

中国烟草科学

ZHONGGUO YANCAO KEXUE

2024年4月 第45卷 第2期

目次

遗传育种

1 烤烟新品种川烟101的选育及特征特性

孙学永, 肖勇, 郭仕平, 杨兴有, 钱宇, 雷强, 祖朝龙,
李斌, 余祥文, 段旺军, 刘炎红, 朱启法

7 基于杂交种光合特性解析烟叶生物量杂种优势的形成机制

陆安彬, 曾帅波, 皮凯, 龙本山, 莫泽君, 段丽丽, 刘仁祥

栽培营养与生理生态

15 不同施氮水平下低烟碱烟草品种烟碱累积和成熟落黄特性

杨逸云, 王嘉豪, 胡希好, 矫海楠, 史素娟, 赵福彬,
刘晓峰, 田田, 张玉芹, 徐青, 张洪博

25 低NO₃胁迫抑制烟草根系质外体运输的机制研究

张标, 许耘祥, 张莉汶, 朱莹莹, 刘海伟

植物保护

35 烟草青枯病拮抗菌的高通量筛选及其复配菌群防效评估

陶正朋, 刘艳霞, 李想, 彭宇, 李寒, 陈丽萍, 徐健,
王克敏, 穆东升, 王致尧, 蒋天平, 宗仪

46 生物炭对烟草根际微生物群落结构及青枯病发生的影响

王建林, 王珍珍, 琚晨仪, 杨亮, 肖庆礼,
彭奎, 谭奇忠, 喻希, 丁伟

56 阿南德氏链霉菌 FXJ-25 的鉴定及对烟草靶斑病的防效

苏家恩, 杨志娟, 董天学, 赵英佑, 王显跃,
费明亮, 陈颐, 钟杰

64 氟唑菌酰胺对烟草赤星病的防效及对烟叶和土壤的安全性

刘勇, 秦言敏, 熊书斌, 黄长权, 冯佳,
李义强, 王杰, 张超群, 黄斌

73 云南省玉溪烟区黑胫病发生风险相关因素分析

刘迎龙, 王军伟, 何鹏搏, 何鹏飞, 吴毅歆,
杨绍聪, 沐婵, 卢灿华, 田阳阳, 何月秋

生物技术

80 烟草 *NtJAZ15* 基因对腺毛发生的影响

裴文毅, 张新要, 朱文奇, 季盈彤, 娄哲,
刘家豪, 闫筱筱, 崔红

90 普通烟草外向整流 Shaker K^+ 通道 *NtSKOR1* 的组织表达分析

农童嘉, 徐方正, 袁佳苹, 向海英, 王学璜, 袁光,
OLUWASEYI Setonji Hunpatin, 崔萌萌, 宁扬, 王倩, 戴培刚

品质化学

99 改善低次烟叶品质的生物发酵工艺优化

刘洪坤, 毛文龙, 游敏, 潘高伟, 郭春生, 乔学义,
吴嘉楠, 刘海龙, 韩云龙, 付金存

智慧农业

108 植保无人机烟草大田施药作业参数优选

许天富, 赵海燕, 刘健锋, 谢康, 孙红权, 李光雷,
郑华, 陈丽萍, 桑维钧, 孙光军

综述与专论

116 贵州省烤烟品种工作的现状及对策展望

彭宇, 姜超英, 焦剑, 李光雷, 陈丽萍, 郑华

其他

24 《烟草科技》2024年第3期目次

45 《中国烟草学报》2024年第2期目次

CHINESE TOBACCO SCIENCE

April, 2024, Vol. 45, No. 2, Bimonthly

CONTENTS

Genetics and Breeding

1 Breeding and Characterization of a New Flue-cured Tobacco Variety Chuanyan101

SUN Xueyong, XIAO Yong, GUO Shiping, YANG Xingyou, QIAN Yu, LEI Qiang,
ZU Chaolong, LI Bin, YU Xiangwen, DUAN Wangjun, LIU Yanhong, ZHU Qifa

7 Analysis of Photosynthetic Characteristics of Hybrid Species and the Formation Mechanism of Biomass Heterosis in Tobacco Leaves

LU Anbin, ZENG Shuaibo, PI Kai, LONG Benshan,
MO Zejun, DUAN Lili, LIU Renxiang

Cultivation, Nutrition, Physiology and Ecology

15 Comparative Analysis of Nicotine Accumulation and Maturity Characteristics of Low Nicotine Tobacco Cultivars

YANG Yiyun, WANG Jiahao, HU Xihao, JIAO Hainan, SHI Sujuan, ZHAO Fubin,
LIU Xiaofeng, TIAN Tian, ZHANG Yuqin, XU Qing, ZHANG Hongbo

25 Mechanism of Low NO₃⁻ Stress Inhibiting Apoplasmic Transport in Tobacco Roots

ZHANG biao, XU Yunxiang, ZHANG Liwen, ZHU Yingying, LIU Haiwei

Pests and Diseases

35 High-throughput Screening of Antagonistic Bacteria against Tobacco Bacterial Wilt and Biocontrol Effects of Compound Microbial Agents

TAO Zhengpeng, LIU Yanxia, LI Xiang, PENG Yu, LI Han, CHEN Liping, XU Jian,
WANG Kemin, MU Dongsheng, WANG Zhiyao, JIANG Tianping, ZONG Yi

46 Effects of Biochar Application on Rhizosphere Microbial Community and Occurrence of Tobacco Bacterial Wilt

WANG Jianlin, WANG Zhenzhen, JU Chenyi, YANG Liang,
XIAO Qingli, PENG Kui, TAN Qizhong, YU Xi, DING Wei

56 Identification of *Streptomyces anandii* FXJ-25 and Its Control Efficacy Against Tobacco Target Spot Pathogen

SU Jia'en, YANG Zhijuan, DONG Tianxue, ZHAO Yingyou,
WANG Xianyue, FEI Mingliang, CHEN Yi, ZHONG Jie

64 Control Effects of Pydiflumetofen on Tobacco Brown Spot and its Safety in Tobacco Leaves and Soil

LIU Yong, QIN Yanmin, XIONG Shubin, HUANG Changquan, FENG Jia,
LI Yiqiang, WANG Jie, ZHANG Chaoqun, HUANG Bin

73 Integrated Analysis of Risk Factors Influencing Tobacco Black Shank Disease in Yuxi Tobacco-growing Region

LIU Yinglong, WANG Junwei, HE Pengbo, HE Pengfei, WU Yixin,
YANG Shaocong, MU Chan, LU Canhua, TIAN Yangyang, HE Yueqiu

Biotechnology

80 Effects of *NtJAZ15* on Tobacco Trichome Development

PEI Wenyi, ZHANG Xinyao, ZHU Wenqi, JI Yingtong,
LOU Zhe, LIU Jiahao, YAN Xiaoxiao, CUI Hong

90 Tissue Expression Analysis of Outwardly-rectifying Shaker K⁺ Channel Gene *NtSKOR1* in *Nicotiana tabacum*

NONG Tongjia, XU Fangzheng, YUAN Jiaping, XIANG Haiying, WANG Xueying, YUAN Guang,
OLUWASEYI Setonji Hunpatin, CUI Mengmeng, NING Yang, WANG Qian, DAI Peigang

Tobacco Chemistry and Quality

99 Optimization of Biological Fermentation for Improving the Quality of Discarded Tobacco Leaves

LIU Hongkun, MAO Wenlong, YOU Min, PAN Gaowei, GUO Chunsheng,
QIAO Xueyi, WU Jianan, LIU Hailong, HAN Yunlong, FU Jincun

Smart agriculture

108 Optimization of Pesticide Application Parameters for Plant Protection Unmanned Aerial Vehicle(UAV) in Tobacco Fields

XU Tianfu, ZHAO Haiyan, LIU Jianfeng, XIE Kang, SUN Hongquan,
LI Guanglei, ZHENG Hua, CHEN Liping, SANG Weijun, SUN Guangjun

Reviews and Perspectives

116 Current Status and Outlook of Flue-cured Tobacco Variety Development in Guizhou

PENG Yu, JIANG Chaoying, JIAO Jian, LI Guanglei, CHEN Liping, ZHENG Hua