

13th Asian Conference on Lactic Acid Bacteria

Prospects of probiotics based on Lactic Acid Bacteria:
Research and Application

PRE- CONFERENCE EVENTS

Day 1 : Wednesday , August 16,2023

14:30 – 19:30 Registration (“Puma Imperial” & “UB grand” Hotel lobbies)

14:30 – 18:00 Preparation of posters and exhibition items in the lobby of 7 and 9 fl Chinggis Khaan National museum .

Note: The list will be uploaded on the website, based on which you may pin up the posters on the respective boards. Our team member will be there to assist you.

9:00 – 15:30 Midterm meeting in the house of honor in Zaisan at the MULS,VRI (According to the program developed by Professor Jiro Nakayama from Kyushu University, The event belongs only to participants of “Core to Core project” and AMP.)

17:30 – 19:30 IEBC meeting the house of honor in Zaisan at the MULS,VRI

SCIENTIFIC PROGRAM

Day 2: Thursday, August 17, 2023

07:00-07:50	Registration and Breakfast (In the Hotel)		
07:00-07:50 08:00-08:20	Registration and Poster preparation Opening Ceremony (Chinggis Khaan National Museum) Welcome address by Chairman of Organizing Committee Greetings Remarks by President of AFSLAB Welcome message by President of MSUA Greeting Remarks from Co-organizers and sponsors		
INVITED SPEAKERS Chair:			
<i>(Please, invited speakers have a 15-minute time slot, while regular speakers are given 12 minutes to present)</i>			
08:20-08:35	Prof. Sung-Sik Yoon from South Korea <i>“Applications of GABA-Producing LAB as Probiotics and Postbiotics”</i>		
08:35-08:50	Prof. Ying Chieh Tsai from Taiwan <i>“The promising role of Lactiplantibacillus plantarum PS128 in managing autism spectrum disorder”</i>		
08:50-09:05	Prof. Yuan-Kun Lee from Singapore <i>“Microbiome clock and human aging”</i>		
09:05-09:20	Prof. Endang Sutriswati Rahayu from Indonesia <i>“Lactiplantibacillus plantarum subsp. plantarum Dad-13, the indigenous probiotic: Health benefits, production and market challenge”</i>		
09:20-09:35	Prof. Chirstina Warinner from USA <i>“The impact of dairy-based diets on the gut microbiome: a view from Mongolia”</i>		
Time	ID	Topic	Speakers

Session 1: LAB application and innovation
Chair: Prof. Yuan-Kun Lee (Singapore)

09:35-09:47	LAIN01	Design and formulate synbiotics for pathogenic prevention using a stimulated human gut model	<u>Massalin Nakphaichit</u> , Kevin Mok, Patkakorn Udomsri, Witida Sathitkowitchai, Dennis Sandris Nielsen and Sunee Nitisinprasert
09:47-09:59	LAIN02	Selective stimulation of probiotic growth and lactic acid production by a novel prebiotic, celloligosaccharides	<u>Jirawan Apiraksakorn</u> , Konlarat Phirom-on
09:59-10:11	LAIN03	Supplementation of <i>Lactocaseibacillus rhamnosus GKLC1</i> improves exercise performance in intrinsically low exercise capacity	<u>You-Shan Tsai</u> , Tzu-Chun Lin, Shih-Wei Lin, Yen-Lan Chen and Chin-Chu Chen
10:11-10:23	LAIN04	Potential development and application of exopolysaccharide production system using thermophilic lactic acid bacteria	<u>Dariimaa Ganbat</u> , Sondor Ganbat, Dong-Woo Lee, Seong-Bo Kim, Yong-Jik Lee, Dong-Jin Jang, Sung Tae Kim, and Sang-Jae Lee
10:23-10:38	Coffee break and Poster viewing		
10:38-10:50	LAIN05	Sugar to Fiber: Thermozymses for Prebiotics	<u>Sondor Ganbat</u> , Jae-Hong Park, Bo Gyoung Choi, Dariimaa Ganbat, Hyeryeong Choi, Dong-Woo Lee, Seong-Bo Kim, and Sang-Jae Lee
10:50-11:02	LAIN06	The beneficial effects of heat-killed <i>Lactiplantibacillus plantarum TWK10</i> on exercise performance, physical adaptation and its association with gut microbiota	<u>Chia-Chia Lee</u> , Mon-Chien Lee, Yi-Chu Liao, Yi-Chen Cheng, Han-Yin Hsu, Jin-Seng Lin, Chi-Chang Huang, and Koichi Watanabe
11:02-11:14	LAIN07	Novel plant-based probiotic drink produced by fermentation of rice milk with a GABA-producing lactic acid bacterium <i>Lactiplantibacillus pentosus</i> 9D3 isolated from Thai pickled weed	<u>Chalat Santivarangkna</u> , Suwapat Kittibunchakul, Nachon Raethong
11:14-11:26	LAIN08	Characterization of Lactic acid bacteria isolated from Mongolian goat colostrum	<u>D. Ulzii-Uchral</u> , B. Tumenjargal, D. Purevtsogt, L. Tsogtbaatar, S. Banzragch, B. Lham, B. Enkhtuul, Sh. Demberel, Chuang Xu, Xinwei Li, Yuxiang Song, M. Zolzaya
11:26-11:38	LAIN09	Intestinal adhesion of <i>Lactobacillus kefirii</i> HBA20 surface protein pairs	Jie GAO Yixin ZHENG Yaxin SANG Guoqing HE
11:38-11:50	LAIN10	The potential of Taiwanese ropy fermented milk as natural additives in ice cream	<u>H. S. Wang</u> , M. J. Chen, S. Y. Wang
11:50-12:02	LAIN11	Development of halal medium for lactic acid bacteria starter culture and its application in fermented dairy products	<u>Tyas Utami</u> and Endang Sutriswati Rahayu
12:02-12:14	LAIN12	The Fabrication of New Antimicrobial Bio nanocomposite based on the Symbiotic-Nanoparticle System	<u>Seyed Abbas Shojaosadati</u> and Fereshteh Nazemi Harandi
12:14-12:26	LAIN13	Innovation in a modern dairy: Reintroducing ancient lactic acid bacteria to the diet	Munkhzul Delger
12:26-12:38	LAIN14	Quality evaluation of yogurt incorporated with giant swamp taro (<i>Cyrtosperma chamissonis</i>) and mango purees	<u>Inish Chris P. Mesias</u> and Mary Rose Maniego
12:38-13:38	Lunch time and Poster viewing		

13:38-13:50	LAIN15	Paradigm Shift of Lactic Acid Bacteria Applications as Potential Amino Acid Producers	<u>Hooi Ling Foo</u> and Teck Chwen Loh
13:50-13:55	Question and Answer		
Session 2: Gut Microbiota and Human health Chair: Prof. Ying-Chieh Tsai (Taiwan)			
13:55-14:10	Invited 6	Increase of non-communicable diseases in Asia is caused by change in diets and/or gut microbiota?	Invited speaker <u>Jiro Nakayama</u> , Akari Shinoda, Phatthanaphong Therdthata, Endang S. Rahayu, Leslie M. Dalmacio and Demberel Shrichin
14:10-14:22	GUMI01	Effect of social defeat stress on murine bile production	<u>Chise Suzuki</u> , Naoko Yamagishi, Daisuke Kyoui, Manaka Asoub, Naoko Moriya, Ayako Aoki-Yoshida, Tatsuhiko Goto, Atsushi Toyoda, Katsunari Ippoushi, Mari Maeda-Yamamoto and Yoshiharu Takayama
14:22-14:34	GUMI02	A carbohydrate-binding module (CBM)-dependent mucin O-glycan breakdown strategy of <i>Bifidobacterium bifidum</i> , highlighted by sulfoglycosidase BbhII	<u>Takane Katayama</u>
14:34-14:46	GUMI03	Study on microbiota of Mongolian herdsman intestine and fermented horse milk "Airag".	<u>Akari Shinoda</u> , Tsogtbaatar Lkhagvajav, Demberel Shirchin, Ayumu Nagashima and Jiro Nakayama
14:46-14:58	GUMI04	From Gut to Brain, Insight into the Molecular Mechanisms of Probiotic <i>Bifidobacterium</i> in Improving Cognitive Function	<u>Jinzhong Xiao</u>
14:58-15:10	GUMI05	Increased abundance of opportunistic bacteria seen in moderate-severe COVID-19 patients from the Philippines	<u>Federico Cristobal C. de Jesus II</u> , Christian Luke D. Badua, Nathaniel Q. Cruz, John Vincent Armada, Mark Joseph M. Abaca, Eric B. Yasay, Marilen Balolong and Leslie Michelle M. Dalmacio
15:10-15:22	GUMI06	Recent increasing trends in asymptomatic carriers of Shiga toxin-producing <i>Escherichia coli</i> (STEC) in Japan	<u>Naoto Hayasaka</u> , Yao Yu, Koichi Uno, Akira Sato, Akio Noguchi and Toshio Sato.
15:22-15:34	GUMI07	Investigating the roles of specific gut bacteria involving in probiotic efficacy for alleviating feline chronic kidney disease	<u>Chen Chang-An</u> , Hsiao-Wen Huang, Ya-Jane Lee and Ming-Ju Chen
15:34-15:46	GUMI08	A study of dietary habits, health status and biodiversity of intestinal lactobacillus in Mongolian and Inner Mongolian adults	<u>D. Ganmaa</u> , Ch Battogtokh, Enkhsetseg Tserenkhoo, D. Enkhmaa and Bilige Menghe
15:46-15:58	GUMI09	An evidence-based approach to functional effects of <i>Weissella confusa</i> F213 as a promising probiotic	<u>I Nengah Sujaya</u> , Komang Ayu Nocianitri and Ni Nengah Dwi Fatmawati
15:58-16:03	Question and Answer		
16:03-16:18	Coffee break and Poster viewing		
Session 3: Genetic and molecular Biology Chair: Prof. Battsetseg Badgar (Mongolia)			
16:18-16:30	GEMO01	Does Glutathione -S-transferase Theta impact the immune response?	<u>Ratha Mahendran</u> , Mugdha V Patwardhan, Lim Yew Koon, Tham Sin

			Mun, Revathi Periaswami, Kesavan Esuvaranathan and Edmund Chiong
16:30-16:42	GEMO2	Study of Population and Functional Genomics of 1,008 <i>Lactococcus lactis</i> Isolates	<u>Weicheng Li</u> , Menghe bilige and Zhihong Sun
Session 4: Probiotic and Animal health Chair: Prof. Battsetseg Badgar (Mongolia)			
16:42-16:57	Invited 7	Microbial Diversity of Traditional Fermented Milk Products of Mongolia	Invited speaker <u>Koichi Watanabe</u> , Jamyantug Dugersuren, and Shirchin Demberel
16:57-17:09	PRAN01	Potential of bacteriocins from lactic acid bacteria against mastitis in dairy cow in the Philippines	<u>Rodney H. Perez</u> and Amily E. Ancuelo
17:09-17:11	PRAN02	Characterization of "Postimmunobiotics" from porcine small intestine	Yoshiya Imamura, Hikari Yamamuro, Binghui Zhou, Sudeb Saha, Fu Namai, Keita Nishiyama, Julio Villena, Haruki Kitazawa
17:11-17:23	PRAN03	The potential probiotics that can effectively prevent or inhibit the periodontal pathogen <i>Porphyromonas gingivalis</i>	<u>Chang, Hsin-Yun</u> and Chen, Ming-Ju
17:23-17:35	PRAN04	Development of next-generation probiotics to enhance dairy cow health	Esmond Sie Wen Lan, <u>Xin-Yu Wang</u> , Jui-Chun Hsieh and Ming-Ju Chen
17:35-17:47	PRAN05	Effects of Yeast Culture and β -glucan on Growth Performance, Immune Function, and Antioxidant Capacity and the related signaling pathway in Mutton Sheep	<u>Hui Chen</u> , Chunwei Yu, Shixiong Liu, Songjian Li, Zixuan Xu, Xueqiang Li, Dongfang Li, Dacheng Liu;
17:47-17:59	PRAN06	Development and utilization of lactic acid bacteria resources	<u>Zhihong Sun</u>
18:20-20:30	Gala dinner at Aurug place, restaurant (Hosted by APU DAIRY LLC)		
Day 3: Thursday, August 18, 2023			
08:20-08:32	PRAN07	Characterization of <i>Bacillus subtilis</i> isolated from sheep's rumen	<u>Tsogtbaatar Lkhagvajav</u> , Olzii-Uchral Davaasuren, Munkhgerel Dalantai, Purevtsogt Dorjgool, Banzragch Sukhbat, Tumenjargal Bazarragchaa, Zolzaya Majigsuren, Demberel Shirchin
Session 5: Physiology and Metabolism. Chair: Prof., Endang Sutriswati Rahayu (Indonesia)			
08:32-08:44	PHME01	Interactions between kefir dominant species and effects of metabolites on kefir grain formation	<u>Leng Jia Qi</u> , De-Rong Chih, Sheng-Yao Wang and Ming-Ju Chen
08:44-08:56	PHME02	<i>Lactiplantibacillus plantarum</i> PS128 improves gastrointestinal dysfunction and modulates α -synuclein levels in rotenone-induced mouse model of Parkinson's disease	<u>Fu-Sheng Deng</u> , Yu-Fen Lin, Chih-Chieh Hsu, Chien-Chen Wu and Ying-Chieh Tsai
08:56 -09:08	PHME03	The beneficial effects of lactic acid bacteria in a letrozole-induced polycystic ovary syndrome rat model	<u>Yan Zhang Lee</u> , Yu-Fen Lin, Chien-Chen Wu, and Ying-Chieh Tsai
09:08-09:20	PHME04	Results of the study on adsorptive quality of zeolite by artificially increasing rumen cud ammonia concentration in lambs	<u>Majigsuren Zolzaya</u> , Tsogtbaatar Lkhagvajav, Dorjgool Purevtsogt, Sukhbat Banzragch, Davaasuren Ulzii-Uchral, Bazarragchaa Tumenjargal, Ayushjav

		Narantuya, Jamyang Dugersuren and Shirchin Demberel
09:20-09:25	Question and Answer	
09:25-09:40	Best poster presentation award	
09:40-10:00	Closing Remarks	
10:20	Excursion: <ul style="list-style-type: none"> • Bus departs from outside the hotel • Visit the Monastery of Aglag • Visit a Herder Family and learn about their way of life • Learn the traditional way of making dairy products Afternoon: <ul style="list-style-type: none"> • Lunch 	
18:00	Return to the hotel	

LIST OF POSTER PRESENTATIONS

No.	ID	Title and Authors
P 1a.	LAIN18 a	The History of Lactic Acid Bacteria Foods Industry in Korea and Paradigm Change for Health with the Corona Pandemic Kook-Hee Kang
P1.	LAIN18	Development of probiotic lychee gummy jelly using the indigenous <i>Lactobacillus fermentum</i> T0701 strain; evaluation of its sensory, nutritional, and shelf-life storage properties <u>Chonticha Romyasamit</u> , Aunchisa Chookaew, Areeya Mahteh, Peeradet Laiphanngam, Siriphorn Chimplee and Phoomjai Sornsenee
P2.	LAIN19	Evaluation of antibacterial, anti-biofilm, antioxidant, and anti-inflammatory activities of <i>Lactobacillus rhamnosus</i> GG fermented kratom leaves (<i>Mitragyna speciosa</i>) <u>Phoomjai Sornsenee</u> and Chonticha Romyasamit
P3.	LAIN20	Anti-Leuconostoc Potential and Optimization of Production of <i>P. acidilactici</i> Pediocin Francisco B. Elegado
P4.	LAIN21	Enhancement of antioxidant activities of oyster by lactic acid bacteria fermentation <u>Ji Yeong Park</u> , Min kyeong Kim, Dariimaa Ganbat, Sondor Ganbat, Bo Hyeon Park, Joo Young Yang, Bu Young Choi, Mi Hwa Park and Sang-Jae Lee
P5.	LAIN22	Establishment of regional traits-based lactic acid bacteria culture collection and its application <u>Joo Young Yang</u> , Dariimaa Ganbat, Sondor Ganbat, Min Kyeong Kim, Bo Hyeon Park, Ji Yeong Park, Yong-Jik Lee, Seon Woong Park, Mi Hwa Park and Sang-Jae Lee
P6.	LAIN23	The influence of lactic acid bacteria fermentation on the bioactivity of green garlic from Sacheon <u>Min Kyeong Kim</u> , Ji Yeong Park, Dariimaa Ganbat, Sondor Ganbat, Bo Hyeon Park, Joo Young Yang, Beom Su Kim, Myong Ki Kim, Mi Hwa Park, and Sang-Jae Lee
P7.	LAIN24	Genome mining-based discovery of antimicrobial peptides from lactic acid bacterium <i>Pediococcus acidilactici</i> strains S1 and K3 <u>Bo Hyeon Park</u> , Dariimaa Ganbat, Sondor Ganbat, Min Kyeong Kim, Seong-Bo Kim, Dong-Woo Lee, Yong-Jik Lee, Han-Seung Lee and Sang-Jae Lee

P8.	LAIN25	Supplementation of non-fermented and fermented red ginseng modulates the gut microbiota and improves intestinal barrier integrity and inflammatory profile in high fat-fed rats Sungjin Eun, Hyunji Seo, Hee-jae Suh, Sehoon Jeong, and <u>Sunhye Lee</u>
P9.	LAIN26	1. Bifidogenic growth stimulation activity of fermentation enriched with digestion enzymes Jae-Hyeok Lee and <u>Gi-Seong Moon</u> 2. Isolation of exopolysaccharide producing lactic acid bacteria and their application Jae-Hui Lee and <u>Gi-Seong Moon</u> 3. Fermented grapefruit presents bifunction bifidogenic growth stimulation activity and antipathogenic activity against <i>Clostridium difficile</i> <u>Gi-Seong Moon</u>
P10.	LAIN27	How the difference of containers affects the Airag microbiome <u>Akari SHINODA</u> , Yuki MORINAGA, Ryouta TSUCHIYA, Bat-Oyun TSERENPUREV, Purevdorj YADAMJAV, Battsetseg BADGAR, Jiro NAKAYAMA
P11.	LAIN28	A pilot study of probiotics in alleviating overactive bladder syndrome <u>You-Shan Tsai</u> , Ci-Sian Wang, Tzu-Chun Lin, Shih-Wei Lin, Yen-Lan Chen and Chin-Chu Chen
P12.	LAIN29	A probiotic with uric acid lowering properties- <i>Lactobacillus paracei</i> LT12 <u>Linda Kong</u> , Tina Tseng, Vivian Chang and William T H Chang
P13.	LAIN30	Clinical trial of <i>Lactobacillus brevis</i> GKEX in improving exercise performance of athletes <u>Yu-Hsin Hou</u> , Ci-Sian Wang, Shih-Wei Lin, Yen-Lien Chen and Chin-Chu Chen
P14.	LAIN31	Exopolysaccharide is the potential effector of <i>Limosilactobacillus fermentum</i> PS150, a hypnotic psychobiotic strain Chin-Lin Huang, Hsu-Feng Chu, Fu-Sheng Deng, Pei-Jun Wen, Ying-Chieh Tsai and <u>Chien-Chen Wu</u>
P15.	LAIN32	Clinical trial of <i>Lactobacillus brevis</i> GKEX in improving exercise performance of athletes <u>Yu-Hsin Hou</u> , Ci-Sian Wang, Shih-Wei Lin, Yen-Lien Chen and Chin-Chu Chen
P16.	LAIN33	Renoprotective effect of <i>Pediococcus acidilactici</i> GKA4 in cisplatin-induced acute kidney injury <u>You-Shan Tsai</u> , Ci-Sian Wang, Tzu-Chun Lin, Shih-Wei Lin, Yen-Lan Chen, and Chin-Chu Chen
P17.	LAIN 34	Characterization and functionalities of <i>Lactobacillus mucosae</i> isolated from children feces <u>Huang Yu-Yin</u> , Jui-Chun Hsieh, Luan-Yin Chang and Ming-Ju Chen
P18.	GUMI11	Necessity of Salmonella and Noro virus Testing of Fecal Material from Cooks <u>Yao YU</u> , Naoto HAYASAKA, Koichi UNO, Akira SATO, Akio NOGUCHI and Toshio SATO.
P19.	GUMI12	Systematic evaluation of lactic acid bacteria probiotic capabilities and application as cell factories for recombinant growth factor production Lokanand Koduru, Meiyappan Lakshmanan, Pooi-Leng Ho, <u>Dave Siak-Wei Ow</u>

P20.	GUMI13	Association of lactose malabsorption and gut <i>Lactobacillus and Bifidobacterium</i> in Mongolian adults <u>Khulan Lkhamsuren</u> , Tuul Nyambal, Raphaela Stahl, Alexander Hübner, Munkhtsetseg Janlav, Davaalkham Dambadarjaa, Christina Warinner and Soninkhishig Tsolmon
P21.	GUMI14	Development technology of starter cultures using LAB strains isolated from Mongolian traditional dairy products <u>Tsend-Ayush Chuluunbat</u>
P22.	GUMI15	Prokaryotic expression and physicochemical properties of <i>Pediococcus acidilactici</i> R-4 bacteriocin PA-1 <u>Shan JIN</u> , Hui CHEN, Zixuan Xu, Songjian Li and Dacheng Liu
P23.	GUMI16	A study of gut microbiota composition in people with diabetes <u>P.Chantsaldulam</u> , Kh.Chaminchimeg, L.Tsogtbaatar, B.Oyuntugs, Ch.Battogtokh, S.Sainbileg, Sh.Demberel and N.Bira
P24.	GUMI17	Bifidobacterium species from Mongolian gut Tuul Nyambal, Khulan Lkhamsuren, Alexander Hübner, Sabri Bromage, Raphaela Stahl, Battogtokh Chimeddorj, Davaalkham Dambadarjaa, Khosbayar Tulgaa, Christina Warinner, Soninkhishig Tsolmon
P25.	GEMO03	Production of low molecular weight heparosan by <i>E. coli</i> Nissle 1917 using K5-polysaccharide eliminase (elmA) <u>Yung-Chuan Liu</u>
P26.	PRAN09	Anti-inflammatory effect of <i>Lactiplantibacillus plantarum</i> -derived membrane vesicles <u>Shino Yamasaki-Yashiki</u> , Fumie Kawashima, Azusa Saika, Ryota Hosomi, Jun Kunisawa and Yoshio Katakura
P27.	PRAN10	Therapeutic Effects of <i>Clostridium butyricum</i> GKB7 on Osteoarthritis in a Rat Model <u>Tzu-Chun Lin</u> , Shih-Wei Lin, Yen-Lien Chen and Chin-Chu Chen
P28.	PRAN11	Screening for probiotic characteristics of lactic acid bacteria isolated from yak dairy products <u>Batsansar Bolorbuyan</u> , Khasbaatar Gantuya, Sengenorov Munkhjargal, Batdorj Batjargal and Jigjiddorj Enkh-Amgalan
P29.	PRAN12	Antimicrobial peptides produced by bifidobacteria in Mongolian newborn animals <u>Bayar Erdene</u> , Demberel Shirchin, Dugersuren Jamyan, Takashi Yoshida
P30.	PRAN13	Development and Application of yeast Culture for mutton Sheep Dacheng Liu, Shan JIN, Hui CHEN, <u>Songjian Li</u> and ZiXuan Xu
P31.	PRAN14	Effect of Yeast Culture and Yeast Cell Wall Polysaccharides on the Intestinal Barrier of mutton Sheep and Based on mutton Sheep Small Intestinal Epithelial Cells Research on the TLR2/Syk/Cards9 signaling pathway <u>Songjian Li</u> , Hui CHEN, ZiXuan Xu, Shixiong Liu, Xueqinag Li, Dacheng Liu
P32.	PRAN15	The bacterial community and metabolome dynamics and their interactions modulated by the fermentation process of yeast cultures of different strains <u>ZiXuan Xu</u> , Hui CHEN, Songjian Li, Shixiong Liu, Xueqinag Li, Shan JIN, Rihan Hai and Dacheng Liu

P33.	PRAN16	Probiotic for prophylaxis and complex therapy of endometritis in cattle <u>N. Golovnyova</u> , N. Ryabaya, M. Safonova, A. Morozova, A. Samartsev, A. Mikhalyuk
P34	PRAN17	Isolation and Characterization of Carotene-Synthesizing Bacteria from Ruminant Animals <u>Purevtsoqt Dorjgo</u> , Banzragch Sukhbat, Ulzii-Uchral Davaasuren, Tsogtbaatar Lkhagvajav, Tumenjargal Bazarragchaa, Demberel Shirchin, Zolzaya Majigsuren
P35	PRAN18	Isolation and Identification of Propionic acid bacteria from the ruminant animals <u>Banzragch Sukhbat</u> , Ulzii-Uchral Davaasuren, Purevtsoqt Dorjgo, Tsogtbaatar Lkhagvajav, Tumenjargal Bazarragchaa, Demberel Shirchin, Zolzaya Majigsuren
P36	PHME05	High cell density culture of lactic acid bacteria by aerobic fed-batch culture Ryo Ichinose, Daiki Kambara, Takatoshi Nakahara, Shino Yamasaki-Yashiki and <u>Yoshio Katakura</u>