

《中国科学引文数据库》(CSCD)来源期刊 中文核心期刊 RCCSE中国权威学术期刊(A⁺) 美国《化学文摘》收录期刊
中国科技论文统计源期刊(中国科技核心期刊) 中国知识资源总库,中国科技期刊精品数据库收录期刊

食品工业科技

Science and Technology of Food Industry

第36卷 半月刊 2015年10月15日 出版

ISSN 1002—0306
CN 11-1759/TS

2015 20

ISSN 1002-0306



为您呈现帝斯曼 发酵菌种三大工具箱

帝斯曼酸奶和新鲜发酵乳制品菌种, 帮您应对生产和新品开发中面临的各种挑战, 提供多样化的选择, 满足风味、质构和产率的不同需求。

- Delvo® Fresh Sensation – 美味诱惑
- Delvo® Fresh Pure – 天然健康
- Delvo® Fresh Proven – 低投入高回报

帝斯曼菌种产品部门, 不仅仅提供产品, 更提供优质的服务, 为您的产品赢得市场, 我们是您可持续发展的好伙伴。

帝斯曼(中国)有限公司 食品配料部
Info.food@dsm.com | www.dsm.com/food
电话 86-21-61418188
传真 86-21-61718451

关注帝斯曼
食品配料部官方微博



关注帝斯曼中国
官方微博



关注帝斯曼
食品配料部官方微信



www.dsm.com/food
www.qualityforlife.com

健康、营养、材料



DSM

缤纷科技, 美好生活

CONTENTS

食品工业科技 2015年第20期, 总340期

前瞻 Prospect

- 14 食品安全在行动 Food Safety In Action
热点追踪 Focus Tracing
- 20 挂面行业在坚守中找到品类的定位与未来
精英视点 Elite point of view
- 22 伊利集团董事长潘刚: 用全球优质资源服务消费者
- 24 工业经济转型背景下食品工业的发展、选择与展望

互动 Communication

- 企业联办 Co-sponsored with Enterprise
- 30 健康之源在于肠道
(克拉萨多生物专栏)
- 31 奔跑吧——奔向冷饮新趋势
(杜邦营养与健康专栏)
- 企业报道 Enterprise Report
- 32 协赛iCell技术: 资源化利用污泥
——助力食品饮料企业健康发展
- 34 克朗斯ErgoBloc L售出百台
——克朗斯组合机组理念的成功故事
- 行业广角 Industry Wide-angle
- 36 你了解配方奶粉中的脂肪吗?
- 39 希悦尔推出3D炫酷的即售方案
- 40 哥兰比亚乳铁蛋白获得欧洲新食品批准
- 41 乳制品2.0大时代来临 品类融合需求创新成发力点
- 42 赛默飞发布紫外可见分光光度法把关零食蜜饯食用安全
- 43 保健行业迎发展良机 汇源入股碧生源共铸民族品牌
——2015中国大健康产业高峰论坛在京举行

信息 Information

- 44 市场排行 Compositor
- 46 资讯动态 News & Trends

SPX



食品加工的 系统工程专家

在鲜奶、常温奶、酸奶、婴儿配方粉、奶酪、黄油、饮料、果汁等诸多食品生产领域, 斯必克都能够为客户提供从工程设计、设备供应、自动化设计, 到项目管理、安装调试以及人员培训和生产线优化等一整套专业的系统工程服务。

无论是现有生产线的改造, 还是新建一座世界级的食品加工厂, 斯必克都能为您提供一整套“交钥匙”工程方案。

了解更多, 请致电:

021-2208 5888 / 6715 8181

ft.china.fb@spx.com

www.spx.com.cn

超高温杀菌 • 巴氏杀菌 • 膜过滤
蒸发器 • 干燥器 • 离心机 • 阀门
换热器 • 均质机 • 搅拌器 • 泵

› APV › Anhydro
› Bran+Luebbe › Lightnin
› Gerstenberg Schröder
› Waukesha Cherry-Burrell
e&e Series
Seital Separation Technology

目次

2015年第20期, 总340期

食品安全

黄山地方茶中重金属浸出规律及健康风险评价.....马明海等(49)

分析检测

HS-SPME-GC/MS法分析焙火对铁观音品质及挥发性香气组分的影响.....陈贤明等(53)

LAMP技术快速检测海产品副溶血弧菌的条件优化.....纪懿芳等(59)

ICP-MS法测定白酒中Mn和毒理性元素的研究.....聂西度等(64)

快速溶剂萃取-超高效液相色谱-串联质谱法测定蜂花粉中氯霉素.....祝子铜等(68)

红枣香味物质的主成分分析.....刘莎莎等(72)

NIR高光谱成像技术检测冷鲜羊肉嫩度.....王婉娇等(77)

基于改良ERIC-PCR技术快速鉴别人参和西洋参.....王锐等(80)

研究与探讨

腌制和干燥工艺对咸金线鱼中生物胺的影响.....陈玉峰等(83)

嗜麦芽窄食单胞菌42-2降解黄曲霉毒素B1的效果研究.....郝修震等(92)

兰州百合鳞茎贮藏腐烂病原菌的鉴定及生物学特性.....巩慧玲等(97)

大孔树脂动态吸附前后罗非鱼下脚料蛋白酶解液的理化特性比较.....蒋雄武等(102)

几种蛋白酶抑制剂对鳇乌贼鱼糜凝胶特性的影响.....杨贤庆等(107)

杨梅叶原花色素对猪油抗氧化作用的研究.....潘俊娴等(111)

乙酰化改性对米渣蛋白功能性质的影响.....任仙娥等(116)

梁山慈竹 (*Dendrocalamus farinosus*) 竹秆水溶性多糖的分离提取及结构分析.....姚曦等(120)

β -环糊精丙酸乙酯包合物的制备及表征.....曹胜男等(124)

辛烯基琥珀酸淀粉酯对人造奶油品质的影响.....谢淑丽等(128)

15种红果肉海棠多酚及抗氧化活性分析.....魏新翠等(133)

滁州绿茶儿茶素组成及其抗氧化活性.....安晓婷等(137)

高直链玉米淀粉络合体的慢消化性与结构鉴定.....詹锦玲等(141)

两种亲水性胶体和两种变性淀粉对青稞-小麦面团流变学特性的影响.....禹洁等(145)

壳聚糖-蒲公英提取物的抑菌活性与稳定性研究.....张强等(150)

不同提取方法对鲜食大豆膳食纤维抗氧化特性的影响.....赵丽等(155)

小麦麸皮抗冻蛋白的纯化及理化性质的研究.....金周筠等(159)

不同茶饮产品的抗氧化能力分析及感官评价.....艾小钰等(164)

生物工程

无外源脯氨酸发酵产反式-4-羟脯氨酸重组大肠杆菌的构建及发酵优化.....胡丹丹等(168)

环境因素对单增李斯特菌*inlB*毒力基因表达的影响.....桑雪等(175)

黄绿蜜环菌菌种分离及人工培养研究.....史强强等(180)

纤细裸藻 $\Delta 9$ -脂肪酸延长酶基因在解脂耶氏酵母中的表达.....霍欢欢等(183)

一株绿色素产生菌的筛选及鉴定.....左勇等(188)

甘肃藏区牦牛酸乳中优良乳酸菌及其组合发酵性能研究.....陈亚等(191)

一株产香真菌的初步鉴定及其挥发性成分分析.....杨建远等(197)

溶藻弧菌生物被膜形成能力及特性分析.....贾玲华等(201)

荔枝果肉苯丙氨酸解氨酶特性的研究.....薛楚然等(206)

一种米曲霉蛋白酶的分离纯化及酶解特性研究.....宗红等(210)

一种耐酸热普鲁兰酶生产菌种的分子构建及发酵研究.....陈超等(214)

目次

2015年第20期, 总340期

产 β -葡萄糖苷酶酿酒酵母菌株紫外诱变选育及酶学性质分析.....	张莉等(220)
温度对固态制曲-水解制备抗氧化大豆肽的影响研究.....	王海萍等(225)
单亲灭活保加利亚乳杆菌与嗜热链球菌抗噬菌体菌株融合子的选育.....	王慕华等(229)
添加复合发酵剂对发酵猪肉干食品安全性的影响.....	王新惠等(234)

工艺技术

恒温超声辅助提取诃子FRAP类抗氧化活性物质的研究.....	刘梦莹等(238)
表面活性剂协同超声波优化牯岭勾儿茶总黄酮提取工艺.....	俞浩等(244)
响应面法优化超声波辅助提取罗望子壳中总黄酮的工艺研究.....	文攀等(248)
微波辐照澳洲坚果壳制备活性炭工艺研究.....	涂行浩等(253)
莴苣中两种致泻性大肠杆菌的富集及DNA提取方法的优化.....	董妍等(260)
米糠可溶性膳食纤维对降低蛋黄酱中胆固醇含量及流变特性的影响.....	郭婷婷等(265)
微波法辅助提取葡萄叶白藜芦醇及其纯化研究.....	孙磊磊等(271)
罗摩果壳多糖提取工艺优化及其抗氧化活性研究.....	白雨鑫等(278)
基于温度控制的牛蒡微波热风耦合干燥研究.....	纪飞等(284)
响应面微波辅助酶法提取油茶枯水溶性膳食纤维的工艺优化.....	卢忠英等(289)
两步法提取杭白菊精油工艺条件的优化.....	吕都等(293)
乙醇沉淀与纳滤脱盐法制备葡萄糖酸的比较研究.....	马超婕等(299)
树脂柱层析法分离纯化籽瓜中L-瓜氨酸.....	席冬华等(304)
猪皮胶原多肽螯合钙的制备及其结构表征.....	许先猛等(309)
酶法-超声波辅助提取香椿叶中总黄酮及抗氧化活性研究.....	刘智峰(314)

食品添加剂

单宁酸对三种天然色素辅色作用的评价.....	刘松等(320)
------------------------	----------

贮运保鲜

采后茉莉酸甲酯处理对桃果实青霉病及细胞壁降解酶的影响.....	李灿婴等(326)
低温对自发气调包装鸡毛菜保鲜效果的影响.....	王颖荣等(331)
1-MCP处理对贮藏后西洋梨货架期品质的影响.....	侯玉茹等(335)
甜樱桃果实采后病原菌的分离鉴定及植物精油抑菌效果研究.....	杜小琴等(339)
贮藏温度及护色剂对鲜切水芹贮藏品质的影响.....	闫晓坤等(344)
1-MCP处理对苦瓜果实贮藏品质和采后生理的影响.....	王波等(348)

营养与保健

γ -氨基丁酸对DEHP染毒大鼠焦虑行为的干预研究.....	刘辉等(354)
纹党多糖对四氧嘧啶诱导糖尿病大鼠血糖血脂的影响.....	叶文斌等(359)
牛磺酸对丙烯酰胺致SH-SY5Y细胞损伤的保护作用.....	郝瑞芳等(364)
菊糖面包对STZ糖尿病小鼠血脂、血糖的影响.....	熊政委等(368)

专题综述

化学方法在农产品产地溯源中的研究进展.....	项洋等(371)
植物中天然香豆素类化合物的提取纯化技术研究进展.....	龚蕾等(377)
果胶改性及应用研究进展.....	孙绪兵等(384)
超声辅助提取枸杞多糖的研究进展.....	李冬梅等(392)
三种蛋清过敏原蛋白的活性及其活性肽的研究进展.....	罗燕等(396)

CONTENTS

October, 2015(No.340)

Food Safety

Health risk assessment and extraction behavior of heavy metals in local tea of Huangshan.....MA Ming-hai et al(49)

Analysis and Determination

Analysis of volatile aroma compounds in baking Tieguanyin Oolong tea by head space-solid phase micro-extraction coupled with gas chromatography-mass spectrometry.....CHEN Xian-ming et al(53)

Optimize of Loop-mediated isothermal amplification technology in detection of *Vibrio parahaemolyticus*.....JI Yi-fang et al(59)

Determination of Mn and toxic elements in Chinese spirits by inductively coupled plasma mass spectrometry.....NIE Xi-du et al(64)

Determination of chloramphenicol residue in bee pollen by accelerated solvent extraction-ultra performance liquid chromatography-tandem mass spectrometry.....ZHU Zi-tong et al(68)

Principal components analysis of flavor compositions in *Zizyphus jujube*.....LIU Sha-sha et al(72)

Detection of chilled mutton tenderness by NIR hyperspectral imaging technology.....WANG Wan-jiao et al(77)

Study on rapid identification of *Panax quinquefolius* and *Panax ginseng* based on improved ERIC-PCR.....WANG Rui et al(80)

Research and Investigation

Effect of picking and drying process on biogenic amines formation in salted threadfin bream(*Nemipterus hexodon*).....CHEN Yu-feng et al(83)

Study on the degradation of aflatoxin B1 by *Stenotrophomonas* sp. 42-2.....HAO Xiu-zhen et al(92)

Identification of the pathogen from stored Lanzhou lily bulb rot disease and biological characteristics.....GONG Hui-ling et al(97)

Comparative of physicochemical properties of tilapia scraps enzymatic hydrolyzate treated by dynamic adsorption of macroporous resin.....JIANG Xiong-wu et al(102)

Influence of some protease inhibitors on gel properties of Ryukyu squid surimi.....YANG Xian-qing et al(107)

Antioxidant activities of proanthocyanidins from Chinese bayberry (*Myrica rubra* Sieb. et Zucc.) leaves in lard oil.....PAN Jun-xian et al(111)

Effect of acetylated modification on the functional properties of rice residue proteins.....REN Xian-e et al(116)

Extraction and structure analysis on polysaccharide of *Dendrocalamus farinosus* culm.....YAO Xi et al(120)

Preparation and release characterization of inclusion complexe of ethyl propionate with β -cyclodextrin.....CAO Sheng-nan et al(124)

Effect of octenyl succinic acid modified starch on quality of margarine.....XIE Shu-li et al(128)

Polyphenols and antioxidant activity analysis of 15 red flesh crabapples.....WEI Xin-cui et al(133)

Catechin composition and antioxidant capacity of green teas in Chuzhou.....AN Xiao-ting et al(137)

Slow digestibility and structure of high amylose corn starch- emulsifier inclusion complex.....ZHAN Jin-ling et al(141)

Effect of two hydrophilic gums or two modified starches on rheological properties of highland barley-wheat dough.....YU Jie et al(145)

Study on antibacterial activity and stability of chitosan and dandelion extract.....ZHANG Qiang et al(150)

Effect of different extraction methods on antioxidant properties of dietary fiber from vegetable soybean pods.....ZHAO Li et al(155)

Purification and physical-chemical characteristic of a novel antifreeze protein from wheat bran (*wbAFP*).....JIN Zhou-yun et al(159)

Antioxidant activity and sensory evaluation of tea drinks.....AI Xiao-yu et al(164)

Bioengineering

Construction and fermentation optimization of a recombinant *Escherichia coli* for the production of *trans*-4-hydroxyproline without extra addition of proline.....HU Dan-dan et al(168)

Effect of environmental factors on *Listeria monocytogenes* *inlB* gene expression.....SANG Xue et al(175)

Study on the separation and domestication of *Armillarialuteo-rivens* strain.....SHI Qiang-qiang et al(180)

Expression of *Euglena gracilis* $\Delta 9$ fatty acid elongase gene in *Yarrowia Lipolytica*.....HUO Huan-huan et al(183)

Isolation and identification of one strain of streptomyces producing green pigment.....ZUO Yong et al(188)

Study on combination fermentation and performance of lactic acid bacteria from yak milk in Tibetan Pastoral Areas.....CHEN Ya et al(191)

Preliminary identification of an aroma-producing fungus strain and analysis of volatile compounds.....YANG Jian-yuan et al(197)

Characterization and biofilm forming-ability of *Vibrio alginolyticus*.....JIA Ling-hua et al(201)

Study on enzymology properties of L-phenylalanine ammonia-lyase(PAL) in litchi fruit.....XUE Chu-ran et al(206)

Purification and characterization of a protease from *Aspergillus oryzae*.....ZONG Hong et al(210)

CONTENTS

October, 2015(No.340)

Construction of a thermostable pullulanase producing bacillus strain and its fermentation studies.....	CHEN Chao et al(214)
UV mutation of production <i>Saccharomyces cerevisiae</i> strain of β -glucosidase and its enzyme characteristics.....	ZHANG Li et al(220)
Study on effect of temperature on soybean antioxidative peptides prepared by solid-state fermentation and hydrolysis.....	WANG Hai-ping et al(225)
Breeding of fusant between single inactivated <i>Lactobacillus bulgaricus</i> and bacteriophage-resistant mutant of <i>Streptococcus thermophilus</i>	WANG Mu-hua et al(229)
Effect of inoculation with a starter culture composed of <i>Lactobacillus sakei</i> and <i>Staphylococcus xylosus</i> on the food safety of fermented dry pork jerk.....	WANG Xin-hui et al(234)

Processing Technology

The FRAP antioxidants extraction from <i>Terminalia chebula</i> Retz based on ultrasound assisted extraction with constant temperature.....	LIU Meng-ying et al(238)
Optimization of surfactant assisted with ultrasonic extraction technology of total flavonoids from <i>Berchemia kulingensis</i> Schneid.....	YU Hao et al(244)
Optimization of ultrasonic assisted extraction conditions of flavonoids from <i>Tamarindus indica</i> shell by response surface method.....	WEN Pan et al(248)
Study on the technology of activated carbon preparation of microwave irradiation of macadamia shell.....	TU Xing-hao et al(253)
Optimized methods for concentration and DNA extraction of two kinds of diarrheagenic <i>Escherichia coli</i> in fresh agricultural products.....	DONG Yan et al(260)
Effect of soluble dietary fiber from rice bran on reducing cholesterol content and rheological property of mayonnaise.....	GUO Ting-ting et al(265)
Study on microwave assisted extraction and purification of resveratrol from grape leaves.....	SUN Lei-lei et al(271)
Optimization of extraction process of polysaccharides from <i>Metaplexis japonica</i> Makino nutshell and evaluation of antioxidative activity.....	BAI Yu-xin et al(278)
Research on characteristics of combined microwave-hot air drying of burdock based on temperature control.....	JI Fei et al(284)
Optimizing microwave extraction technology of soluble dietary from camellia cakes with response surface methodology.....	LU Zhong-ying et al(289)
Optimization of extraction process for <i>Chrysanthemum morifolium</i> essential oil by two-step method.....	LV Du et al(293)
Removing salt by ethanol precipitation and nanofiltration to preparation gluconic acid.....	MA Chao-jie et al(299)
Isolation and purification of L-citrulline in seeding watermelon by resin column chromatography.....	XI Dong-hua et al(304)
Preparation and characterization of pigskin polypeptide chelating calcium.....	XU Xian-meng et al(309)
Study on enzymatic-ultrasonic assisted extraction of total flavonoids from <i>Tone sinensis</i> and its anti-oxidation activities.....	LIU Zhi-feng (314)

Food Additives

Evaluation of copigmentation effects of tannin acid on three kinds of pigments.....	LIU Song et al(320)
---	---------------------

Storage and Preservation

Effect of jasmonic acid methylester treatment on blue mould and cell wall degrading enzymes activities in peach fruit.....	LI Can-ying et al(326)
Effect of storage temperature on quality of modified atmosphere package on Chinese little greens.....	WANG Ying-rong et al(331)
Effect of 1-MCP treatment on quality of <i>Pyrus communis</i> L. during shelf-life of storage.....	HOU Yu-ru et al(335)
Isolation and identification of pathogenic bacteria for sweet cherry and antibacterial effect of plant essential oil.....	DU Xiao-qin et al(339)
Effect of storage temperature and color fixative on the quality of fresh-cut cress.....	YAN Xiao-kun et al(344)
Effect of 1-methylcyclopropene (1-MCP) treatment on storage quality and postharvest physiology of bitter melon.....	WANG Bo et al(348)

Nutrition and Healthcare

Intervention effect of Gamma aminobutyric acid on anxiety behavior induced by di(2-ethylhexyl) phthalate in rats.....	LIU Hui et al(354)
Effect of polysaccharides extract from <i>Codonopsis pilosula</i> on glycemia and lipidemia in alloxan-induced diabetic rats.....	YE Wen-bin et al(359)
Protective effects of taurine on SH-SY5Y cells injury induced by acrylamide.....	HAO Rui-fang et al(364)
Effect of inulin bread on blood glucose and lipid of mice with diabetes induced by STZ.....	XIONG Zheng-wei et al(368)

Reviews

Research progress of chemical methods for geographical origin traceability of agricultural products.....	XIANG Yang et al(371)
Research progress in extraction and purification techniques of natural coumarin compounds in plants.....	GONG Lei et al(377)
Research progress of modification and application of pectin.....	SUN Xu-bing et al(384)
A view of extraction of <i>Lycium barbarum</i> polysaccharides assisted by ultrasound and its bioactivities.....	LI Dong-mei et al(392)
Progress of bioactive protein and peptides in three egg white allergens.....	LUO Yan et al(396)

特种酶制剂事业

不仅仅提供产品，更提供解决方案

安琪酶制剂专注于新、特型酶制剂的研发与推广，为食品、医药、酿造等生产企业提供优质解决方案，致力于成为贵司可持续发展的战略合作伙伴！

- 呈味核苷酸提升解决方案

核酸酶 脱氨酶

- 蛋白水解解决方案

复配蛋白酶

木瓜蛋白酶

风味蛋白酶



关注微信了解动态

安琪酵母股份有限公司
ANGEL YEAST CO., LTD.

地址：湖北省宜昌市城东大道168号 邮编：443003

电话：0717-6370352 网址：enzyme.angelyeast.com

传真：0717-6370352 邮箱：enzyme@angelyeast.com