
AAB 2015 Agenda

September 15th, 2015 (Tuesday)

[10:00 - 16:00] – On-site Registration and Affixing Posters

[16:30 - 17:30] - Meeting of Scientific Committee

[18:00 - 20:00] – Welcoming Banquet

September 16th, 2015 (Wednesday)

[09:00 - 10:00] – **Opening Ceremony**

Chairman: Junlu Guo

Welcome Speeches and Conference Photo

[10:00 - 11:30] – Section I

History and Culture of Vinegars (Opening Lectures)

Chairmen: Hirohide Toyama and Zhenghong Xu

I-1. 10:00-10:30

Current Situation and a Bright Future of Vinegar Industry in China

Xiangyun Wei (*China Condiment Association, China*)

I-2. 10:30-11:00

Investigation and Application of Acetic Acid Bacteria in China——Chinese Cereal Vinegar as a Main Example

Fusheng Chen (*Huazhong Agricultural University, China*)

I-3. 11:00-11:30

Facts and Fiction, Science and Technology: the Balsamic Vinegar Case Study

Paolo Giudici (*University of Modena and Reggio Emilia, Italy*)

[11:30 - 14:00] – Lunch, Vinegar Taste and Noon Break

[14:00 - 15:15] – Section II

Health and Main Compounds of Traditional Vinegars

Chairmen: Sixin Liu and Paolo Giudici

II-1. 14:00-14:20 / Invited Speak

Analysis of Polyphenols and Flavonoids, the Key Index for Shanxi Extra Aged Vinegar, and Their Correlation with Antioxidant Capacity

Yu Zheng, Xian Liu, Jiahui Yao, Xiaolin Xie, Yanbing Shen, Min Wang

II-2. 14:25-14:45/ Invited Speak

Effect of Mature Process on Volatile Compounds of Shanxi Mature Vinegar, a Traditional Chinese Vinegar

Jia Chen, Huaimin Zhang, Jiangyong Li, Xiaoying Xing, Jinlong Wang, Rufu Wang

II-3. 14:50-15:10 / Invited Speak

Determination of Rheological Properties and its Relationship with Total Aroma Release in Shanxi Aged Vinegar by Rheometer and Solid Phase Microextraction Coupled with GC-MS

Hong Zhu, Zaigui Li

[15:15-16:25] – Section III

Process and Quality Control of Vinegars

Chairmen: Luc De Vuyst and Zaigui Li

III-1. 15:15-15:35 / Invited Speak

Mixed Culture of *Saccharomyces cerevisiae* and *Acetobacter pasteurianus* for Acetic Acid Production

Xiong Chen, Mei Yan, Zhi Wang, Dongsheng Li, Li Qin, Zhijun Li, Juan Yao, Xinle Liang

III-2. 15:40-16:00 / Invited Speak

Production and Characteristics of High Quality Vinegar from Sugarcane Juice

Ganlin Chen, Fengjin Zheng, Zhichun Li, Jian Sun, Bo Lin, YangruiLi

III-3. 16:05-16:20

Acetic Acid Fermentation at High Temperature by a Thermotolerant *Acetobacter pasteurianus* T24 from Self-adaption Experiment

Miao Liu, Yuqiao Wei, Shiru Jia, Zhilei Tan, Lingpu Liu, Cheng Zhong, Jiaying Li

[16:25 – 17:00] – Tea Break, Vinegar Taste and Poster Session

[17:00 – 17:45] – Section IV

Relationship of Microbes with Vinegars

Chairmen: Ganlin Chen and Francois Barja

IV-1. 17:00-17:20/ Invited Speak

The Occurrence of Acetic Acid Bacteria: Ubiquitous or Niche-specific?

Luc De Vuyst, Stefan Weckx, Vasileios Pothakos

IV-2. 17:25-17:40

Identification of Acetic Acid Bacteria through Matrix-assisted Laser Desorption/Ionization Time-of-flight Mass Spectrometry

Jonas De Roos, Leilei Li, Maarten Aerts, Ilse Cleenwerck, Peter Vandamme , Luc De Vuyst

[17:45 - 19:00] – Supper

[19:00 - 21:30] – Youth Oral Presentation

Chairman: Paolo Giudici

Members: Francois Barja, Isidoro Garc á-Garc á, Luc De Vuyst, Min Wang, Sixin Liu, Uwe Deppenmeier, Wolfgang Liebl, Zhenghong Xu

Y-1. 19:00-19:10

Isolation and Identification of Gas-producing Microorganisms in Aged Vinegar

Huaimin Zhang, Rufu Wang

Y-2. 19:15-19:25

Isolation, Screening and Identification of Lactic Acid Bacteria from *Daqu* of Shanxi Aged Vinegar

Yushuang Jiao, Rufu Wang

Y-3. 19:30-19:40

Komagataeibacter hainanensis sp. nov., a Novel Cellulose-producing Strain Isolated from Coconut Milk

Longxiang Liu, Congfa Li, Sixin Liu

Y-4. 19:45-19:55

Screening of *Acetobacter pasteurianus* Mutant with Ethanol-Tolerance by a New Atmospheric and Room Temperature Plasma

Zeming Xu, Shiru Jia

Y-5. 20:00-20:10

Comparative Analysis of Clustered Regularly Interspaced Short Palindromic Repeats Loci in the Acetic Acid Bacteria

Kai Xia, Xinle Liang

Y-6. 20:15-20:25

Comparative Analysis for Operons Based on *Acetobacter pasteurianus* Genome

Haoran Yang, Fusheng Chen

Y-7. 20:30-20:40

Global Insights on Acetic Acid Resistance Mechanisms and Genetic Stability of *Acetobacter pasteurianus* Strains by Comparative Genomics

Bin Wang, Fusheng Chen

Y-8. 20:45-20:55

Analyses of Shanxi Aged Vinegar Constituents and Their Effects against Cancer Cells *in vitro*

Hengye Chen, Fusheng Chen

Y-9. 21:00-21:10

Producing Mature Vinegar with Whole Intelligent Equipment

Yao Li, Hongnian Zhao, Chunxue Song

Y-10. 21:15-21:25

Research on Fermentation with One Liquid-Phase and Double Solid-Phase

Xiaoying Xing, Yufeng Yan

September 17th, 2015 (Thursday) :
A Journey of Famous Shanxi Vinegar Companies

September 18th, 2015 (Friday)

[8:00 – 11:15] – Section IV (Continued)

Relationship of Microbes with Vinegars

Chairmen: Min Wang and Uwe Deppenmeier

IV-3. 8:00-8:20/Invited Speak

Batch-to-batch Uniformity of Bacterial and Fungal Community Succession in the Acetic Acid Fermentation of Zhenjiang Aromatic Vinegar

Zongmin Wang, Zhenming Lu, Yongjian Yu, Guoquan Li, Jinsong Shi, Zhenghong Xu

IV-4. 8:25-8:45/Invited Speak

Screening and Identification of Antagonistic Bacteria from Shanxi Mature Vinegar and Analysis of Antibacterial Substances

Lin Hao, Liyan Jia, Hua Luo, Qian Wang, Min Hu, Xianyao Duan

IV-5. 8:50-9:10/Invited Speak

Use of Genetic Tools for the Physiological Characterization, Isolation and Application of Membrane-bound Dehydrogenases from Acetic Acid Bacteria

W. Liebl, A. Ehrenreich

IV-6. 9:15-9:35/Invited Speak

Specific Features Conferring High Acid Resistance to *Komagataeibacter* spp.

F. Barja, C. Andrés-Barrao, M. L. Chappuis, E. Cabello, R. Ortega Perez

IV-7. 9:40-9:50

Zinc and Copper Induce Overexpression of Bacterial Cellulose Synthase Operon in *Komagataeibacter europaeus* 5P3

C. E. Portilla, V. Ducret, K. Perron, F. Barja

[9:55-11:15] – Section IV (Continued)

Relationship of Microbes with Vinegars

Chairmen: Isidoro Garc á-Garc á and Housheng Hong

IV-8. 9:55-10:10

High Strength Acetic Acid Production in *Acetobacter pasteurianus* by Transcriptional Analysis and Enhancement of Alcohol Respiratory Chain Run

Xiaole Xia, Chuanliu Zhu, Zhengliang Qi, Wu Wang

IV-9. 10:15-10:30

Levansucrase Diversity among Different Genera of Acetic Acid Bacteria

F. Jakob, R. F. Vogel

IV-10. 10:35-10:50

Determination of Dehydrogenase Activity in *Gluconobacter* and *Acetobacter* strains

F. Sainz, M. J. Torija, A. Mas, M. Matsutani, N. Kataoka, T. Yakushi, K. Matsushita

IV-11. 10:55-11:10

Acetic Acid Bacteria of UNIMORE Microbial Culture Collection: from Strains Preservation to Selected Starter Cultures Distribution

L. De Vero, M. Gullo, P. Giudici

[11:15 - 11:25] – Tea Break

[11:25 -13:00] – Section V

Equipments and Engineering Aspects which Vinegar Companies Need

Chairmen: Erick Vandamme and Lin Hao

V-1. 11:25-11:45/Invited Speak

Solid State Fermentation Process Enhanced by Vibro-fluidization

Yuzhen Zhang, Hongzhang Chen

V-2. 11:50-12:10/Invited Speak

Study on self-inducing reactor and its application in vinegar and yeast production

Housheng Hong, Zhiqiang Zhang, Wei Zhang

V-3. 12:15-12:35/Invited Speak

Overview of Engineering Tasks and Typical Equipment Design for Industrial Vinegar Plants

Frank Emde

V-4. 12:40-12:55

A Glimpse into the Future of Vinegar Production Technology and the Development of a Virtual Brewing Assistant

L. Wilsberg, Dr. S. Sellmer-Wilsberg, H.W. Wilsberg

[13:00 - 14:00] – Lunch and Noon Break

[14:00 – 16:55] – Section VI

Others—Except Vinegar, Investigation, Technology and Product Related to Acetic Acid Bacteria

Chairmen: Xiong Chen and Frank Emde

VI-1. 14:00-14:20/Invited Speak

How to Make *Gluconobacter oxydans* Fit for the Future

U. Deppenmeier

VI-2. 14:25-14:45/Invited Speak

Gluconic Acid Bioproduction by Acetic Acid Bacteria, a Difficult Equilibrium to Reach

I. Garcia-Garcia, A.M. Cañete-Rodriguez, I.M. Santos-Dueñas, J.E. Jimenez-Hornero

VI-3. 14:50-16:10/Invited Speak

The Formation Process of Sphere-like Bacterial Cellulose Produced in Agitated Culture and its Characterization

Jicai Bi, Sixin Liu, Congfa Li, Jun Li, Longxiang Liu, Jian Deng, Yichong Yang

VI-4. 16:15-16:30

Characterisation of a Novel Heteropolysaccharide Produced by *Kozakia baliensis*

J. Brandt, F. Jakob, R. F. Vogel

VI-5. 16:35-16:50

Engineering *Gluconobacter oxydans* for Value-added Product Production and Simplified Product Recovery

M. Blank, K. Pearson, P. Schweiger

[16:55 - 17:15] – Tea Break

[17:15 – 18:00] – Closing Ceremony

Chairman: Fusheng Chen

17:15-17:35

INDUSTRIALLY USEFUL MICROBES:.....really our friends !?

Erick Vandamme (Ghent University, Belgium)

17:35-18:00 AAB 2015 Youth Award and Closing Remarks

18:00-19:00 Poster Backout

[19:00 – 20:30] – Banquet Dinner

The Code Numbers and Titles of the Poster Presentations

P-1 Analyses of Shanxi Aged Vinegar Constituents and Their Effects against Cancer Cells *in vitro*

Hengye Chen, Qing Gui, Jingjing Shi, Robert Wang, Fusheng Chen

P-2 Analysis on the Characteristic Composition of Shanxi Aged Vinegar

Ting Li, Xiaoguang Peng, Line Yang, Lei Zhang

P-3 Study on Improving Identification of Vinegar by Electronic Nose

Jianfeng Cheng, Hongjuan Hu

P-4 Research of Different Sterilized Methods Solving Aged Vinegar Gas Production

Jiangyong Li, Rufu Wang

- P-5 Sprouted Rice in the Husk as a Substrate of *Yongchun Monascus* Vinegar**
Xi Yuan, Fusheng Chen
- P-6 Screening of *Acetobacter pasteurianus* Mutant with Ethanol-Tolerance by a New Atmospheric and Room Temperature Plasma**
Zeming Xu, Xiaoying Wu, Shiru Jia, Zhilei Tan, Yuming Zhang, Li Ye, Peipei Han
- P-7 Comparative Analysis for Operons Based on *Acetobacter pasteurianus* Genome**
Haoran Yang, Fusheng Chen
- P-8 Global Insights on Acetic Acid Resistance Mechanisms and Genetic Stability of *Acetobacter pasteurianus* Strains by Comparative Genomics**
Bin Wang, Wanping Chen, Tao Chen, Fusheng Chen
- P-9 Optimization of Two-dimensional Electrophoresis Process for Proteomic Analysis of *Acetobacter pasteurianus* Industrial Pellets**
Junmei Zhang, Jieyan Shi, Kai Xia, Xinle Liang
- P-10 Separation and Culture of Superior Acetic Acid Bacteria from Haining Yufeng Traditional Rose Vinegar**
Zexin Gao, Xiaotong Sun, Xun Huang, Bing Gao
- P-11 Isolation and Identification of Gas-producing Microorganisms in Aged Vinegar**
Huaimin Zhang, Rufu Wang
- P-12 Isolation and Preliminary Identification of *Bacillus* in *Daqu* of Shanxi Mature Vinegar**
Jinlong Wang, Rufu Wang
- P-13 Comparative Analysis of Clustered Regularly Interspaced Short Palindromic Repeats Loci in the Acetic Acid Bacteria**
Kai Xia, Yudong Li, Xinle Liang
- P-14 Isolation, Screening and Identification of Lactic Acid Bacteria from *Daqu* of Shanxi Aged Vinegar**
Yushuang Jiao, Rufu Wang
- P-15 Strawberry Purée: Selective Bio-transformation of its Glucose Content into Gluconic Acid. Influence of the Initial Concentration of Substrate on the Stability of the Product**
I. Garcia-Garcia, A.M. Cañete-Rodríguez, I.M. Santos-Dueñas, J.E. Jimenez-Hornero, M.J. Torija-Martínez, A. Mas
- P-16 *Komagataeibacter hainanensis* sp. nov., a Novel Cellulose-producing Strain Isolated from Coconut Milk**
Longxiang Liu, Congfa Li, Sixin Liu, Jian Deng, Jicai Bi, Yichong Yang, Huamei Chen, Minhua Yu
- P-17 Acetate not Hydrión Can Promote Acetic Acid of Acetic Acid Bacteria during Liquid-state Fermentation**
Huiqin Sha

P-18 Development of Tartary Buckwheat Vinegar with High GABA and D-CI
Yunlong Li, Hongmei Li, Junjun Hu, Fang Shan, Junsheng Bian, Hong Guo

P-19 Producing Mature Vinegar with Whole Intelligent Equipment
Hongnian Zhao, Chunxue Song, Yao Li

P-20 Research on Fermentation with One Liquid-Phase and Double Solid-Phase
Yufeng Yan, Li Tian, Jianxi Qin, Feiyan Li, Liwei Han, Yaowen Wu, Xiaofei Guo, Xiaozhi Fan, Lu Lin, Long Zheng

P-21 Cellulose producing acetic acid bacteria: screening towards applications
M. Gullo, G. Zanichelli, L. De Vero, P. Giudici