, Bora Lim

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P3-30

Qualitative and quantitative analysis of phospholipids in domestic citrus fruits and vegetables

Eun-Ju Cho*, Ho-Chang Kim, Jeung-Hee Lee

Department of Food and Nutrition, Daegu university

P3-31

Analysis of total aflatoxin in soy sauces and pastes for school meals in Chungcheongnam-do using LC-MS/MS

Suha Kim*, Hansol Shin, Seungsoon Yeo, Doekyoung Kwon,

Myounghee Shin, Kyoungah Baek, Hyunmee Hong

Food and Drug Examination Team, Chungcheongnam-do Institute of Health and Environment Research

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Potential of FT-NIR spectroscopy for detection of chilling injury in Kimchi cabbage

Ji-Young Choi*, Sung Hee Park

Practical Technology Research Group, World Institute of Kimchi

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경기도 내 카페에서 판매되는 음료별 당류 함량 조사

최영주*, 김양희, 박신희, 김대환, 윤수정, 김지은, 강효정, 민지현, 이명진
경기도보건환경연구원 식품의약품연구부

미생물/발효/안전성

P4-01

양조용 포도 품종별 포도주의 페놀화합물 비교 연구

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국립원예특작과학원 과수과

P4-02

국내산 검정콩 저분자 발효물의 함황아미노산 및 품질특성 비교

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P4-03

Hot pepper (*Capsicum annuum* L.) powder as a noble and economic fermentation enhancer for yeast and alcoholic beverage

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P4-04

표면반응분석법을 활용한 가바 생물전환 균주의 최적 배양조건 확립

유승진*, 유광필, 조혜선, 임자연
(주)창역

P4-05

Reduction of odor components in distilled Soju produced using domestic hops

Hyun Jin Choi*, Ye Seul Kwon, Mi Seong Kim, Chang-Soo Kang, Han-Seok Choi

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Agriculture and Fisheries

P4-06

A comparative analysis of the physicochemical properties of enzyme-treated raw rice fermentation liquor

Ye Seul Kwon*, Mi Seong Kim, Chang-Soo Kang, Han-Seok Choi

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Agriculture and Fisheries

P4-07

양파간장 분말을 이용한 시즈닝 품질특성 평가

이채윤^{1*}, 이동훈¹, 최유리¹, 조형우¹, 이원희¹, 김은혜¹, 김환희¹, 김수환², 정재희¹,
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P4-08

Development of seasoning products using fermented onion Korean soy sauce powder

Chae Yun Lee^{1*}, Dong Hun Lee¹, Yu Ri Choi¹, Hyeong Woo Jo¹, Won Hee Lee¹,
Eun Hye Kim¹, Hwan Hui Kim¹, Jae Hee Jeong¹, Su Hwan Kim², Chang Ki Huh^{1,2}

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P4-09

Evaluation and quality characteristics of excellent yeast (*Saccharomyces cerevisiae* SFT-70) for complex fermented tea production

Hyeong Woo Jo^{1*}, Yu Ri Choi¹, Dong Hun Lee¹, Chae Yun Lee¹, Won Hee Lee¹, Eun Hye Kim¹, Sun yong Kim¹, Jun seo Jang¹, Jae Hee Jeong¹, Su Hwan Kim², Sang Ah Kim³,
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P4-10

다양한 식품군에서 분리, 동정된 발효 성능이 우수한 젖산균(*Leuconostoc mesenteroides* SFT-45)의 특성확인

이동훈^{1*}, 최유리¹, 이채윤¹, 조형우¹, 이원희¹, 김은혜¹, 김선용¹, 장준서¹, 정재희¹,
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Quality characteristics of kombucha Fermented with commercial SCOBY during fermentation

Su-Jin Shin*, Seul-Gi Lee, Kwanghyun Kim, Bong-Yun Oh
Fermented Food Industry support Center (FFIC)

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Quality characteristics of rice Makgeolli fermented by the processing forms of *Crepidiastrumson sonchifolium*

Seul-Gi Lee*, Su-Jin Shin, Kwanghyun Kim, Bong-Yun Oh
Fermented Food Industry Support Center (FFIC)

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Quality characteristics of fermented rice Makgeolli by Nuruk

Bong-You Oh*, Seul-Gi Lee, Su-Jin Shin, Byung-Kuk Choi, Geun-Ho Song, Sang-Ah Kim,
Kwanghyun Kim

Fermented Food Industry Support Center, Korea

P4-14

A microbial response to oxidative stress via transcription factors

Sungmin Hwang*, Jung Up Park, Bohyun Yun, Ji-won Park, Go Kyoung Na, Ji
Soo Kim,
SongYi Han, Kyoung Min Choi, WonWoo Lee
Division of Practical Research, Honam National Institute of Biological Resources

P4-15

Fermentation characteristics of *Cheonggukjang* prepared with non-germinated Pungsannamul-soybean

Eun Ah Sim*, Eun-Gyung Mun, Hyeonbin Kim, Ui-Lim Choi, Seungil Jeong,
Boung-Jun Oh
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P4-16

전통발효식품 유래 유용균주 발굴 및 이를 활용한 천연물 발효 추출물 제조

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P4-17

커피체리 펄프를 활용한 막걸리 제조기술 개발 및 그 특성

주진규^{1*}, 김권채¹, 김재민¹, 최민재¹, 차상화², 손동모², 백지환¹

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커피 체리 펄프를 활용한 와인 제조기술 개발

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P4-19

멸균 지표미생물의 D, Z-value 비교

남주희*, 정은선, 김채영, 임지유, 정두영, 김은영, 김종범
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유통 샐러드의 미생물학적 오염도 분석

임지유*, 김채영, 김은영, 남주희, 정두영, 김종범
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P4-21

Occurrence of fungi in dried ginseng by storage environment

Jang Nam Choi*, So Soo Kim, Ji Seon Baek, Mi Jeong Lee, Ja Yeong Jang,
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Development Administration, Wanju, Rep. of Korea

P4-22

A BRET-based rapid detection of PAHs by fusion protein expression system

Ahreum Seo*, Hyeyeong Seo, Huiwon Seo, Hayeon Lee, Seok-Hee Lee, and
Yooheon Park
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P4-23

A survey on a status of pesticide residues in seafood during the distribution and production stages

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P4-24

광주지역 유통 가금육에서 분리된 캄필로박터균의 항생제 내성 조사

이민규*, 정혜진, 서은진, 이세미, 이향희, 오그네, 서정미, 김용환, 김애경
광주광역시보건환경연구원

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남해안 서식 패류의 미생물학적 안전성 분석

김채영*, 임지유, 김은영, 남주희, 정두영, 김중범
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P4-26

세척 공정에 의한 생미역의 미생물 안전성 및 품질에 미치는 영향

박지윤*, 최은지, 우승혜, 성정민, 박종대
한국식품연구원 가공공정연구단

P4-27

**Fecal microbiota profiling of dairy cattles, holstein and jersey, in South Korea :
a comparative study**

Gwangsu Ha*, Ji-Won Seo, Hee Gun Yang, Soo-Young Lee, Do-Youn Jeong and Hee-Jong Yang

Microbial Institute for Fermentation Industry (MIFI)

P4-28

**Metagenomic biomarker discovery and comparative microbial community in
Cheonggukjang supplied Bacillus subtilis SRCM102059, using next generation
sequencing**

Hee Gun Yang*, Su Ji Jeong, Ji Won Seo, Gwangsu Ha, Hee-Jong Yang and Do-Youn Jeong

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Complete genome sequence of *Acetobacter senegalensis* Gb7 isolated from kombucha

Eunbi Oh*, Suyeon Gu, Seungwha Jo, Doyoun Jeong
Microbial Institute for Fermentation Industry, Korea

P4-30

Physiological activities and functional characteristics of radish vinegars using *Acetobacter pasteurianus* SRCM102411

Su Yeon Gu^{1*}, Eun Bi Oh¹, Seung-Wha Jo¹, Hyeon Hwa Oh², Do-Youn Jeong¹

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P4-31

Aroma patterns and their potential biomarker of different fermentation stages by farm-produced vinegars

Hee-Min Gwon*, Sun Hee Kim, Woo Soo Jeong, So-Young Kim and
Soo-Hwan Yeot†
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P4-32

Inverse association of daily fermented soybean past (“Jang”) intake with metabolic syndrome risk, especially body fat and hypertension, in men of a large hospital-based cohort

Su-Ji Jeong¹, Sunmin Park², Ji-Won Seo¹, Hee Gun Yang¹, Myeong Seon Ryu¹,
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P4-33

**Optimization of ethanol production by *Saccharomyces cerevisiae* SRCM
500093 through response surface methodology**

Ji-Won Seo, Su-Ji Jeong, Hee Gun Yang, Myeong Seon Ryu, Hee-Jong Yang,
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Microbial community of fermentants prepared with composite strains

Su Jeong Lee*, Soo-Hwan Yeo, So-Young Kim, Woo Soo Jeong
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Resource, NIAS, RDA

P4-35

**Changes in the ginsenoside content during the fermentation process using
Lactobacillus plantarum KCCM 42962**

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Science, Inje University

P4-36

**Microbial consortium of Jeju traditional fermented foods and their
cosmetic ingredient potentials**

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²Jeju Institute, RAFIQ Cosmetics

P4-37

Analysis of the fermentation properties of Godulbaegi Kimchi

Lee Su Jung*, Gim Sung Woong, Kim Eui Jin
Berry&Biofood research institute

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Manufacturing *Takju* by raw material using complex starter and investigation of quality characteristics

Hee-Min Gwon*, Sun Hee Kim, Woo Soo Jeong, and Soo-Hwan Yeot
Fermented and Processed Food Science Division, Department of Agrofood
Resources, NIAS, RDA, Korea

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시판 84개 한식메주를 이용한 간장의 품질특성

류정아*, 윤성란, 박정민, 류현정, 임소현
경상북도농업기술원

P4-40

Comparison of microbial communities, quality characteristics, and sensory characteristics of commercial *Makgeolli*

Seung-A Woo*, MyeongHui Han, SeongEui Yoo, SeoYeon Kwak, WooSoo
Jeong, Soo-Hwan Yeo, SoYoung Kim
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P4-41

Selection of superior yeast strains for high alcohol production and fruit aroma generation in solid-state fermentation

Han Byul Kang*, Su Jeong Lee, Sun-Hee Kim, So-Young Kim, Soo-Hwan Yeo,
Woo Soo Jeong
Fermented and Processed Food Science Division, Department of Agrofood
Resource, NIAS, RDA

P4-42

Antimicrobial and potential probiotic activity of JSRB 8 *Bacillus velezensis* isolated from traditionally fermented soybean products

Myeong Seon Ryu*, Ji-won Seo, Su-ji Jeong, Hee-Jong Yang, Do-Youn Jeong
Microbial Institute for Fermentation Industry(MIFI)

P4-43

Comparison of fermentation and functional characteristics of useful fungi isolated from traditional *Nuruk*

Woo Soo Jeong*, Su Jeong Lee, So-Young Kim, Soo-Hwan Yeo
Fermented and Processed Food Science Division, Department of Agrofood
Resource, NIAS, RDA

P4-44

***Lactobacillus* strains isolated from *Perilla frutescens* leaf are candidates for probiotics and may improve blood cholesterol levels**

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P4-45

Comparison of *Saccharomyces boulardii* cell surface display system for endo-inulinase expression

Gayoung Lee^{1*}, Jamin Shin¹, Yong-Su Jin² Minho Song³ and Soo Rin Kim¹
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Urbana-Champaign,
³Division of Animal and Dairy Science, Chungnam National University

P4-46

Effects on nutrients composition of *Tenebrio molitor* according to fermentation by *Cordyceps militaris* Mycelia

Neul-I Ha¹, Seung-Bin Im¹, Kyoung-Sun Seo¹, Kyung-Je Kim¹, Seong-Woo Jin¹,
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P4-47

Synthesis of dextran like exopolysaccharide from rice flour hydrolysate by *Gluconobacter oxydans* ATCC 11894 bioconversion

Seung-Min Baek^{1*}, Bo-Ram Park¹, Chan Soon Park¹, Shin-Young Park¹

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Rural Development Administration, Korea

P4-48

Optimal culture conditions and anti-inflammatory compositions hot water extract from fermented *Coix lacryma-jobi* L. var. *mayuen* Stapf. by *Hericium erinaceum* mycelials

Seong-Woo Jin¹, Dong-Uk Kim¹, Kyung-Je Kim¹,
Young-Woo Koh¹, Seung-bin Im¹, Jeong Sang Wook¹,
Neul I Ha¹, Hee-gyeong Jeong¹, Dong-Hyeon LEE¹, Kyeong-Won Yun², Yu Jin
Choi³, Kyoung-Sun Seo^{1*}

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P4-49

The research trends of eumycetes genomics

Sang-Wook Jeong*, Kyung-Je Kim, Seong-Woo Jin, Neul-i Ha, Hee-Kyung Jeong,
Young-Woo Koh, Seung-Bin Im, Dong Uk Kim, Dong Hyeon Lee, Kyoung Sun
Seo

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P4-50

Strategy of *Lentinula edodes* log cultivation smart farm system establishment

Hee-Gyeong Jeong, Kyung-Je Kim, Seong-Woo Jin, Young-Woo Koh,
Seung-Bin Im, Sang-Wook Jeong, Neul-I Ha, Dong-Hyeon Lee, Dong-Uk Kim,
Kyoung-Sun Seo*
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P4-51

Development and application of phage cocktail treatment to control *Pectobacterium carotovorum* subsp. *carotovorum* in lettuce

Su-Hyeon Kim*, Ye-Rim Park, Hyeju Jung, Seoyoung Kim, Mi-Kyung Park
School of Food Science and Biotechnology, Kyungpook National University

P4-52

Synergistic effect of vB_EcoS_EC phage and pleurocidin peptide against antibiotic-resistant *Escherichia coli*

Yu-Bin Jeon*, Su-Hyeon Kim, So-Hui Park, Mi-Kyung Park
School of Food Science and Biotechnology, Kyungpook National University

P4-53

Optimization of a novel and efficient polyvalent phage infecting *Escherichia coli* and *Salmonella* spp. for scale-up production

Seoyoung Kim*, Yu-Bin Jeon, Su-Hyeon Kim, Jaein Choe, Mi-Kyung Park
School of Food Science and Biotechnology, Kyungpook National University

P4-54

Metagenomic analysis of bacterial community and functional capacity in Cheongsan Island Local Kimchi

Sangdon Ryu*, Seunghui Song, Kira Moon, Jae-Cheol Lee, Nakyeong Lee, Yun Ji

Kim, Sung Moon Lee, Se won Chun, Jae-Hyoung Joo
Division of Practical Research, Honam National Institute of Biological Resources

P4-55

Isolation, identification, and fermentation characteristics of acetic acid bacteria (*Acetobacter pasteurianus* SFT-18 and *Gluconobacter oxydans* SFT-27) for Kombucha manufacturing

Dong Hun Lee^{1*}, Chae Yun Lee¹ Yu Ri Choi¹, Hyeong Woo Jo¹, Won Hee Lee¹,
Eun Hye Kim¹, Sun Yong Kim¹, Jun Seo Jang¹, Jae Hee Jeong¹, Su Hwan Kim²,
Byung Kuk Choi³, Chang Ki Huh^{1,2}

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P4-56

Development of lingonberry wines co-fermented with mulberry, apple and pear

Bugyeong Son^{1*}, Suhyun Lee¹, Yena Lee¹, Jiyun Oh¹, and Sae-Byuk Lee^{1,2*}

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생리활성/영양/기능성

P5-01

Safety and inhibition of hypersensitivity from sprout ginseng-derived postbiotics using smart agriculture

Kiman Lee*, Jin Hong Park, Da Hee Lee, Nam Jun Kim, Youngmin Park
R&D Center, Rokya Co., Ltd.

P5-02

Quantification of triterpenes in *Centella asiatica* cultivated in a smart farm, and their activation in keratinocytes

Jin Hong Park^{1*}, Da Hee Lee¹, Youngmin Park¹, Kiman Lee¹, Tae Jin Kang²
¹R&D Center, Rokya Co., Ltd., ²College of Pharmacy, Sahmyook University

P5-03

Anti-inflammatory and anti-obesity effect of the new cultivar *Salvia miltiorrhiza* 'Hongdan'

Jong Won Han^{1*}, Yejin Kim², Samuel Park², Hui-Jeon Jeon³, Kyung Ho Ma¹, Jeong Hoon Lee¹, Jin Tae Jung¹ and Jeehye Sung²

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P5-04

Comparison of nutritional and physicochemical characteristics between Korean native pepper variety and improved variety

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P5-05

Anti-oxidant, anti-diabetes, and anti-thrombosis activities of Gounbit, a Korean native hot pepper variety

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Anti-oxidant, anti-diabetes, and anti-thrombosis activities of Sumihyang, a Korean native hot pepper variety

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Anti-thrombosis, anti-oxidant and anti-tyrosinase activities of the aerial part of *Apocynum lancifolium*

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Anti-thrombosis, anti-oxidant and anti-tyrosinase activities of the leaves of *Rhododendron fortunei*

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P5-09

Anti-thrombosis, anti-oxidant and anti-tyrosinase Activities of of *Abies nephrolepis*

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P5-10

A study on the functional ingredients of Jeollanam-do Kimchi

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Hyeon Lee, Yoo Min Park, Ah Hyeon Jo, Sook Park, Hwan Sik Na, Mi Yeong
Shin, Yang Joon An
Jeollanam-do Institute of Health and Environment

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Anti-coagulation and platelet aggregation inhibitory Activities of the edible root of *Dioscorea alata* L.

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P5-12

Analysis of minerals and functional ingredients in domestic and foreign laver (*Pyropia* spp.)

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P5-13

Antioxidant activity and anti-obesity effect of *Sunchang* kombucha vinegar

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P5-14

Effect of beneficial bacteria and harmful components in traditional soybean paste on the anti-obesity

So-Won Jang*, Ju-Eun Kang, Ra-Yeon Kim, Soo-Min Park, Geun-Seoup Song
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P5-15

Anti-hyperlipidemia and hepatocellular protective effect of ethanol extract

from *Lithospermum erythrorhizon*

Byung-Min Oh*, Hyun-Wang Kim, Hye-Soo Jung, Hee-Jin Kim, Young-Soo Kim,
Geun-Seoup Song
Department of Food Science and Technology, Jeonbuk National University

P5-16

Nrf2-mediated protective effect of protein hydrolysates from *Protaetia brevitarsis* larvae against H₂O₂-induced cytotoxicity in AML12 hepatocytes

Hyeon-Ji Yoon*, Jeong-Min Lee, Syng-Ook Lee
Department of Food Science and Technology, Keimyung University

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Nrf2/HO-1-mediated protective effect of protein hydrolysates from silkworm (*Bombyx mori*) Pupae against H₂O₂-induced cytotoxicity in AML12 mouse hepatocytes

Gyu-Hyeon Park*, Chan-Hyeon Park, Syng-Ook Lee
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Dual targeting of KRAS and β -catenin by Isoalantolactone, an NR4A1 inactivator, inhibits colon cancer cell growth

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P5-19

Anti-tumor effect of Ganjang (Korean soy sauce) on AOM/DSS-induced colitis-associated colorectal mouse model

Hyeon-Ji Lim^{1*}, In-Sun Park¹, Se-young Yang¹, Su-Ji Jeong², Gwangsu Ha²,
Hee-Jong Yang², Do-Youn Jeong², Seon-Young Kim¹, Chan-Hun Jung¹

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P5-20

Effects of Cheonggukjang (Fermented Soybean) the development of colitis-associated colorectal cancer in mice

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Do-Youn Jeong², Seon-Young Kim¹, Chan-Hun Jung¹

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Anti-proliferative effect of *Euonymus alatus* (Thunb.) Siebold leaf extract by apoptosis in human breast cancer cells

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A tool to screen for identify potential anti-aging effects of probiotics bacteria using *Caenorhabditis elegans* animal model

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Jisoo Kim, Songyi Han, WonWoo Lee

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Immunopotentiating activity of *Platycodon grandiflorum* extracts in immunosuppressed rats

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P5-24

The protective effect of fermented soybean snacks against loperamide-induced constipation in rats

Sang-Min Kim^{1*}, Hye Ran Choi¹, Hyung-Min Choi², Tae Ho Ryu¹

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P5-25

Effect of fermented blackberry extracts on 3T3-L1 differentiation

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Sang-Wang Lee², Seon-Young Kim¹ and Mi Hee Park¹

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P5-26

Anti-inflammatory effect and signaling mechanism of *Glycine max* hydrolyzed with enzymes from *Bacillus velezensis* KMU01 in a dextran sulfate sodium-induced colitis mouse model

Seung-Hyeon Lee^{1*}, Ha-Rim Kim^{1*}, Eun-Mi Noh¹, Jae Young Park¹,
Min-Ju Kim¹, Se-Young Yang¹, Mi-Sun Kwak², Ye-Jin Jung², Hee-Jong Yang³,
Myeong-Seon Ryu³, Hyangyim Seo⁴, Hansu Jang⁴, Boung-Jun Oh¹,
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P5-27

영지버섯에 의한 꾸지뽕나무 잔가지의 고체발효 및 생물변환 생성물들의 xanthine oxidase 및 angiotensin converting enzyme 저해활성

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임산 자원의 발효과정 중 대사체학적 변화

이다은*, 정다운, 유종희, 나수창, 김대운, 오효빈, 황대일, 김태영
(재)진안홍삼연구소

P5-29

Changes and characteristics of cultured lactic acid bacteria depending on fermentation time of red ginseng rice malts

Da Eun Jeong*, Da Eun Lee, Jong Hee Yoo, Hyo Bin Oh, and Tae Young Kim
Institute of Jinan Red Ginseng

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발효 홍삼의 진세노사이드 및 벤조피렌 분석

최하경*, 주선민, 김태영, 황대일
(재)진안홍삼연구소

P5-31

Metabolomic changes during aging of fermented black ginseng vinegar

Hyo Bin Oh^{1*}, Jong Hee Yoo¹, Da Eun Jeong¹, Da Eun Lee¹ and Tae Young Kim¹
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P5-32

Anti-obesity effects of *Cirsium pendulum* Fisch and *Polygonum multiflorum* Thunberg in a high-fat diet-induced obese C57BL/6J mouse model

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Shalom Sara Thomas², Youn Soo Cha², Dae Il Hwang¹
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P5-33

산림약용자원의 항염증 효능평가를 통한 호흡기 및 면역질환 개선용 식소재화 가능성 연구

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인삼의 Minor ginsenoside성분이 함유되어 있는 콤부차의 품질특성

나수창^{1*}, 김대운, 김하빈, 심상협, 김태영
¹(재)진안홍삼연구소

P5-35

***In vitro* evaluation of natural estrogenic compounds from citrus peel through BRET-Based ER dimerization and transactivation assays**

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Republic of Korea

P5-36

Efficacy and safety evaluation of fermented soybean (Deonjang powder) intake on intestinal microbiome and metabolic disease in pre-diabetic subjects

Hui-Yeon Jang^{1*}, Si-Yeon Lee¹, Su-Jin Jung^{1,3}, Hee-Jong Yang², Su-ji Jeong², Myeong-Seon Ryu², Seung-Ok Lee^{1,3,4}, Soo-Wan Chae^{1,3}
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P5-37

Contents of major components and antioxidant effects of green *Coffea arabica* 'Geisha' beans cultivated in Korea

Yun-Suk Kwon*, Seolah Kim, Eun Yong Song, Yong Hee Kwon, So Jin Lee, Doo-Gyung Moon

National Institute of Horticultural and Herbal Science, Rural Development Administration

P5-38

Comparison and analysis of antioxidant activity according to a garlic cultivar produced in Jeju

Byung-Hyuk Kim*, Minji Shin, Seong Eun Lee,
Kyeong Hwan Moon, Hyun-Hee Han

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P5-39

Antioxidant activity and anti-obesity effects of mixture of *Brassica juncea* and black rice bran

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P5-40

Inhibition effect against 20 bacteria and 4 cell lines of methanol and water extracts from pawpaw (*Asimina triloba* [L.] Dunal) cultivated in Korea

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⁵Department of Food and Nutrition, Dong-eui University

P5-41

Inhibition of melanogenesis by *Piper betle* leaf essential oil via an activation of MAPK signaling and the antioxidant pathway

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Kyungpook National University

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Attenuation of UVB-induced photoaging by oleanolic acid and ursolic acid: structure-activity relationship, molecular docking and elucidation of molecular mechanism

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P5-43

***Dillenia indica* L. Bark extract: A natural antidiabetic food remedy with antioxidant properties in insulin-resistant cells and diabetic mice**

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Whitening, wrinkle inhibitory, and anti-obesity activities of sword bean (*Canavalia ensiformis*) fermentation liquid fermented by *Lactobacillus* sp.

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Functional properties of enzymatic hydrolysates of sesame seed meals

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The inquiry into the osteogenic potential and physicochemical properties of chickpea protein extracts from three different enzyme hydrolysis

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***Cirsium japonicum* var. *maackii* attenuates weight gain, reduces thrombus formation, and prevents atherosclerosis in high-fat diet-induced C57BL/6 mice**

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음나무(*Kalopanax septemlobus*)의 가시, 잎, 가지 열수 추출물에 항산화 활성 연구

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P5-49

Comparative study on the physicochemical properties and antioxidative activity of various berry vinegars

Gim Sung Woong*, Lee Su Jung, Kim Eui Jin

Berry&Biofood research institute

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Ant-inflammation effects of *Elsholtzia ciliata* in poly I:C stimulated RAW264.7 cells

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Antioxidant activities and ACE inhibitory effects of fermented green tea by *Lactobacillus* species

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P5-52

Effect of six herbal medicine water extracts and their mixed extract on antioxidation and preadipocyte differentiation

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Skin-lightening, anti-wrinkle, and anti-obesity effects of sword bean (*Canavalia ensiformis*) pod fermentation liquid

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Physiological activity of fermented *Coix lacryma-jobi* L. var. *ma-yuen* by mushroom mycelial

Kyung-Je Kim¹, Dong-Hyeon Lee¹, Seong-Woo Jin¹, Young-Woo Koh¹, Seung-Bin Im¹, Neul-I Ha¹, Hee Gyeong Jeong¹, Sang-Wook Jeong¹, Kyeong-Won Yun², Yu Jin Choi³, Kyoung-Sun Seo^{1*}

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Comparison between perilla and sesame seed meal extracts on oxidative stress and inflammation in LPS-treated RAW 264.7 cells

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P5-56

Fucoidan of *saccharina japonica* improves the inflammatory responses and skin barrier deterioration in fine dust (FD)-stimulated HaCaT keratinocytes

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Anti-allergic effect of *Curcuma longa* L. leaf hot water extract in IgE/BSA-stimulated mast cells and a passive cutaneous anaphylaxis (PCA) mouse model

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Exploring the potential of *Sargassum homeri* ultrasonic ethanol extract in inhibiting melanogenesis: mechanisms and efficacy

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Extraction of food intake from the Korean population for risk assessment of persistent organic pollutants (POPs): data from the Korea national health and nutrition examination survey 2016-2021

Minji Jung*, Yongwoon Shin, Ji-Eun Lee, Hakseung Ryu, Na eun Kim,
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