



月刊

Liquor-Making Science & Technology

贵州省轻工业科学研究所
中国酿酒信息中心 主办

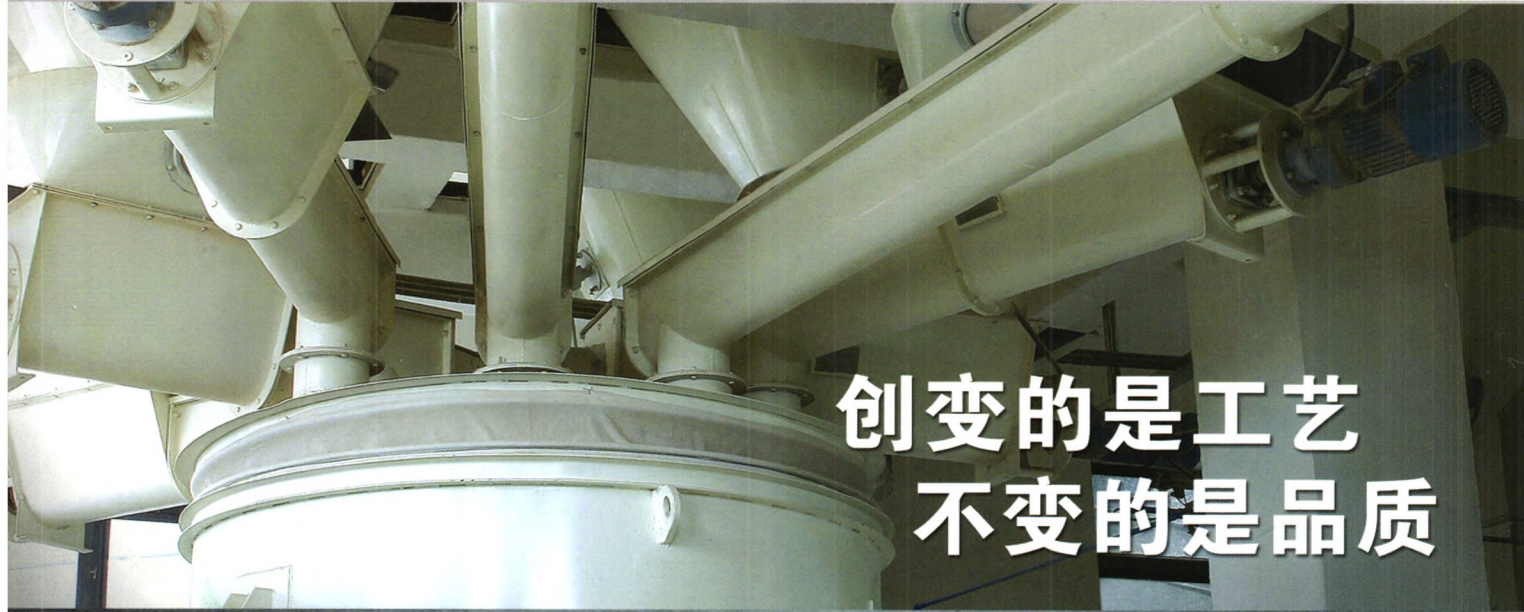
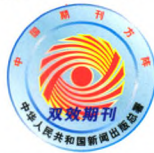
ISSN 1001-9286

1

2014

(总第235期)

- 国家期刊奖百种重点期刊
- 全国中文核心期刊
- 中国科技核心期刊
- 《CAJ-CD规范》执行优秀期刊



创变的是工艺 不变的是品质



牧羊祝您新春快乐



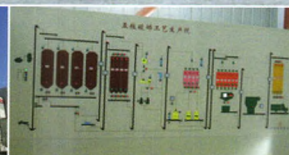
粉碎工段



混合工段



筒仓



电控系统



酿造工段

中国牧羊
CHINA MUYANG
缔造系统价值

牧羊酿造系统工程

牧羊酿造工程公司，传承经典，以人为本，开拓创新，追求卓越，具有国内领先的从原粮清理存储、粉碎配料、制曲及酿酒自动化生产线工程服务能力及丰富经验，精心为您缔造从原粮到原浆的系统工程！



万方数据

地址：江苏省扬州市邗江区华声路 电话：86-514-85828888 网址：www.muyang.com

第三届全国期刊奖百种重点期刊
全国中文核心期刊 中国科技核心期刊

酿酒科技

NIANGJIU KEJI

Liquor-making Science & Technology

2014年第1期

(总第235期)

2014年1月18日出版

编委会顾问:沈怡方 高景炎 高月明 季克良 王秋芳 袁仁国 蔡友平

编委会主任:肖冬光

编委会副主任:黄平 张肖克

编委会委员:(以姓氏汉语拼音为序)

曹健君 程宏连 杜小威 黄平 黄永光 胡建祥 贾翹彦
蒋红星 蒋英丽 姜莹 李华 赖登辉 刘自力 刘中利
吕云怀 普必恩 邱树毅 沈才洪 石峰 王瑞明 王仕佐
王秀道 吴建峰 吴天祥 肖冬光 谢永文 谢玉球 熊小毛
徐岩 徐占成 杨大金 俞学锋 张德芹 张良 张肖克
张智斌 邹海晏 钟方达 周新虎

主编:黄平

副主编:张肖克 姜莹

责任编辑:黄永光 杨国华

英文编辑:乐扬

创刊日期:1980年3月

主管单位:贵州科学院

主办单位:贵州省轻工业科学研究所

中国酿酒信息中心

协办单位:贵州茅台酒股份有限公司

泸州老窖股份有限公司

安琪酵母股份有限公司

陕西省太白酒业有限责任公司

江苏洋河酒厂股份有限公司

云南玉林泉酒业有限公司

贵州茅台集团习酒有限责任公司

湖北枝江酒业股份有限公司

四川省古蔺郎酒厂有限公司

湖北稻花香酒业股份有限公司

湖北白云边酒业股份有限公司

重庆诗仙太白酒业(集团)有限公司

江苏双沟酒业股份有限公司

贵州董酒股份有限公司

金沙窖酒酒业有限公司

山西杏花村汾酒厂股份有限公司

四川省哲学社会科学重点研究基地·中国酒史研究中心

编辑出版:酿酒科技杂志社

地址:中国·贵州·贵阳市沙冲中路58号(550007)

电话:0851-5796163 5762572 5772798

传真:0851-5776394

http://www.LMST.cn //NJKJ.chinajournal.net.cn

中文网址:酿酒科技.cn 酿酒科技.com 中国酿酒.cn

通用网址:中国酿酒 酿酒科技

E-mail:NJKJ@263.net

lmst@lmst.cn

广告经营:520100101-0100

印刷:贵阳精彩数字印刷有限公司

发行范围:国内外公开发行

国内发行:贵阳市邮政局 国内代号:66-23

国外发行:中国国际图书贸易公司(北京399信箱)

国外代号:BM4236

国内订阅:全国各地邮局(所)

刊号:ISSN 1001-9286

号:CN 52-1051/TS

定价:国内¥18.00 国外\$18.00

目次

◀专题报告▶

有机大曲与普通大曲的差异性研究
..... 涂荣坤,蔡小波,沈才萍,等9人(1)

◀研究报告▶

脂肪酶产生菌的筛选及其产酶条件优化
..... 周焕景,何腊平,张义明,等9人(6)

浓香型大曲产酯酶菌株HSM的分离及产酶营养条件研究
..... 吕梅,陈茂彬,镇达(12)

稻花香包包曲白酒发酵过程微生物动态分析
..... 李习,张晶,严锦,等6人(16)

兼香型白云边酒不同工艺高温大曲差异性分析
..... 熊小毛,严楠峰,黄莹娜,等8人(21)

回酒蒸馏提高浓香型大曲酒质量的研究
..... 陈珊,张宿义,税梁扬,等7人(24)

浓香型白酒窖泥细菌的分离鉴定
..... 黄治国,邓杰,卫春会,等5人(27)

超高压对高产洛伐他汀红曲霉菌株的诱变选育
..... 王伟,李尽哲,黄雅琴,马俊义(30)

酒醅微生物总DNA提取方法研究
..... 李德林,敖宗华,邓波,等5人(33)

小麦蒸煮香气成分的研究... 叶华夏,练顺才,谢正敏,等5人(38)

啤酒生产关键环节与啤酒风味物质的关系
..... 赵晓燕,胡鹏刚,王晟楠,肖蓓(43)

◀生产实践▶

低档低度浓香型白酒稳定性研究
..... 何静,阳小成,张宿义,等7人(48)

不同季节对浓香型白酒发酵的影响
..... 尹小满,张宿义,敖宗华,等9人(51)

机制大曲和人工大曲生物、理化指标比较分析
..... 简晓平,施永祥,王涛,游玲(55)

低酒精度配制酒关键生产技术探讨
..... 汪陈平,刘源才,刘胜华,等5人(59)

论传统白酒酿造向机械智能化设备酿造设备成套生产线
转型的必要性 谢永文,肖曙光,谢永俊,等8人(63)

天然甜型葡萄酒的保糖技术研究
..... 刘荣刚,施云鹏,韩雪,姬文刚(65)

提升洋河复合绵柔调味酒酒质的几点措施
..... 张广松,谢巍然,余静,等5人(67)

高筋面粉代替普通面粉制曲对特香型白酒风味影响的研究
..... 肖美兰,严伟(71)



◀新产品·新技术▶

功能性柚子果酒工艺研究 李宇,胡玉娇(74)

◀酿酒机械化·信息化▶

白酒生产自动控制管理系统硬件的配置和选用
..... 王兆恩,赵彬,杨富斌,朱宏伟(78)

◀综述报告▶

红曲霉在白酒行业中的应用研究进展 杨建,王伟平(82)

◀综合利用▶

糖蜜酒精废液培养微生物絮凝剂产生菌的研究
..... 易小畅,蒋智,陆兵,等5人(85)

◀分析·检测▶

QuEChERS-HPLC快速测定白酒中13种邻苯二甲酸酯

期刊基本参数:CN 52-1051/TS*1980*m*A4*128*zh*P*¥18.00*15500*33*2014-01

- 彭俏容,于淑新,赵连海,等 8 人(89)
三重四级杆串联质谱法测定糯米(黄酒原料)中多菌灵
残留量的不确定度分析
..... 彭 祺,高海峰,竹惠燕,等 7 人(93)
响应面分析法对碱法提取酒糟蛋白工艺的优化
..... 毕 波(97)

◀酒文化▶



- 管论酒文化研究的薄弱点与着力点
——以四川酒文化研究为例 彭贵川,宋 歌(101)
中国酒文化值得深入研究——在泸州酒文化研讨
会上的发言 曾枣庄(105)

◀酒业经纬▶

- 控温发酵对浓香型白酒品质变化趋势的研究
..... 罗 冰(108)
贵州省白酒产业人才需求与培养途径
..... 王 娟,郭 锐(115)

◀企业管理▶

- 基于建模分析方法对葡萄酒质量的评价
..... 张威强,颜孙强,叶杨烽,等 5 人(118)

◀市场研究▶

- 白酒出口目标国选择——基于引力模型指标变量的分析
..... 严 皓,廖国强(121)

◀饮酒与健康▶

- 不同品质的食用白酒对大鼠肝脏形态及其肝功能的影响
..... 刘爱东,谢 岚,蒋 慧,潘贵书(125)

◀市场动态▶

- 中国最具价值品牌榜公布:茅台稳坐酒类第一宝座 (47)
湖北白云边酒业上缴国税年增量首破亿元 (92)

◀书 讯▶

- 酿酒科技杂志社邮购书刊 (100)
中国轻工业出版社邮购书目 (130)

◀会议·消息▶

- 董酒荣膺品牌强国“中国梦践行企业”荣誉称号 (5)
金沙酒业力推经典酱香 两新品获专家认可 (23)
第二届中国期刊品牌建设与创新年会在云南举行 (26)
泸州老窖荣登 2014《BrandZ™ 最具价值中国品牌 100 强》 (29)
第五批啤酒《酿酒师》国家职业资格鉴定在福州举行 (37)
泸州老窖陈年老酒上海嘉禾秋拍会再创新高 (42)
泸州老窖圣鹿源养生白酒新品上市推荐会举行 (47)
习酒公司酱香勾兑班荣获“全国质量信得过班组” (50)
2013 年度中国酒业协会科学技术奖评审结果公示 (64)
山东启动白酒业食品安全追溯系统 (77)
2013 年贵州省轻工业科学研究所白酒评委年会
暨培训会筑召开 (81)
茅台酒公司通过安全生产标准化一级企业现场评审 (96)
四川将建立知名酒类品牌资源保护区 (96)
2013 中国白酒消费转型升级高峰论坛举行 (104)
茅台商务消费、普通消费呈现强劲承接效应 (107)
泸州老窖顺利通过“安全生产标准化一级企业”现场评审 (117)
洋河股份(苏酒集团)湖南工业园项目落户长沙 (120)
大关酱酒新品上市发布会在石阡举行 (124)
中国白酒文化知识有奖征文启事 (129)

◀广 告▶

- 汪洋酒类专用炭 (广 1)
宜宾圆明园实业有限公司提供基酒 (广 2)
山东梁山良友生物工程有限公司大曲系列产品 (广 3)
山东梁山久源生物产品 (广 4)
成都醇中醇君明生物科技有限公司高产酒曲、酿酒设备等 (广 5)
桂林银荔酒业有限公司优质米香型基酒 (广 6)
四川中华美酒业有限公司基酒 (广 7)

- 南昌市田园食品科学研究所天然白酒风味剂 (广 8)
IQJ 乙型大曲压块机 (广 9)
泰铂酿酒设备 (广 10)
泰安市盛宏春酿酒设备厂最新专利酿酒设备 (广 11)
贵州龙黔威酒业有限公司提供优质酱香基酒 (插 1)
山西兰花青酒业有限公司清香型白酒大曲及基酒 (插 2)
“绵爽王”调味酒 (插 3)
山东梁山徐曙生物工程有限公司系列大曲 (插 4)
商丘宇工大曲压块机 (插 5)
亿贝尔酿酒设备 (插 6)
河南丰达生物科技有限公司功能微生物 (插 7)
酒用矿物澄清剂 中正包装机械灌装设备 (插 8)
“酒仙”牌酒曲 (插 9)
川艺大曲 (插 10)
钟山活性炭 (插 11)
柏根牌超级过滤器 岳之冠酿酒设备 (插 12)
山东杨湖酒业有限公司芝麻香原酒 (插 13)
夏氏酿酒设备 (插 14)
“笑仙”牌 Q303 纯种根霉菌曲 (插 15)
广元市酒类技术研究所不醉液 (插 16)
宜宾市齐裕复合陈调味酒 (130)
张家港市金源生物化工有限公司糖化酶 (131)
南京市卓派酿酒有限公司代加工 JA 澄清剂 (132)
哈尔滨醇正醇酒曲 (133)
旭日升香料 (134)
青州赛特包装机械 (135)
酒窖曲房无线测温系统 (136)
雅大高产酿酒技术 (137)
山东中惠食品有限公司生物制品 (138)
山东省苍山县庭院经济研究所酿酒设备 (139)
大汉设备 (140)
四川省酿酒研究所至醇原浆 (141)
济南瑞丰生物工程有限公司生物制品 (142)
三虹牌化纤窖池专用布 (143)
四川意文净化科技有限公司 (144)

- 封面——牧羊集团酿酒设备
封二——《酿酒科技》新年祝福
封三——大东牌白酒净化设备
封底——安琪酵母恭祝新春
彩一——科华酒水净化设备
彩二——天津宝钿净化设备
彩三——天津宝钿净化设备
彩四——成都锐达机电实业有限公司过滤设备
彩五——国密董酒
彩六——武汉佳成生物制品有限公司生物制品
彩七——梅花山牌活性炭
彩八——汪洋酒类专用净水炭
中彩一——泸州老窖特曲老酒
中彩二——宜宾叙府酒业调味酒和基酒
中彩三——“徐坊村”大曲
中彩四——洋河蓝色经典
中彩五——诗仙太白·盛世唐朝
中彩六——傅潭酒业芝麻香基酒
中彩七——泰山泉酿酒设备
中彩八——贵州龙大曲酱香基酒\酱香大曲
后彩一——意文酒水净化设备
后彩二——港阳牌酒用香料辅料
后彩三——开封市茂盛有限公司酿酒机械
后彩四——上海菲玛自动控制包装机械
后彩五——林海机械
后彩六——济南雪娜斯智能酒水设备
后彩七——典藏价值·青花郎
后彩八——国五剑酒业酱香酒
后彩九——四川八大原酒企业
后彩十——金酱酒业基酒
后彩十一——普瑞特食品级不锈钢薄壁容器
后彩十二——百奥福纯粮固态发酵产品

CONTENTS

◀SPECIAL REPORTS▶

- Study on the Difference between Organic Daqu and Ordinary Daqu
..... TU Rongkun et al(1)

◀RESEARCH REPORTS▶

- Screening of a Lipase-producing Microbial Strain and Optimization
of Its Lipase-producing Conditions ZHOU Huanjing et al(6)
- Isolation of Esterase-producing Strain HSM from Nong-flavor
Daqu and Study on Its Esterase-producing
Nutritional Conditions LV Mei et al(12)
- Dynamic Analysis of Microbial Communities in the Fermenting
Process of Daohuaxiang Liquor by Use of Wrapped Starter
..... LI Xi et al(16)
- Analysis of the Difference in Physiochemical Indexes and Microbial
Quantity of Baiyunbian High-temperature Daqu
Produced by Different Techniques - - - XIONG Xiaomao et al(21)
- Study on the Distillation of Reflux Liquor to Improve the
Quality of Nong-flavor Liquor CHEN Shan et al(24)
- Isolation and Identification of Bacteria Strains from
Pit Mud of Nong-flavor Liquor HUANG Zhiguo et al(27)
- Ultra-high Pressure Mutation Breeding of *Monascus* Strains
with High Yield of Lovastatin WANG Wei et al(30)
- Study on the Extraction of Total DNA of Microbes in
Fermented Grains LI Delin et al(33)
- Analysis of the Volatile Flavoring Components of
Wheat in Cooking and Steaming YE Huaxia et al(38)
- Analysis of the Key Procedures in Beer Production and Their Relations
with Beer Flavoring Substances ZHAO Xiaoyan et al(43)

◀PRODUCTION PRACTICE▶

- Study on the Stability of Low-grade and Low-alcoholicity
Nong-flavor Liquor HE Jing et al(48)
- Effects of Seasons on the Fermentation of Nong-flavor Liquor
..... YIN Xiaoman et al(51)
- Comparative Analysis of Biological and Physiochemical
Indexes of Artificial Daqu and Machine-made Daqu
..... JIAN Xiaoping et al(55)
- Discussion on the Key Techniques of Low-alcohol Liqueur
..... WANG Chenping et al(59)
- Discussion on the Necessity of the Transformation of Traditional
Liquor Production to Mechanical Intelligent Manufacturing
..... XIE Guangwen et al(63)
- Study on Sugar Retention Technology for Naturally-sweet
Grape Wine LIU Ronggang et al(65)
- Several Measures to Improve the Quality of Yanghe Soft-flavor
Blending Liquor ZHANG Guangsong et al(67)
- Investigation on the Effects of the Use of Bread Flour instead
of Cake Flour on the Flavor of Site-flavor Liquor
..... XIAO Meilan et al(71)

◀NEW TECHNOLOGY▶

- Study on the Production of Functional Pomelo Fruit Wine
..... LI Yu et al(74)

◀MECHANIZATION·INFORMATION▶

- Configuration and Selection of Hardwares of Automatic Control
System for Liquor Production WANG Zhaoen et al(78)

◀SUMMARY REPORTS▶

- Research Progress in the Application of *Monascus* in
Liquor-making Industry YANG Jian et al(82)

◀COMPREHENSIVE UTILIZATION▶

- Study on the Culture of Beer Barm with Molasses Alcohol
Wastewater to Produce Microbial Flocculant
..... YI Xiaochang et al(85)

◀ANALYSIS·DETERMINATION▶

- Fast Determination of 13 Kinds of Phthalate Esters in

- Liquor by QuEChERS-HPLC PENG Qiaorong et al(89)
- Analysis of the Uncertainties in the Detection of Carbendazim
Residue in Glutinous Rice by HPLC-MS/MS..... PENG Qi et al(93)
- Optimization of Alkali Extraction of Protein from Distiller's Grains
by Use of Response Surface Method BI Bo(97)

◀CULTURES OF ALCOHOLIC BEVERAGES▶

- Study on the Weak Spots and Acting Points of Liquor Culture
—Take Liquor Culture Study in Sichuan for an Example
..... PENG Guichuan et al(101)
- Chinese Liquor Culture Deserve Deep Research
—The Speech at the Seminar of Liquor Culture in Luzhou
..... ZENG Zaozhuang(105)

◀CROSS ON ENTERPRISES▶

- Study on the Effects of Temperature-controlled Fermentation on
the Quality of Nong-flavor Liquor LUO Bing(108)
- Discussion on Talent Demand and Talent Training Ways in
Liquor-making Industry in Guizhou WANG Juan et al(115)

◀ENTERPRISES MANAGEMENT▶

- Evaluation of Grape Wine Quality Based on Modeling Analysis
..... ZHANG Weiqiang et al(118)

◀MARKET RESEARCH▶

- Chose of the Export Target Country for Chinese Liquor
—Based on the Analysis of Target
Variable of Gravity Model YAN Hao et al(121)

◀DRINKING AND HEALTH▶

- Effects of Edible Liquor of Different Quality on Liver Morphology
and Liver Functions of Sprague-Dawley Rats
..... LIU Aidong et al(125)

◀MARKET TRENDS▶

- Maotai Ranked No.1 in Wine Products in Chinese
Most Valuable Brands List (47)
- The Annual Increment of State Tax Payment Broke
100 Million CNY by Baiyunbian Distillery (92)

◀BOOK NEWS▶

- Mail-order Book List of Liquor-making Science & Technology
Publishing House (100)
- Mail-order Books in China Light Industry Publishing House (130)

◀CONFERENCES·NEWS▶

- Dongjiu Won the Honorable Title of China Dream Practitioner (5)
- Jinsha Liquor Industry Co.Ltd. Released Its Classic Jiang-flavor Series
Products and Two Accepted by Experts (23)
- The 2nd China Journals Brand Construction & Innovation Annual
Meeting Held in Yun'nan (26)
- Luzhou Laojiao Listed in 2014 BrandZ™ Chinese Top 100 Brands..... (29)
- The Fifth Batch of State Vocational Qualification Evaluation for
Brewster Was Held in Fuzhou (37)
- Aged Luzhou Laojiao Hit Record High at Shanghai Jiahe Autumn Auction... (42)
- Release Meeting of New Product of Luzhou Laojiao-Shenluyuan
Healthcare Liquor Was Held (47)
- Blending Work Team in Xijiu Co.Ltd. Won the Honor of State Quality
Trustworthy Work Team (50)
- Public Notification of 2013 Appraisal Results of Science & Technology
Prize by China Wine Industry Association (64)
- Shandong Launched Food Safety Tracing System in Liquor-making
Industry (77)
- 2013 Liquor Judges Annual Meeting (Training Conference) of Guizhou
Light Industry Science & Technology Research Institute
Was Held in Guiyang (81)
- Maotai Group Passed through On-site Assessment of Grade A Enterprise
in Standardized Safety Production (96)
- Sichuan Will Construct Famous Wine Brands Resources Protection Zone ... (96)
- 2013 Summit Forum on the Transition and the Upgrade of Chinese
Liquor Consumption Was Held (104)
- Business Consumption and Common Consumption of Maotai

Increased Rapidly	(107)
Luzhou Laojiao Co.Ltd. Passed through On-site Assessment of Grade A Enterprise in Standardized Safety Production	(117)
Hunan Industrial Zone Project of Yanghe Group Launched in Changsha ..	(120)
Release Meeting of Dagan Jiang-flavor New Products Was Held in Shiqian	(124)
A Notice Inviting Articles with Awards on Chinese Liquor Culture Knowledge	(129)

◀ADVERTISEMENTS▶

Wangyang Active Carbon for Alcoholic Beverages	(Ad1)
Basic Liquor Provided by Yibing Yuanmingyuan Co.Ltd.	(Ad2)
Daqu Series Provided by Shandong Liangyou Bioengineering Co.Ltd.	(Ad3)
Liangshan Jiuyuan Biological Products	(Ad4)
High-yield Starter for Liquor etc.by Chunzhongchun Junming Biotech Engineering Co.Ltd.	(Ad5)
Guilin Silver Lai Liquor Industry Co. Quality Rice Flavor Base Wine	(Ad6)
Base Liquor by Zhonghuamei Liquor Industry Co.Ltd.	(Ad7)
Natural Liquor Flavoring Agent Provided by Nanchang Tianyuan Food Scientific Research Institute	(Ad8)
IQJ Type Daqu Briquetting Machine	(Ad9)
Taibo Liquor-making Equipment	(Ad10)
New Liquor-making Facilities by Tai'an Shenghongchun Liquor-making Facility Factory	(Ad11)
Quality Jiang-flavour Basic Liquor Provided by Guizhoulong Qianwei Liquor Industry Co. Ltd.	(Insert 1)
Qing-flavor Daqu and Qing-flavor Base Liquor by Shanxi Lanhuaping Liquor Industry Co.Ltd.	(Insert 2)
"Mianshuangwang" Brand Modifying Liquor	(Insert 3)
Series Daqu Starter by Liangshan Xushu Biology Co. Ltd.	(Insert 4)
Shangqiu Yugong Daqu Briquetting Machine	(Insert 5)
Yibeier Wine-making Apparatus	(Insert 6)
Natural Flavoring Liquid Provided by Fengda Biotech Co.Ltd.	(Insert 7)
Mineral Clarifying Agent for Alcoholic Beverages	(Insert 8)
Filling Facilities by Qinzhou Zhongzheng Co. Ltd.	(Insert 8)
Jiuxian Brand Daqu Starter	(Insert 9)
Chuanyi Daqu	(Insert 10)
Zhongshan Active Carbon	(Insert 11)
Baigen Brand Stainless Steel Ultra-Filter	(Insert 12)
Yuezhiquan Liquor-making Machinery	(Insert 12)
Sesame-flavor Base Liquor by Shandong Yanghu Liquor Industry Co.Ltd.	(Insert 13)
Xia's Wine-making Apparatus	(Insert 14)
Quality <i>Rhizopus</i> Species Q303	(Insert 15)
Sobering Liquid by Guangyuan Wine Products Technical Research Institute	(Insert 16)
Flavoring Liquor of Yibin Qiyu Liquor Industry Co.	(130)
Quality Saccharifying Enzyme	(131)
Zuopai Liquor-making Co.Ltd.	(132)
JA Series for Alcoholic Beverages	(132)
Chunzhongchun Starter etc.	(133)
Xurisheng Spices	(134)
Qinzhou Saite Packing Machinery	(135)
Wireless Thermoscope for Starter Room	(136)
Yada High-output Liquor-making Techniques	(137)
Bio-products by Shandong Zhonghui Food Co.Ltd.	(138)
Wine-making Equipments Provided by Changshan Courtyard Economy Research Institute	(139)
Dahan Equipment	(140)
Exhibition of Quality Liquors in Sichuan Institute of Wine-brewing Industries	(141)
Pit Mud Functional Bacteria Provided by Ji'nian Ruifeng Bioengineering Co.	(142)
Sanhong Brand Special Chemical Fiber Cloth for Jars	(143)
Sichuan Yiwen Jinhua Scientific Technology Co.Ltd.	(144)

Meihuashan™ Active Carbon	(Front Cover)
New Year's Greeting by Liquor-making Science & Technology	(Inside Front Cover)
Dadong Brand Purifiers for Liquors	(Inside Back Cover)
Angel Yeast	(Back Cover)
Kehua Brand Purification and Filtration Equipment	(Colour P.1)
Tianjin Baoju Filtration Equipment	(Colour P.2)
Tianjin Baoju Filtration Equipment	(Colour P.3)
Chengdu Ruida Electromechanical Co. Filters	(Colour P.4)
Dongjiu Liquor in China	(Colour P.5)
Biological Product by Jiacheng Bio-product Co.Ltd....	(Colour P.6)
Meihuashan™ Active Carbon	(Colour P.7)
Wangyang Active Carbon	(Colour P.8)
Luzhou Laojiao Liquor	(Mid Colour P.1)
Yibin Xufu Liquor	(Mid Colour P.2)
"Xufangcun" Daqu	(Mid Colour P.3)
Yanghe Liquor	(Mid Colour P.4)
Chongqing Shixian Taibai Liquor	(Mid Colour P.5)
Sesame-flavor Base Liquor by Futan Liquor Industry Co. Ltd.	(Mid Colour P.6)
Patented Wine-making Equipments of Taishanquan Co.Ltd.	(Mid Colour P.7)
Guizhoulong Daqu Jiang-flavor Base Liquor ...	(Mid Colour P.8)
Yiwen Purification and Filtration Equipment for Liquors and Water	(Back Colour P.1)
Gangyang Brand Fragrance & Auxilliary Materials for Wine-making	(Back Colour P.2)
Kaifeng Maosheng Wine-making Machinery Co.Ltd.	(Back Colour P.3)
Shanghai Feima Automated-Control Packing Machinery	(Back Colour P.4)
Linhai Machinery	(Back Colour P.5)
Xuenas Equipments for Liquors	(Back Colour P.6)
Qinghualang Liquor	(Back Colour P.7)
Jiang-flavor Base Liquor of Guowujian Liquor Industry Co.	(Back Colour P.8)
Eight Base Liquor-making Enterprises in Sichuan	(Back Colour P.9)
Jiang-flavour Base Liquor by Gold Jiang-flavour Liquor Industry Co.	(Back Colour P.10)
Pret Liquor-making Equipments	(Back Colour P.11)
Baiaofu Fermentated Products	(Back Colour P.12)

Liquor-making Science & Technology
(Monthly)

No.1 Tol.235 Jan. 18, 2014

SPONSORED BY:

Guizhou Light Industry Scientific Research Institute

PUBLISHED BY:

《Liquor-making Science & Technology》Publishing House

No.58, Middle Road Shachong, Guiyang, China

P.C.:550007

E-mail:LMST@public.gz.cn

http://www.LMST.com.cn

SUBSCRIPTION:

The post offices (stops) all over China

PERIODICAL NO: ISSN 1001-9286/CN 52-1051/TS

OVERSEA DISTRIBUTION:

China International Book Trading Co.

P.O.B.: 399, Beijing, China

SUBSCRIPTION CODE: BM4236

PRICE: \$18.00/issue, \$216.00/year

酿造行业发酵专家——安琪酵母 **恭祝您**



传承传统酿酒工艺

推进酿酒工业发展

• 白酒功能菌 • 安琪根霉酒曲 • 安琪酿酒曲 • 安琪生香酵母

地址：湖北省宜昌市城东大道168号 电话：0717-6353619

邮箱：ethanol@angelyeast.com 网站：brew.angelyeast.com