

CHINESE TOBACCO SCIENCE

ISSN 1007-5119
CN 37-1277/S

中国烟草科学

中国农业科学院烟草研究所 中国烟草总公司青州烟草研究所 主 办

第37卷 Vol.37 第1期 No.1

· 双 月 刊 ·



www.zgyckx.com.cn

2016·1

◎ 中文核心期刊 ◎ 中国科技核心期刊 ◎ 百种中国杰出学术期刊
◎ CSCD收录期刊 ◎ 中国精品科技期刊 ◎ 英国CAB数据库收录期刊

中国烟草科学

ZHONGGUO YANCAO KEXUE

2016 年 2 月 第 37 卷 第 1 期

目 次

遗传育种

1 拟南芥花期基因转化烟草及其早花反应特性研究

常爱霞, 郭利杰, 刘 旦, 罗成刚,
冯全福, 魏 凯, 王 兰

8 *NtC3H* 基因对烟草类黄酮及绿原酸合成的影响

李 洋, 唐雪冰, 李晓峰, 李 明, 储昭辉, 丁新华

栽培营养

14 有机无机复混钾肥钾素表观释放特征及对烤烟产质量的影响

余垚颖, 蒋长春, 顾会战, 王 勇,
郭应菊, 喻 晓, 王明富

20 饼肥与化肥配施对烤烟叶片组织结构及有机酸含量的影响

许 娜, 许家来, 朱先志, 刘光亮, 梁晓芳, 孙延国,
杨举田, 刘 莉, 徐 蕊, 石 屹

26 有机肥 C/N 优化下氮肥运筹对烟株根际无机氮和酶活性的影响

丁效东, 闫慧峰, 张士荣, 陈伟贤, 郭俊杰,
魏 彬, 王 军

32 混合有机肥用量对烤烟根系活力及根际土壤生物特性的影响

李艳平, 刘国顺, 丁松爽, 李静静, 阎海涛, 阎 申

生理生态

37 贵州烟区烤烟烟叶香气物质分析

李玲燕, 徐宜民, 王程栋, 陈爱国, 陶 健,
刘百战, 赵 萍, 王树声

45 烤烟基因型间多元有机酸含量差异性分析

王国平, 王海波, 李艳丽, 罗成刚, 曹建敏,
张 玉, 冯全福, 常爱霞

51 贵州中部山区生态因子与烤烟生物碱含量及组分的相关分析

梁 盟, 王程栋, 宋文静, 孟 霖,
朱 海, 师利艳, 徐宜民

调制加工

56 不同烘烤工艺对云烟 87 烟叶烘烤质量的影响

刘 勇, 叶为民, 王玉胜, 何宽信, 杏朝刚,
张海伟, 张根平, 李立新

植物保护

61 壳寡糖席夫碱纳米银溶液对烟草花叶病防治及烟叶色素的影响

孙翠红, 徐翠莲, 尤方芳, 施守杰, 王一丁,
赵铭钦, 孙 双, 刘 芳, 杜林洳

67 烟草中溴菌腈农药残留检测方法及消解动态

周杨全, 徐光军, 徐金丽, 张纪利, 苏 赞,
王 鹏, 李明光, 邓东强, 胡亚杰

72 苯甲酸降解菌的分离鉴定及其对烤烟幼苗生长的影响

李 鑫, 王 丰, 周冀衡, 李 强, 邵建平, 赵 杰,
王瑞宝, 许 计, 李亚兵, 李 超

品质化学

78 基于 PLSR 分析烟叶化学成分与感官质量的相关性

林顺顺, 张晓鸣

83 晒红烟重要致香物质与其感官质量的相关性研究

刘善民, 王允白, 包 艳, 冯俊喜, 钟 青,
曹建敏, 石 翔, 岳 珩

综述与专论

89 代谢组学技术在烟草研究中的应用进展

王小莉, 付 博, 赵铭钦, 贺 凡, 王鹏泽, 刘鹏飞

烟草基因组专栏

97 烟草重要基因篇: 13. 烟草腺毛发生和发育相关基因

张洪映, 崔 红

其他

7 《烟草科技》2016 年第 1 期目次

13 《中国烟草学报》2016 年第 1 期目次

77 《烟草科技》2016 年第 2 期目次

CHINESE TOBACCO SCIENCE

February, 2016, Vol. 37, No.1, Bimonthly

CONTENTS

Genetics and Breeding

- 1 Study on Transgenic Arabidopsis Flowering Gene FT into Tobacco and Its Early Blooming Properties
CHANG Aixia, GUO Lijie, LIU Dan, LUO Chenggang,
FENG Quanfu, WEI Kai, WANG Lan
- 8 The Influence of *NtC3H* on the Synthesis of Flavonoids and Chlorogenic acid in Tobacco
LI Yang, TANG Xuebing, LI Xiaofeng, LI Ming,
CHU Zhaohui, DING Xinhua

Cultivation, Nutrition and Fertilization

- 14 The K Apparent Release Characteristics of Organic-inorganic Compound Potash Fertilizers and Its Effect on Yield and Quality of Flue-cured Tobacco
YU Yaoying, JANG Changchun, GU Huizhan, WANG Yong,
GUO Yingju, YU Xiao, WANG Mingfu
- 20 Effect of Different Ratios of Cake Fertilizer and Chemical Fertilizer on Tissue Structure and Organic Acid Contents in the Leaves of Flue-cured Tobacco
XU Na, XU Jialai, ZHU Xianzhi, LIU Guangliang, LIANG Xiaofang,
SUN Yanguo, YANG Jutian, LIU Li, XU Lei, SHI Yi
- 26 The Effect of Nitrogen Management on Nmin and Enzyme Activities in Rhizosphere Soil of Flue-cured Tobacco under the Optimization of C/N with Organic Fertilize
DING Xiaodong, YAN Huifeng, ZHANG Shirong, CHEN Weixian,
GUO Junjie, WEI Bin, WANG Jun
- 32 Effects of Mixed Organic Fertilizer Amount on Root Vigor and Rhizosphere Soil Biological Characteristics of Flue-cured Tobacco
LI Yanping, LIU Guoshun, DING Songshuang, LI Jingjing, YAN Haitao, YAN Shen

Physiology and Ecology

- 37 Analysis of Aroma Components in Flue-cured Tobacco Leaves in Guizhou Tobacco-growing Areas
LI Lingyan, XU Yimin, WANG Chengdong, Chen Aiguo, TAO Jian,
LIU Baizhan, ZHAO Ping, WANG Shusheng
- 45 Comparison of Multiple Organic Acid Contents in Different Flue-cured Tobacco Genotypes
WANG Guoping, WANG Haibo, LI Yanli, LUO Chenggang, CAO Jianmin,
ZHANG Yu, FENG Quanfu, CHANG Aixia
- 51 Analysis of the Correlation between Ecological Factors and Content/Component of Alkaloids in Tobacco Leaves in the Central Region of Guizhou Province
LIANG Meng, WANG Chengdong, SONG Wenjing, MENG Lin,
ZHU Hai, SHI Liyan, XU Yimin

Tobacco Processing

- 56 Effects of Different Flue-curing Processes on Tobacco Quality of Yunyan 87
LIU Yong, YE Weimin, WANG Yusheng, HE Kuanxin, XING Chaogang,
ZHANG Haiwei, ZHANG Genping, LI Lixin

Pests and Diseases

- 61 The Control Efficiency of COS-Ag to TMV in Tobacco and Its Effect on Tobacco Pigment**
SUN Cuihong, XU Cuilian, YOU Fangfang, SHI Shoujie, WANG Yiding,
ZHAO Mingqin, SUN Shuang, LIU Fang, DU Linru
- 67 Residue Analysis and Dissipation of Bromothalonil in Tobacco**
ZHOU Yangquan, XU Guangjun, XU Jinli, ZHANG Jili, SU Zan,
WANG Peng, LI Minguang, DENG Dongqiang, HU Yajie
- 72 Isolation and Identification of a Benzoic Acid-degrading Bacterium and Its Effect on Growth of Flue-cured Tobacco**
LI Xin, WANG Feng, ZHOU Jiheng, LI Qiang, SHAO Jianping,
ZHAO Jie, WANG Ruibao, XU Ji, LI Yabing, LI Chao

Tobacco Chemistry and Quality

- 78 Correlation of Tobacco Chemical Components and Sensory Quality Assessed by PLSR**
LIN Shunshun, ZHANG Xiaoming
- 83 Correlation Analysis on Important Aroma Components and Smoking Quality of Red Sun-cured Tobacco**
LIU Shanmin, WANG Yunbai, BAO Yan, FENG Junxi, ZHONG Qing,
CAO Jianmin, SHI Xiang, YUE Heng

Reviews and Perspectives

- 89 Research of Metabolomics in Tobacco.**
WANG Xiaoli, FU Bo, ZHAO Mingqin, HE Fan,
WANG Pengze, LIU Pengfei

Tobacco Genome Forum

- 97 Advances in Molecular Mechanism of Tobacco Glandular Trichome Development**
ZHANG Hongying, CUI Hong