

CHINESE TOBACCO SCIENCE

ISSN 1007-5119

CN 37-1277/S

中国烟草科学

中国烟草科学

双月刊

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2期 No.2

第三十七卷

第一期

· 双月刊 ·

ISSN 1007-5119



9 771007 511165

www.zgyckx.com.cn

2016·2

◎ 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

二〇一六年四月

中国烟草科学

ZHONGGUO YANCAO KEXUE

2016年4月 第37卷 第2期

目 次

植物保护

1 疫霉葡聚糖激发子 Gep1 诱导烟草对烟草花叶病毒的抗性研究

霍 瑞，薛守聪，任加庆，许汝冰，李锡宏，赵秀云

6 重庆丰都烟区田间烟草病毒病及其 Dot-ELISA 检测

时洪伟，刘陈晨，李 科，孙 淳，代先强，马冠华，青 玲

11 紫苏乙醇粗提取物对烟蚜的生物控制作用

袁莲莲，王耀锋，靳志伟，张 静，李 伟，董石飞，
赵存孝，黄明迪，姚忠虎，王凤龙，杨金广

栽培营养

16 烟秆生物质炭对土壤碳氮矿化的影响

李志刚，张继光，申国明，高 林，王 瑞，孟贵星，张继旭，戴衍晨

23 一株兼有 β -甘露聚糖酶活性聚磷菌的分离和鉴定

孙明辉，孙会忠，王小东，朱金峰，李广良，陈 冲，陈启龙

29 江西烤烟生产常用有机肥质量研究

苑举民，何宽信，李立新，胡蓉花，石 屹，杏朝刚，张超群，陈国军

36 生物质炭对植烟土壤质量及烤烟生长的影响

管恩娜，管志坤，杨 波，董建新，胡希好，
阚京军，吴元华，张庆忠，李明光，梁洪波

42 SPAD 值与鲜烟叶成熟度及烤后烟叶质量的关系

孙阳阳，靳志伟，黄明迪，王耀锋，杨树勋，赵存孝，夏 巍，
乔万鹏，龚鹏飞，孙卫东，袁 威，孙福山，王爱华，王松峰，高宪辉

生理生态

47 移栽期对 NC55 叶片发生进程模拟模型建立

孙延国，梁晓芳，许 倩，张艳艳，刘光亮，
许 娜，杜传印，管恩森，石 屹

54 河南主产烟区烤烟主流烟气巴豆醛释放量差异及聚类分析

景延秋，袁秀秀，刘英杰，范艺宽，苏新宏，朱金峰，张月华，李怀奇

调制加工

59 变黄期阶梯升温烘烤工艺对多酚类及相关物质的影响

王爱华，王松峰，孙福山，黄明迪，王耀锋，
杨树勋，赵存孝，夏 巍，乔万鹏，王希玲

品质化学

65 基于 RBF 神经网络建立库存烟叶香型的预测模型

周泽弘，曹淋海，王昌全，李启权，李冰，李珊

现代烟草农业

71 潍坊烟区职业烟农队伍建设的探索与思考

曹红祥，崔志军，臧传江，王喜功，孟庆洪，
万辉，杨少杰，聂威，薛博

77 RFID 技术在烟草物流中的应用效果

赖如勤，于闽，陈玲

综述与专论

83 连作条件下植烟土壤保育与修复

王瑞，邓建强，谭军

89 栽培措施对烤烟生育进程的影响研究进展

王发勇，袁清华，廖宜树，陈建军

烟草基因组专栏

95 烟草重要基因篇：14. 烟草类黄酮合成相关基因

陈帅，杨爱国

其他

28 《烟草科技》2016年第3期目次

35 《中国烟草学报》2016年第2期目次

88 《烟草科技》2016年第4期目次

94 《中国烟草科学》2016年征订启事

CHINESE TOBACCO SCIENCE

April, 2016, Vol. 37, No.2, Bimonthly

CONTENTS

Pests and Diseases

- 1 Study of Glucan Elicitor Gep1 from *Phytophthora* Which Induces Resistance in Tobacco to Tobacco Mosaic Virus
HUO Rui, XUE Shoucong, REN Jiaqing, XU Rubing, LI Xihong, ZHAO Xiuyun
- 6 Detection of Field Viral Diseases on Tobacco in Fengdu County of Chongqing with the Dot-ELISA Technique
SHI Hongwei, LIU Chenchen, LI Ke, SUN Miao, DAI Xianqiang, MA Guanhua, QING Ling
- 11 Biological Control Effects of Ethanol Extracts of *Perilla Frutescens* on *Myzus Persicae*
YUAN Lianlian, WANG Yaofeng, JIN Zhiwei, ZHANG Jing, LI Wei, DONG Shifei, ZHAO Cunxiao, HUANG Mingdi, YAO Zhonghu, WANG Fenglong, YANG Jinguang

Cultivation, Nutrition and Fertilization

- 16 Study on the Effects of Tobacco Stem Biochar on Soil Organic Carbon and Nitrogen Mineralization
LI Zhigang, ZHANG Jiguang, SHEN Guoming, GAO Lin, WANG Rui, MENG Guixing, ZHANG Jixu, DAI Yanchen
- 23 Isolation and Identification of a Phosphate Accumulating Strain with β -mannanase Activity
SUN Minghui, SUN Huizhong, WANG Xiaodong, ZHU Jinfeng, LI Guangliang, CHEN Chong, CHEN Qilong
- 29 Analysis on the Quality of Organic Fertilizers for Tobacco in Jiangxi
YUAN Jumin, HE Kuanxin, LI Lixin, HU Ronghua, SHI Yi, XING Chaogang, ZHANG Chaoqun, CHEN Guojun
- 36 Effects of Biochar on Tobacco-planting Soil Quality and Flue-cured Tobacco Growth
GUAN Enna, GUAN Zhikun, YANG Bo, DONG Jianxin, HU Xihao, KAN Jingjun, WU Yuanhua, ZHANG Qingzhong, LI Mingguang, LIANG Hongbo
- 42 The Relationship of SPAD Value, Maturity of Fresh Tobacco Leaves and Quality of Flue-cured Tobacco Leaves
SUN Yangyang, JIN Zhiwei, HUANG Mingdi, WANG Yaofeng, YANG Shuxun, ZHAO Cunxiao, XIA Wei, QIAOWanpeng, GONG Pengfei, SUN Weidong, YUAN Wei, SUN Fushan, WANG Aihua, WANG Songfeng, GAO Xianhui

Physiology and Ecology

- 47 Establishment of Simulation Model for the Impact of Transplanting Time on Leaf Initiation in Tobacco NC55
SUN Yanguo, LIANG Xiaofang, XU Qian, ZHANG Yanyan, LIU Guangliang, XU Na, DU Chuanyin, GUAN Ensen, SHI Yi
- 54 Variation and Cluster Analysis of Crontonaldehyde Content in Mainstream Smoke of Flue-cured Tobacco Leaf from Henan
JING Yanqiu, YUAN Xiuxiu, LIU Yingjie, FAN Yikuan, SU Xinhong, ZHU Jinfeng, ZHANG Yuehua, LI Huaiqi

Tobacco Processing

- 59 Effects of the Step-temperature Yellowing Curing Technology on Polyphenol and Related Substance in Tobacco Leaves**

WANG Aihua, WANG Songfeng, SUN Fushan, HUANG Mingdi, WANG Yaofeng,
YANG Shuxun, ZHAO Cunxiao, XIA Wei, QIAO Wanpeng, WANG Xiling

Tobacco Chemistry and Quality

- 65 The Establishment of Prediction Model of Inventory Tobacco Flavor Based on RBF Neural Network**

ZHOU Zehong, CAO Linhai, WANG Changquan, LI Qiquan, LI Bing, LI Shan

Modern Tobacco Agriculture

- 71 The Exploration and Thoughts on Construction of Professional Tobacco-grower Teams in Weifang Tobacco Area**

CAO Hongxiang, CUI Zhijun, ZANG Chuanjiang, WANG Xigong,
MENG Qinghong, WAN Hui, YANG Shaojie, NIE Wei, XUE Bo

- 77 Application Effect of RFID Technology in Tobacco Logistics**

LAI Ruqin, YU Min, CHEN Ling

Reviews and Perspectives

- 83 Ecological Protection and Remediation of Tobacco-Growing Soils in Continuous Cropping Regions**

WANG Rui, DENG Jianqiang, TAN Jun

- 89 Research Progress on the Effects of Cultivating Measures on Flue-cured Tobacco Developmental Process**

WANG Fayong, YUAN Qinghua, LIAO Yishu, CHEN Jianjun

Tobacco Genome Forum

- 95 Tobacco Flavonoid Biosynthesis and Related Genes**

CHEN Shuai, YANG Aiguo