

“一带一路”背景下中国-东盟现代农业技术师资培训班
**China-ASEAN Faculty Development Training on Modern
Agricultural Technology under the Background of “The Belt & Road
Initiative”**

主题/Theme: 云享农技 共育农才

Cloud Sharing of Agriculture Technology Joint Cultivation on Agricultural Talents

时间/Time: 2021.09.22 — 2021.09.26

上课方式/Mode of Lecture: 线上/online ZOOM

责任单位/Responsible Units:

主办单位/Organizer:

贵州大学

Guizhou University

承办单位/Executive Organizers:

贵州大学国际交流与合作处

贵州大学绿色农药与农业生物工程教育部重点实验室

Office of International Relations, Guizhou University

Key Laboratory of Green Pesticide & Agriculture Engineering Ministry

of Education P.R. China, Guizhou University

协办单位/Co-organizers:

柬埔寨西哈努克省

斯里兰卡扬巴大学

老挝琅南塔师范学院

Preah Sihanouk Provincial Hall, Cambodia

Wayamba University of Sri Lanka

Luangnamtha Teacher College (LNTTC) Lao PDR

支持单位/Supporters:

中华人民共和国教育部国际合作与交流司

中国-东盟教育交流周组委会秘书处

中华人民共和国驻巴基斯坦伊斯兰共和国大使馆

贵州省农业农村厅

贵州省人民对外友好协会

Department of Cooperation and Exchanges, Ministry of Education of
the People's Republic of China

The Secretariat of the Organizing Committee of China-ASEAN Education
Cooperation Week

Embassy of the People's Republic of China in the Islamic Republic of Pakistan

Agricultural and Rural Department of Guizhou Province

Guizhou Provincial Association for Friendship with Foreign Countries

参与对象/Participants:

中国与东盟国家农业领域专家、学者、师生、政府官员以及其他相关人员。

Experts, scholars, researchers, teachers, students, and government officials in the field of agriculture and other relative talents from China and ASEAN countries.

“一带一路”背景下中国-东盟现代农业技术师资培训班日程表
China-ASEAN Faculty Development Training on Modern Agricultural Technology
under the Background of “The Belt & Road Initiative”

| 时间 Beijing Time | 内容 Content | | 授课专家 Lecturers |
|-----------------|-------------|--|--|
| 9.22 | 09:30-10:30 | 开幕式 Opening Ceremony | |
| | 10:30-11:30 | 讲座 1 Lecture 1 农药信息学平台构建与应用 Construction and Application of Pesticide Informatics Platform | 郝格非 博士、教授 贵州大学绿色农药与农业生物工程教育部重点实验室 Hao Gefei, Professor, Ph.D. Key Laboratory of Green Pesticide & Agricultural Bioengineering, Ministry of Education, Guizhou University |
| | 11:30-11:40 | 问答环节 Q&A | |
| | 14:30-15:30 | 讲座 2 lecture 2 新加坡都市垂直农业 Vertical Urban Agriculture in Singapore | 王锡民 教授 新加坡国立大学理学院生物科学系 Wong Sek Man, Professor, Ph.D. Professor, Department of Biological Sciences, Faculty of Science, National University of Singapore |
| | 15:30-15:40 | 问答环节 Q&A | |
| | 16:00-17:00 | 讲座 3 lecture 3 应用赤眼蜂生物防治几种重大农业钻蛀性害虫 Biological Control of Several Key Agricultural Borer Pests with Trichogramma | 臧连生 博士、教授 贵州大学绿色农药与农业生物工程教育部重点实验室 Zang Liansheng, Professor, Ph.D. Key Laboratory of Green Pesticide & Agricultural Bioengineering, Ministry of Education, Guizhou University |
| 17:00-17:10 | 问答环节 Q&A | | |
| 9.23 | 10:00-11:00 | 讲座 4 lecture 4 科学写作与学术交流 Scientific Writing and Communications | 李庆孝 博士、教授、副主编 美国夏威夷大学分子生物科学与生物工程学系教授 《美国化学学会农业与食品化学杂志》副主编 Li Qingxiao, Professor, Ph.D. Associate Editor Professor, Department of Molecular Biosciences and Bioengineering, University of Hawaii Associate Editor, <i>Journal of Agricultural and Food Chemistry</i> |
| | | 问答环节 Q&A | |
| | 14:30-15:30 | 讲座 5 lecture 5 草地贪夜蛾高效精准防治技术研究及应用 Research and Application of High Efficiency and Targeted Technology in the Control of Spodoptera Frugiperda | 朱峰 博士后、副研究员 贵州大学绿色农药与农业生物工程教育部重点实验室博士后 贵州省农业科学院植物保护研究所副研究员 Zhu Feng, Post-doctoral, Associate Research Fellow Post-doctoral, Key Laboratory of Green Pesticide & Agricultural Bioengineering, Ministry of Education, Guizhou University Associate Researcher Fellow, Institute of Plant Protection, Guizhou Academy of Agricultural Sciences |
| | 15:30-15:40 | 问答环节 Q&A | |
| | 16:00-17:00 | 讲座 6 lecture 6 手性农药的发现与开发 Discovery and Development of Chiral Agrochemicals | 李圣坤 博士、教授 贵州大学绿色农药与农业生物工程教育部重点实验室 Li Shengkun, Professor, Ph.D. Key Laboratory of Green Pesticide & Agricultural Bioengineering, Ministry of Education, Guizhou University |
| | 17:00-17:10 | 问答环节 Q&A | |

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|-------------|-------------|---------------------|---|--|
| 9.24 | 10:00-11:00 | 讲座 7 lecture 7 | 单倍体分型基因组组装对茶树进化史提供了新见解 Haplotype-resolved Genome Assembly Provides Insights into Evolutionary History of the Tea Plant Camellia Sinensis | 张兴坦 博士 研究员 中国农业科学院(深圳)农业基因组研究所 Zhang Xingdan, Ph.D., Researcher Fellow Agricultural Genomics Institute at Shenzhen, Chinese Academy of Agricultural Sciences |
| | 11:00-11:10 | | 问答环节 Q&A | |
| | 14:30-15:30 | 讲座 8 lecture 8 | 农药在现代农业中的应用 Modern Application of Pesticide in Agriculture | W. M. Wishwajith W. Kandegama 博士、高级讲师 斯里兰卡瓦扬巴大学农业和种植园管理学院园艺及园林学系 Dr. W. M. Wishwajith W. Kandegama, Senior Lecturer Department of Horticulture and Landscape Gardening, Faculty of Agriculture & Plantation Management, Wayamba University of Sri Lanka |
| | 15:30-15:40 | | 问答环节 Q&A | |
| | 16:00-17:00 | 讲座 9 lecture 9 | 稻田种养与控害技术 The Technology of Planting and Raising in Paddy Field and Controlling Pest | 陈卓 博士、教授 贵州大学绿色农药与农业生物工程教育部重点实验室 Chen Zhuo, Professor, Ph.D. Key Laboratory of Green Pesticide & Agricultural Bioengineering, Ministry of Education, Guizhou University |
| 17:00-17:10 | 问答环节 Q&A | | | |
| 9.25 | 10:00-11:00 | 讲座 10 lecture 10 | 病害防治的关键：正确鉴定植物病原 Correct Identification of Plant Pathogens: the Key to Control diseases | Ruvishika S. Jayawardena 博士 泰国皇太后大学真菌研究卓越中心 Dr. Ruvishika S. Jayawardena Centre of Excellence in Fungal Research, Mae Fah Luang University, Chiang Rai, Thailand |
| | 11:00-11:10 | | 问答环节 Q&A | |
| | 14:30-15:30 | 讲座 11 lecture 11 | 免疫诱抗剂在作物病毒病防治中的应用 Application of Immune Inducer in Crop Virus Disease Control | 李向阳 博士、教授 贵州大学绿色农药与农业生物工程教育部重点实验室 Li Xiangyang, Professor, Ph.D. Key Laboratory of Green Pesticide & Agricultural Bioengineering, Ministry of Education, Guizhou University |
| | 15:30-15:40 | | 问答环节 Q&A | |
| 9.26 | 10:00-11:00 | 讲座 12 lecture 12 | 植物病害的诊断、鉴定与防治 Plant Diseases Diagnosis, Identification and Control | 王勇 博士、教授 贵州大学农学院 Wang Yong, Professor, Ph.D. College of Agriculture, Guizhou University |
| | 11:00-11:10 | | 问答环节 Q&A | |
| | 14:30-15:30 | 讲座 13 lecture 13 | 动物疾病防控（牛疫病防控） Animal Disease Prevention and Control (Prevention and Control of Bovine Epidemic Disease) | 黄涛 博士、副教授 贵州大学动物科学院 Huang Tao, Associate Professor, Ph.D. College of Animal Science, Guizhou University |
| | 15:30-15:40 | | 问答环节 Q&A | |

郝格非 博士、教授

贵州大学绿色农药与农业生物工程教育部重点实验室

Hao Gefei, Professor, Ph.D.

Key Laboratory of Green Pesticide & Agriculture Engineering
Ministry of Education P.R. China, Guizhou University

讲 座 1: 农药信息学平台构建与应用

Lecture 1: Construction and Application of Pesticide Informatics
Platform



郝格非目前工作于贵州大学精细化工研究中心，贵州大学绿色农药与农业生物工程教育部重点实验室。2011年博士毕业于华中师范大学化工学院，农药学专业。研究领域主要包括 1. 农药合理设计的计算化学生物学；2. 新型植物生长调节剂的合理设计。近年来在 *J. Am. Chem. Soc.*, *Nucleic Acids Res.*, *Brief. Bioinform.*, *Drug Discov. Today*, *J. Exp. Bot.*, *J. Agric. Food Chem.* 等杂志以第一/通讯作者身份发表 SCI 论文 30 余篇。

郝教授 2017 年入选教育部“长江学者奖励计划”青年项目。担任中国化工学会第九届农药专业委员会委员，中国化学会会员，广东省高性能计算学会理事，*Current Drug Discovery Technologies* 客座编辑，国际刊物 *Journal of Agricultural Sciences-Sri Lanka* 编辑。

Prof. HAO Gefei currently works in Centre for Research and Development of Fine Chemicals, Key Laboratory of Green Pesticide & Agriculture Bioengineering Ministry of Education P. R. China, Guizhou University. He received his Ph.D. of Pesticides in 2011, from College of Chemical, Central China Normal University. His research interests mainly include: 1. the computational chemical biology of the rational design of pesticides. 2. The rational design of the new plant growth regulator. In recent years, he has published over 30 peer-reviewed papers as first/communication authors in leading journals, such as in *J. Am. Chem. Soc.*, *Nucleic Acids Res.*, *Brief. Bioinform.*, *Drug Discov. Today*, *J. Exp. Bot.*, *J. Agric. Food Chem.* etc.,

Professor Hao has been nominated as a candidate for the Youth Program of the Yangtze Scholars Award Program of the Ministry of Education in 2017. He has been also appointed as a member of the 9th Pesticide Professional Committee of the China Chemical Society, a member of the China Chemical Society, a member of the Guangdong High Performance Computing Society. He is also an editor of the International *Journal of Agricultural Sciences-Sri Lanka*, and a guest editor of *Journal of Current Drug Discovery Technologies*.

王锡民 教授

新加坡国立大学理学院生物科学系

Wong Sek Man

Professor, Department of Biological Sciences, Faculty of Science
National University of Singapore

讲 座 2: 新加坡都市垂直农业

Lecture 2: Vertical Urban Agriculture in Singapore



王锡民教授任职于新加坡国立大学科学学院生物科学系，指导过 27 名博士生和 25 名理学硕士生，发表了 100 多篇高质量学术论文。

王教授的研究包括：植物病毒的分子生物学，新病毒的发现，病毒的复制和转化机制，病毒的快速和敏感检测，病毒-病毒和病毒宿主相互作用的协同作用、协同、交叉保护，病毒新颖的基因功能，利用植物病毒载体进行蛋白质表达，抗病毒转基因植物，病毒结构生物学和生物信息学，利用植物病毒作为药物输送的纳米材料，RNA 干扰，深测序和 RNA 结构分析等。

王教授所获教学/科研/服务奖：

优秀教学奖 2000 年

卓越教学奖 2001 年

杰出大学研究员奖 1999 年

公共行政奖章(新加坡国庆日铜奖)
2013

长期服务奖章(新加坡国庆日奖)
2013

Professor WONG Sek Man is a Professor in the Department of Biological Sciences, National University of Singapore. He has supervised 27 PhD and 25 MSc students and published over 100 peer-reviewed papers.

His Expertise: Molecular biology of plant viruses, discovery of new viruses, virus replication and translation mechanisms, rapid and sensitive detection of viruses, synergism in virus-virus and virus-host Interactions, synergism, cross protection, virus novel gene functions, protein expression using plant viral vectors, virus resistant transgenic plants, structural biology and bioinformatics of viruses, Use of plant viruses as nano-materials for drug delivery, RNA interference, deep sequencing and RNA structural analysis.

His Teaching/Research/Service Awards:

Faculty Meritorious Teaching Award 2000

Faculty Teaching Excellence Award 2001

Outstanding University Researcher Award 1999

The Public Administration Medal (Bronze, Singapore National Day Awards) 2013

The Long Service Medal (Singapore National Day Awards) 2013

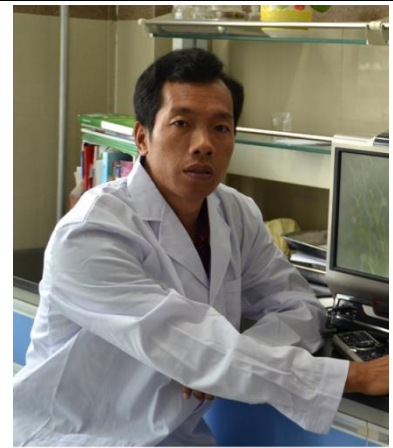
臧连生 博士、教授

贵州大学绿色农药与农业生物工程教育部重点实验室

Zang Liansheng, Professor, Ph.D.

Key Laboratory of Green Pesticide & Agricultural Bioengineering
Ministry of Education, Guizhou University

讲 座 3: 应用赤眼蜂生物防治几种重大农业钻蛀性害虫
Lecture 3: Biological Control of Several Key Agricultural Borer
Pests with Trichogramma



臧连生，贵州大学研究员、博士生导师。主要从事害虫生物防治及资源昆虫产业化开发相关研究工作。在应用天敌昆虫开展害虫生物防治方面取得多项创新性成果，开发的赤眼蜂生物防治水稻二化螟和大豆食心虫技术已实现大规模推广应用，年推广应用面积达 100 万亩以上。

主持参与国家级科研项目 8 项，省部级科研项目 10 项；获得省部级科研成果奖一等奖 3 项、二等奖 4 项，在 *Science*、*Annual Review of Entomology*、*Journal of Pest Science* 等国际权威期刊发表学术论文 50 余篇；出版专著 5 部；授权国家发明专利 20 余项。

臧教授所获荣誉称号有“中国昆虫学会青年科学技术奖”，国家“万人计划”科技创新领军人才，并担任中国植物保护学会生物防治专业委员会委员，中国昆虫学会生物防治专业委员会委员以及《*Entomologia Generalis*》、《中国生物防治学报》、《环境昆虫学报》、《吉林农业大学学报》等期刊编委等职务。

Professor Zang currently works in Guizhou University as a research fellow and PhD supervisor. His expertise lies in biological control of pests, and industry development of resource insects. Professor Zang has created many innovative methods and technologies for pest control, especially in biological control of *trichogramma japonicum* on *chilo suppressalis* in rice, and *leguminivora glycinivorella*. These two technologies have been successfully applied in planting over 1 million acres.

Professor Zang has secured 8 national and 10 provincial projects in recent years. As a key member, he has won the first prize of provincial scientific and technologies three times, the second prize 4 times. Professor Zang has been granted over 20 national invention patents and published over 50 high quality papers on leading academic journals, such as *Science*、*Annual Review of Entomology*、*Journal of Pest Science* etc., He published 5 academic books.

Professor has been honored with "Ten Thousand Plan" - "National High-level talents special support", Youth Science and Technology Award of the Entomological Society of China. He is the member of the Biological Control Committee, member of Plant Protection and Entomological Society of China, Editorial board member of journals, including *Entomologia Generalis*, *Chinese Journal of Biological Control*, *Journal of Environmental Entomology*, and *Journal of Jilin Agricultural University*.

李庆孝 博士、教授、副主编

美国夏威夷大学分子生物科学与生物工程学系教授
《美国化学学会农业与食品化学杂志》副主编

Li Qingxiao, Professor, Ph.D. Associate Editor

Professor, Department of Molecular Biosciences and
Bioengineering, University of Hawaii
Associate Editor, *Journal of Agricultural and Food Chemistry*

讲 座 4: 科学写作与学术交流
Lecture 4: Scientific Writing and Communications



李庆孝，博士，教授，博士生导师，美国马诺阿分校分子生物科学与生物系教授，夏威夷大学蛋白质组学核心实验室主任、农药残留研究实验室主任，

李教授长期从事分子生物学研究，是环境生物化学和生物技术方面的权威专家，兼任美国 J. Agri. Food Chem. 副主编。其主要研究领域有环境微生物学和生物技术、生物降解和生物合成、植物修复、海洋污染和毒理、免疫化学、环境分析化学、持久性污染物及农药的环境行为等。

李教授先后发表 SCI 论文 280 余篇，引文 5000 余次，H Index 为 40，i10-index 为 144，已授权美国专利 12 项。参加美国化学会、美国科学发展协会、美国农业部 W-1045 技术委员会、美国农业部有关“生物技术、生物转化工程及生物处理”项目的南部地区发展委员会委员美国农业部多地区项目("S-1007, The Science and Engineering for a Biobased Industry and Economy")、美国农业部 IR-4 项目。

Professor, Ph.D., Li Qingxiao works in the Department of Molecular Biosciences and Biology, University of Hawaii. He currently is PhD supervisor, director of the Proteomics Core Laboratory, director of the Pesticide Residue Research Laboratory.

Professor Li is an authoritative expert in environmental biochemistry and biotechnology. Professor Li serves as deputy editor for the *Journal of Agricultural and Food Chemistry*. His research interests mainly include environmental microbiology and biotechnology, bio-degradation and bio-synthesis, plant restoration, marine pollution and toxicology, immunochemistry, environmental analytical chemistry, persistent pollutants and environmental behavior of pesticides.

Professor Li has published more than 280 SCI papers with citations over 5000 times, H Index 40, i10-index 144. He has been granted 12 U.S. patents. He has taken part in the key project "S-1007, The Science and Engineering for a Biobased Industry and Economy" which sponsored by many technical societies, including American Chemical Society, American Association of Arts and Sciences, the Technical Committee W-1045 of the US Department of Agriculture, etc., He also joint IR-4 project sponsored by the US Department of Agriculture.

朱峰 博士后、副研究员

贵州大学绿色农药与农业生物工程教育部重点实验室博士后
贵州省农业科学院植物保护研究所副研究员

Zhu Feng, Post-doctoral, Associate Research Fellow

Post-doctoral, Key Laboratory of Green Pesticide & Agricultural Bioengineering, Ministry of Education, Guizhou University
Associate Researcher Fellow, Institute of Plant Protection, Guizhou Academy of Agricultural Sciences

讲 座 5: 草地贪夜蛾高效精准防治技术研究及应用

Lecture 5: Research and Application of High Efficiency and Targeted Technology in the Control of *Spodoptera Frugiperda*



朱峰，贵州大学绿色农药与农业生物工程教育部重点实验室博士后，贵州省农业科学院植物保护研究所副研究员。主要从事农药使用安全风险评估及农药高效利用技术研究。

朱峰于 2017-2018 年度获得意大利政府与中国政府互换奖学金项目，在意大利巴西利卡塔大学学习 6 个月，主要研究内容为昆虫蛋白传感器用于食品质量快速诊断工作。

工作以来主持及参加了国家重点研发计划项目子课题、国家重点实验室开放基金、农业部行业专项、农业农村部应急项目、科技部成果转化项目、贵州省联合基金项目、贵州省科技支撑计划等项目 10 余项。至今以第一作者在核心期刊上发表论文 14 篇，其中 SCI 收录 3 篇，主持制定农药分析方法行业标准 18 项，参与制定地方标准 2 项，申请国家发明专利 5 项，获得国家授权发明专利 1 项、实用新型专利 1 项、人工智能识别病虫害系统软件著作权 1 项。

Dr. Zhu Feng is a post-doctoral at Key Laboratory of Green Pesticide & Agriculture Engineering Ministry of Education P.R. China , Guizhou University, as well as an associate research fellow in Institute of Plant Protection, Guizhou Academy of Agricultural Sciences. His research mainly involves in the safety risk assessment and efficient utilization technology research of pesticide.

He was awarded the exchange scholarship by the joint governmental scheme between the Italy and China in 2017-2018 and studied at the University of Basilicata in Italy for 6 months. His research interests included insect protein sensor for rapid diagnosis of food quality.

Over these years, he has secured more than 10 projects, including sub projects of national key R&D plan projects, fund of national key laboratories, industry special projects of the Ministry of Agriculture, emergency projects of the Ministry of Agriculture and Rural Affairs, transformation projects of scientific and technological achievement form the Ministry of Science and Technology, joint projects of Guizhou Province, Science and Technology Support Plan of Guizhou Province, etc. As the first author, he published 14 papers and originated 18 standards for pesticide analysis methods. Moreover, he has applied 5 national invention patents and obtained 1 invention patent, 1 utility model patent and 1 Software Copyright which is related to artificial intelligence pest identification system.

李圣坤 博士、教授

贵州大学绿色农药与农业生物工程教育部重点实验室

Li Shengkun, Professor, Ph.D.

Key Laboratory of Green Pesticide & Agricultural Bioengineering,
Ministry of Education,
Guizhou University



讲 座 6: 手性农药的发现与开发

Lecture 6: Discovery and Development of Chiral Agrochemicals

李圣坤教授专注于手性新农药先导的发掘和精准性制备研究，以琥珀酸脱氢酶抑制剂为切入点，提出了去芳香化和仿生策略，发掘出芳基噁唑啉和 Drimane 混源萜新模型，并优化出多种手性杀菌剂新先导及候选化合物；创建了不对称加成和脱羧偶联新体系、构思并实践了“多功能骨架”理念，实现了 β -芳基胺和 Drimane 混源萜手性骨架的高效制备；证实了新手性杀菌剂候选化合物和新方法的潜力，实现了成果转化或技术合作，为手性新农药创制奠定了重要基础。

近 5 年来，李教授主持国家自然科学基金 3 项，以通讯作者在国际权威期刊上发表论文 14 篇、被专题报道 4 篇；授权发明专利 2 件。合作出版教材 2 部(副主编 1 部)；

曾获得教育部长江学者、南京市高层次举荐人才、香江学者奖、陕西省优秀博士论文和美国化学协会会员奖等。

Professor Li and his research group mainly focus on field of the chiral agrochemicals oriented discovery and development of novel ligands. The promising results have been acquired with succinate dehydrogenase inhibitors as models. Dearomatization and biomimetic optimization has conceived and implemented for the discovery of aryloxazolines and drimane meroterpenoids as novel chiral scaffolds. The research outcomes significantly generate a large variety of new chiral leads and candidates. Catalytic asymmetric additions and decarboxylative couplings have developed and established by his research group for the synthesis of the privileged β -arylamines and drimane meroterpenoids, respectively. The novelty and practicality of the novel agrochemical candidates and synthetic methodologies now have been evaluated and confirmed so as to promote the favorable performance and the technical cooperation as well as improvement of the fundamental achievements.

In recent 5 years, Professor Li has granted three national scientific projects as a principal investigator. As corresponding authors, he has published 14 papers on leading journals, in which four papers has been particularly highlighted. He has been granted 2 invention patents. Prof. Li has co-authored two academic books.

Prof. Li has received a wealth of awards, including The Yangtze River Scholar, High-level Talents of Nanjing, Hong Kong Scholarship, Excellent Doctoral Dissertation of Shaanxi Province, and ACS Membership Award, etc..

张兴坦 博士 研究员

中国农业科学院(深圳)农业基因组研究所

Zhang Xingdan, Ph.D., Researcher Fellow

Agricultural Genomics Institute at Shenzhen,
Chinese Academy of Agricultural Sciences

讲 座 7: 单倍体分型基因组组装对茶树进化史提供了新见解

Lecture 7: Haplotype-resolved Genome Assembly Provides
Insights into Evolutionary History of the Tea Plant
Camellia Sinensis



张兴坦博士，研究员，博士生导师。2015年7月在重庆大学获得植物学博士学位，攻读博士期间于2013年-2014年在美国 J. Craig Venter Institute 研究所从事访问研究；2015年，工作于福建农林大学基因组与生物技术研究中心，从事热带植物基因组学研究。2021年起，工作于中国农业科学院(深圳)农业基因组研究所，从事农作物基因组学研究。

主持国家自然科学基金、福建省基金、福州市科技基金等多项基金。近年来以第一或共同第一作者在《Nature》，《Nature Genetics》，《Nature Plants》等国际学术期刊发表论文多篇。

Dr. Xingtang Zhang is currently a research fellow and PhD supervisor. He received his Ph.D. in Botany from Chongqing University in July 2015. During the period from 2013 to 2014, he studies in J. The Craig Venter Institute, USA, as a visiting scholar. In 2015, he worked in the Genomics and Biotechnology Research Center, Fujian Agricultural and Forestry University where he was engaged in tropical plant genomics research. Since 2021, Dr. Zhang joins the Agricultural Genomics Research Institute of the Chinese Academy of Agricultural Sciences (Shenzhen) where he mainly involves in crop genomics research.

Dr. Zhang has secured many important projects as a principle investigator. These projects are sponsored by the National Natural Science Foundation, Fujian Provincial Fund, Fuzhou Science and Technology Fund and many other funds. As the first or co-author, he has published a couple of papers in leading academic journals such as Nature, Nature Genetics, Nature Plants and etc.,

W. M. Wishwajith W. Kandegama 博士、高级讲师
斯里兰卡瓦扬巴大学农业和种植园管理学院园艺及园林学系

Dr. W. M. Wishwajith W. Kandegama, Senior Lecturer
Department of Horticulture and Landscape Gardening,
Faculty of Agriculture & Plantation Management,
Wayamba University of Sri Lanka

讲 座 8: 农药在现代农业中的应用
Lecture 8: Modern Application of Pesticide in Agriculture



Dr. W. M. Wishwajith W. Kandegama 目前工作于斯里兰卡瓦兰巴大学农业和种植园管理学院，目前担任高级讲师。作为一名学者和研究员，Kandegama 博士在斯里兰卡和中国教学、开展研究、指导学生和评估他们的技能发展方面积累了更广泛的经验。此外，他还在斯里兰卡和英国包括食品饮料行业在内的多个组织工作，并参与过产品推广、现代制造技术、最新立法。他为农业部门和农村发展部门工作，参与国际食品安全标准，以及清洁生产的应用。此外，他还成功地在农药封装上应用了纳米技术，并开发了一种可控释放农药纳米制剂，以保护环境。

Dr. W. M. Wishwajith W. Kandegama 研究方向如下：
有机农场管理
食品安全管理
食品开发与商品化
中药材生产与商业化
商业园艺生产
苗圃管理
环境安全管理
职业安全管理

Dr. W. M. Wishwajith W. Kandegama works in Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka and currently hold a position of senior lecture. As an academic and researcher, Dr. Kandegama has obtained broader experiences in teaching, conducting research, guiding student and evaluating their skills development both in Sri Lanka and China. Moreover, he has been working in various organizations including food & drink industry in Sri Lanka and UK, and experiencing in product promotion, modern manufacturing technologies, latest legislation. He works for agriculture sector and rural development. He involves in international food safety standards, and applications of cleaner production. In addition, he has achieved successful application of nanotechnology on pesticide encapsulation and developed a controlled release pesticide Nano Formulation to protect environment.

Expertise of Dr. W. M. Wishwajith W. Kandegama as follow:
Organic farm management
Food safety management
Food product development and commercialization
Herbal medicine production and commercialization
Commercial horticulture production
Nursery management
Environmental safety management
Occupational safety management.

陈卓 博士、教授

贵州大学绿色农药与农业生物工程教育部重点实验室

Chen Zhuo, Professor, Ph.D.

Key Laboratory of Green Pesticide & Agricultural Bioengineering
Ministry of Education, Guizhou University

讲 座 9: 稻田种养与控害技术

Lecture 9: The Technology of Planting and Raising in Paddy Field
and Controlling Pest



陈卓教授就职于贵州大学绿色农药与农业生物工程教育部重点实验室。主要研究包括植物病虫害综合防治。先后承担多项国家及省部级项目，其中包括国家自然科学基金、国家科技支撑计划项目、贵州省重大科技专项、贵州省农业攻关项目。

陈教授的主要荣誉包括国家农业技术科学家称号（2019年），国家中青年科技创新领军人才（2018年），贵州省专家（2018年）。贵州大学新世纪优秀青年（2013），贵州省优秀青年科技工作者（2013年）。

陈卓教授是中国植物保护学会专业委员会成员，“现代农药学”“激光生物学报”编委，“Pesticide Biochemistry and Physiology”，“Evolutionary Bioinformatics”特刊的副主编。

陈卓教授发表了高水平专业论文 200 余篇。期刊包括，Plant Dis, Phytopathology, JPGR, Pestic Biochem Phys, Arch Virol 等等。陈卓教授获得了国家科技进步二等奖 1 次，省部级科技进步一等奖 2 次，省部级科技进步二等奖 1 次。

Zhuo Chen is currently a professor Key Laboratory of Green Pesticide & Agricultural Bioengineering, Ministry of Education, Guizhou University. He focuses on crop disease as well as action mechanism of fungicides. He has received several important grants, which include the Nation Nature Science Foundation of China (NSFC), the National Key Technology R&D Program and the Key S&T Program of Guizhou Province.

He has been awarded honors include Scientists from National Agricultural Industry Technology System (2019), National Young Scientific Innovation Talents (2018), Provincial excellent experts (2018), New Century Excellent Talents in University (2013) and Young Talents of Scientific and Technological of Guizhou Province (2013).

He is a member of Professional committee of Biological Invasions of China Society of Plant Protection. He is an editorial board member of *Modern Agrochemicals* and *Acta Laser Biology Sinica*. He also served as associate editor of *Special Issue of Pesticide Biochemistry and Physiology* and *Special Issue of Evolutionary Bioinformatics*.

He has published more than 200 papers in peer-reviewed journals such as *Plant Dis*, *Phytopathology*, *JPGR*, *Pestic Biochem Phys*, *Arch Virol*, et al. He was awarded several national and provincial S&T awards, which include one Second-Class National S&T Progress Award, 2 First-Class Ministry and Provincial S&T Progress Awards and 1 Second-Class Ministry and Provincial S&T Progress Awards.

Ruvishika S. Jayawardena 博士

泰国清迈大学真菌研究中心

Dr. Ruvishika S. Jayawardena

Centre of Excellence in Fungal Research,

Mae Fah Luang University

讲 座 10: 病害防治的关键: 正确鉴定植物病原

Lecture 10: Correct Identification of Plant Pathogens:
the Key to Control diseases



Ruvishika S. Jayawardena 博士在泰国皇太后大学真菌研究中心担任研究员工作，是泰国皇太后大学讲师。Ruvishika S. Jayawardena 博士于 2017 年博士毕业于泰国皇太后大学理学系生物科学。她的专长在于 Colletotrichum，植物病理学，真菌分类学和真菌植物学。她主持参与了多项重要的研究课题。近年来发表了 100 多篇高质量学术论文。荣获 Clarivate analytics 植物和动物科学领域高引用研究员奖（2018-2020 年）

Ruvishika S. Jayawardena 博士主要担任编辑职务如下：期刊 *Plant Pathology- Studies in Fungi* 编辑（2016 年至今），期刊 *Current Research in Environmental & Applied Mycology (Journal of Fungal Biology)* 编辑（2016 年至今）；期刊 *Cryptogamie, Mycologie* 编辑（2018 至今），期刊 *Colletotrichum - Plant Pathology and Quarantine* 副编辑（2016 年至今）；期刊 *Microfungi- Phyottaxa* 副编辑（2017 年至今）。

Dr. Ruvishika S. Jayawardena works in Centre of Excellence in Fungal Research as a researcher and a lecturer at School of Science, Mae Fah Luang University, Thailand. She received her Ph.D. of Bioscience in 2017, from School of Science, Mae Fah Luang University, Chiang Rai, Thailand. Her expertise lies in Colletotrichum, Plant pathology, Fungal taxonomy and Fungal phylogeny. She has secured several research grants, including two projects as a principal investigator. She has published over 100 peer-reviewed academic papers in the field. She has received the highly cited researcher award in plant and animal science category from 2018-2020, by the Clarivate analytics.

Dr. Ruvishika S. Jayawardena has been editor or associate editor for professional journals as follow:

Editor, *Plant Pathology- Studies in Fungi*, since 2016

Editor, *Current Research in Environmental & Applied Mycology (Journal of Fungal Biology)*, since 2016

Editor, *Cryptogamie, Mycologie*, since 2018

Associate Editor, *Colletotrichum - Plant Pathology and Quarantine*, since 2016

Section Editor, *Microfungi- Phyottaxa*. since 2017

李向阳 博士、教授

贵州大学绿色农药与农业生物工程教育部重点实验室

Li Xiangyang, Professor, Ph.D.

Key Laboratory of Green Pesticide & Agricultural Bioengineering
Ministry of Education, Guizhou University

讲 座 11: 免疫诱抗剂在作物病毒病防治中的应用

Lecture 11: Application of Immune Inducer in Crop Virus
Disease Control



李向阳教授 2012 年博士毕业于贵州大学绿色农药与农业生物工程教育部重点实验室，师从宋宝安院士。毕业后留校工作至今，主要从事先导化合物分子靶标的发掘、作用机制和结构优化研究工作。

先后主持国家自然科学基金项目 3 项，国家重点研发计划项目子课题 2 项，贵州省科学技术厅农业攻关项目 1 项，贵州省教育厅招标项目 1 项。在 *Journal of Agricultural and Food Chemistry* 和 *Bioorganic & Medicinal Chemistry* 等国内外主流刊物上发表 SCI 论文 40 余篇，其中第一作者或通讯作者 18 篇。申请国家发明专利 14 件，其中授权专利 5 件。参编《2016-2017 植物保护学学科发展报告》和《中国农药典》等专著 4 部。

荣获教育部高等学校科学研究优秀成果奖科学技术进步奖二等奖，中国石油与化学工业优秀出版物奖·图书奖一等奖，贵州省科学技术进步奖一等奖。担任中国工程院院刊系列主刊“*Engineering*” *Green Plant Protection Innovation* 专题的主编助理和客座编辑。农药学国际知名权威 SCI 期刊 *Journal of Agricultural and Food Chemistry* 和 *Pesticide Management Science* 期刊特约审稿人。

Professor Li Xiangyang received his Ph.D. from the Key Laboratory of Green Pesticides and Agricultural Bioengineering, Ministry of education, Guizhou University in 2012. Since then, he has been working in Guizhou university, engaging in molecular target discovery of lead compounds, mechanism of action and structure optimization research.

He has presided over 3 projects of National Natural Science Foundation of China, 2 sub-projects of National Key Research and Development Program, 1 agricultural research project of Guizhou Provincial Department of Science and Technology, and 1 bidding project of Guizhou Provincial Department of Education. He has published more than 40 SCI papers in the *Journal of Agricultural and Food Chemistry*, *Bioorganic & Medicinal Chemistry* and other mainstream publications at home and abroad, among which 18 were the first author or corresponding author. He applied 14 national invention patents, including 5 authorized patents. He has participated in the compilation of 4 monographs, such as 2016-2017 Report on the Development of Plant Protection Science and Chinese Pesticide Code.

Honors and Esteem Indicators:

Second Prize of Outstanding Achievement Award for Research (Science and Technology Progress), Institutions of Higher Education, Ministry of Education;

First Prize of Outstanding Publication Award for China Petroleum and Chemical Industry;

First Prize of Science and Technology Progress Award in Guizhou Province;

Editor-in-chief assistant and guest editor of *Green Plant Protection Innovation of "Engineering"* ;

Reviewer of *Journal of Agricultural Food Chemistry*
Reviewer of *Pesticide Management Science*.

王勇 博士、教授
贵州大学农学院

Wang Yong, Professor, Ph.D.
College of Agriculture, Guizhou University

讲 座 12: 植物病害的诊断、鉴定与防治
Lecture 12: Plant Diseases Diagnosis, Identification and Control



王勇教授，贵州大学农学院植保系教师，系副主任，教授，贵州大学特聘教授 B 类，博、硕士生导师，博士后合作导师。

王教授是贵州省优秀青年科技人才（第十二批），贵州省青年科技奖、贵州大学国华奖获得者，中国植物病理学会理事，中国植物病理学会理事青年工作委员会秘书，委员，贵州省菌物学会常务理事，植物病原真菌分委员会主任，贵州省微生物学会理事。

主要从事植物病原学及微生物资源利用研究，2011 年以来主持科研项目 16 项，其中国家自然科学基金 2 项，发表 SCI 论文 90 篇，论文被引用次数 3000 余次。在国际顶级真菌学杂志《Fungal Diversity》上联合发表高水平研究论文 10 篇，其中第一作者 1 篇，通讯作者 4 篇。

担任国际期刊 *Plant Pathology & Quarantine* 的科学主编以及 *Mycosphere*, *Studies in Fungi* 的编委成员，*Frontiers in Microbiology* 专刊特邀编辑，是 *Fungal Diversity*, *Plant Diseases*, *Fungal Biology*, *MYCOTAXON* 和 *Sydowia* 等 SCI 入围期刊及《植物病理学报》《菌物学报》的审稿专家。

Prof. WANG Yong currently works at the Department of Plant Protection, College of Agriculture, Guizhou University as a Professor, MSc supervisor and post-doctoral co-supervisor.

He has been nominated as Outstanding Young Talents in Science and Technology, Guizhou Province (12th Batch). He also hold Guizhou Provincial Youth Science and Technology Award and Guohua Award Winner of Guizhou University. He is a Member of the Chinese Plant Pathology Society, Secretary of the Youth Working Committee, the Chinese Society of Plant Pathology, a Member of the Standing Committee of the Guizhou Institute of Bacteria, a director of the Guizhou Institute of Microbiology.

He mainly engages in plant pathogenology and microbial resource utilization research. Since 2011, he has hosted over 16 scientific research projects, including 2 projects sponsored by the National Natural Science Foundation of China. In recent years, he has published 90 peer-reviewed research papers, cited more than 3000 times, including many leading journals, such as *Fungal Diversity*. He also co-authored 10 high-level research papers, including one by the first author and four by the newsletter.

He serves as a scientific editor of the international journal *Plant Pathology and Quarantine*, as well as a member of the editorial board of *Mycosphere* and *Studies in Fungi*, *MYCOTAXON*. He is a guest editor of *Frontiers in Microbiology*. And he is also the reviewer of journals such as *Fungal Diversity*, *Plant Diseases*, *Fungal Biology*, *MYCOTAXON*, *Sydowia*, *Chinese Plant Pathology*, *Journal of Fungus*.

黄涛博士、副教授

贵州大学动物科学院

Huang Tao, Associate Professor, Ph.D.

College of Animal Science, Guizhou University

讲 座 13: 动物疾病防控 (牛疫病防控)

Lecture 13: Animal Disease Prevention and Control

(Prevention and Control of Bovine Epidemic Disease)



黄涛博士工作于贵州大学动物科学院，副教授。主要研究是通过WestBlot、免疫沉淀、流式细胞术、免疫荧光、激光共聚焦技术，来研究 ORFV 病毒基因的功能、病毒力、病毒与宿主的相互作用、病毒基因对宿主的免疫调节及免疫逃逸机制。研究早期疾病的检测方法包括多重 PCR 和酶联免疫吸收试验 (ELISA) 方法，应用于主要病原体的检测和抗体检测。研究新一代疫苗，用大肠杆菌表达靶蛋白，用该蛋白免疫易感动物，观察免疫效果，或构建基因核酸疫苗、核酸疫苗免疫动物，观察免疫效果。

Dr. Huang is an associate professor in College of Animals Science, Guizhou University. He focuses on the interaction of the function of unknown gene in the ORFV, virulence with host. He is also interested in immune regulation of virus gene to host, immune escape mechanism with host cells through WestBlot, immunoprecipitation, flow cytometry, immunofluorescence, and laser confocal techniques. Dr. Huang and his research team also carry out research associated with early disease detection methods, included Multiplex-PCR and enzyme-linked immune absorbent assay (ELISA) methods that applied in the detection of major pathogens and antibody detection, as well as coordinating participation in international ring-trials to evaluate test performance.

His research group has been developing new generation vaccine by using E. coli to express target protein so as to monitor how the protein immunize susceptible animals by observing the immune effect, or by constructing gene nucleic acid vaccine or nucleic acid vaccine to immunized animals and observe the immune effect.