

“海上丝绸之路”相关国家植物保护高级研讨会, 2018.9

*The IPPC High-level Symposium on Cooperation of the Phytosanitary Measures among the Chinese Initiative  
“One Road” Countries, Sept. 2018*

广西南宁合一生物防治技术有限公司

**Guangxi Nanning Heyi Biological Control, LTD**

师翱翔，技术总监

Ian Shi, Technical Adviser



我们致力于

WE ARE COMMITTED TO

# 生物防治 BIOLOGICAL CONTROL ...

我们做什么？  
WHAT WE DO?

我们生产天敌昆虫并提供全套技术服务  
We produce natural enemies for pest control and provide technical service to support growers

创建者  
FOUNDERS

创建者拥有30多年生物防治和管理经验  
The founders have a combined 30+ years of Biological Control and Management experience

成绩  
ACHIEVEMENTS

我们获得国家级和地市级天敌昆虫产业化生产和大面积生物防治应用奖项  
We have been awarded with National and Municipal prizes for large scale application of Bio-Control

地点  
LOCATION

公司2010年成立，位于中国广西南宁市  
Found in 2010, our company is located in Nanning, Guangxi, China



# 合一生防的历史和里程碑 Heyi's History and Milestones

2010



创建者宋一林，师翱翔  
业务经理和昆虫学家  
Founders Yilin Song, Ian Shi  
Businessman and entomologist



创建初期/Start



今天的合一生防/Company today

# 合一生防的历史和里程碑 Heyi's History and Milestones

2011



螟黄赤眼蜂发布用于防治甘蔗螟虫  
Introduction of *Trichogramma chilonis* against sugarcane borers



2012-2018放蜂面积/release acreage



# 合一生防的历史和里程碑 Heyi's History and Milestones

2012



大面积释放赤眼蜂防治甘蔗螟虫

Large scale inundative release of *T. chilonis* against sugarcane borers

# 合一生防的历史和里程碑 Heyi's History and Milestones

2014



开始生产和销售胡瓜钝绥螨防治柑橘红蜘蛛  
Introduction of *Neoseiulus cucumeris* against citrus red mite

# 合一生防的历史和里程碑 Heyi's History and Milestones

2015

开始生产和应用稻螟赤眼蜂防治稻纵卷叶螟和二化螟  
Start production and application of *T. japonicum* for rice insect pests, *Cnaphalocrocis medina* and *Chilo suppressalis*



# 合一生防的历史和里程碑 Heyi's History and Milestones

2017

米蛾自动化生产线投入运行

Launch of automatic production line of *Corcyra cephalonica*



- 每批次可采收米蛾卵 $\geq 20$ 万毫升 More than 200,000 ml of *C. cephalonica* eggs in one batch
- 赤眼蜂年总产量为500亿头 annual production of trichogramma is 50 billions



# 强大的赤眼蜂

## Mighty Wasps

- 知彼知己 Understanding Pests and Wasps
- 时机和正确方法 Timing and Right Methods
- 无需化学农药 No Chemicals
- 效力 Effectiveness
- 产品+全套技术服务 Product+Technology and Support

# 甘蔗螟虫和赤眼蜂

## Sugarcane Borers and Trichogramma

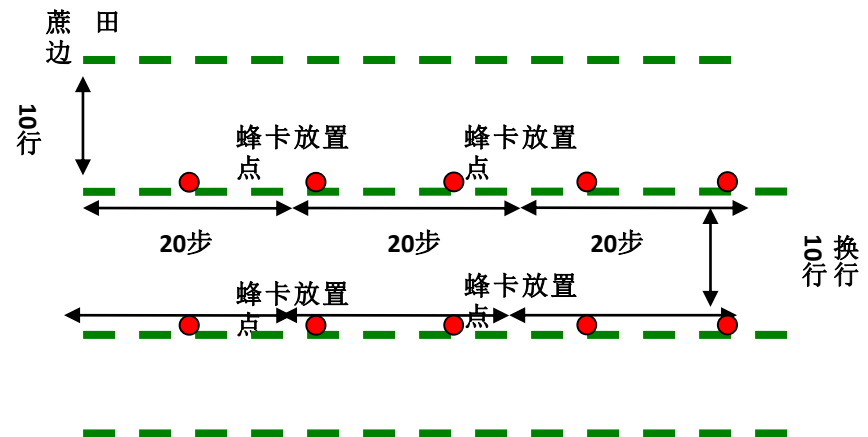
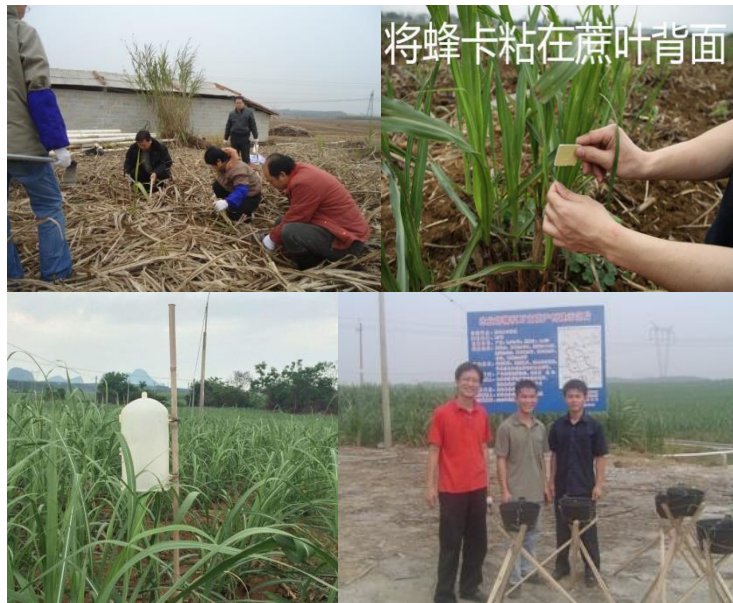
- 三种主要螟虫，条螟、黄螟、二点螟 Three main species of borers, *Chilo sacchariphagus*, *Tetramoera schistaceana*, *Chilo infuscatellus*
- 优势赤眼蜂 Predominant parasitoid, *T. chilonis*



# 适时和正确释放

## Timing and Correct Release

- 释放效果取决于释放的时机和放蜂量 Timing and rate of release are crucial
- 释放方法 Release methods



# 无需化学农药

## No Chemicals

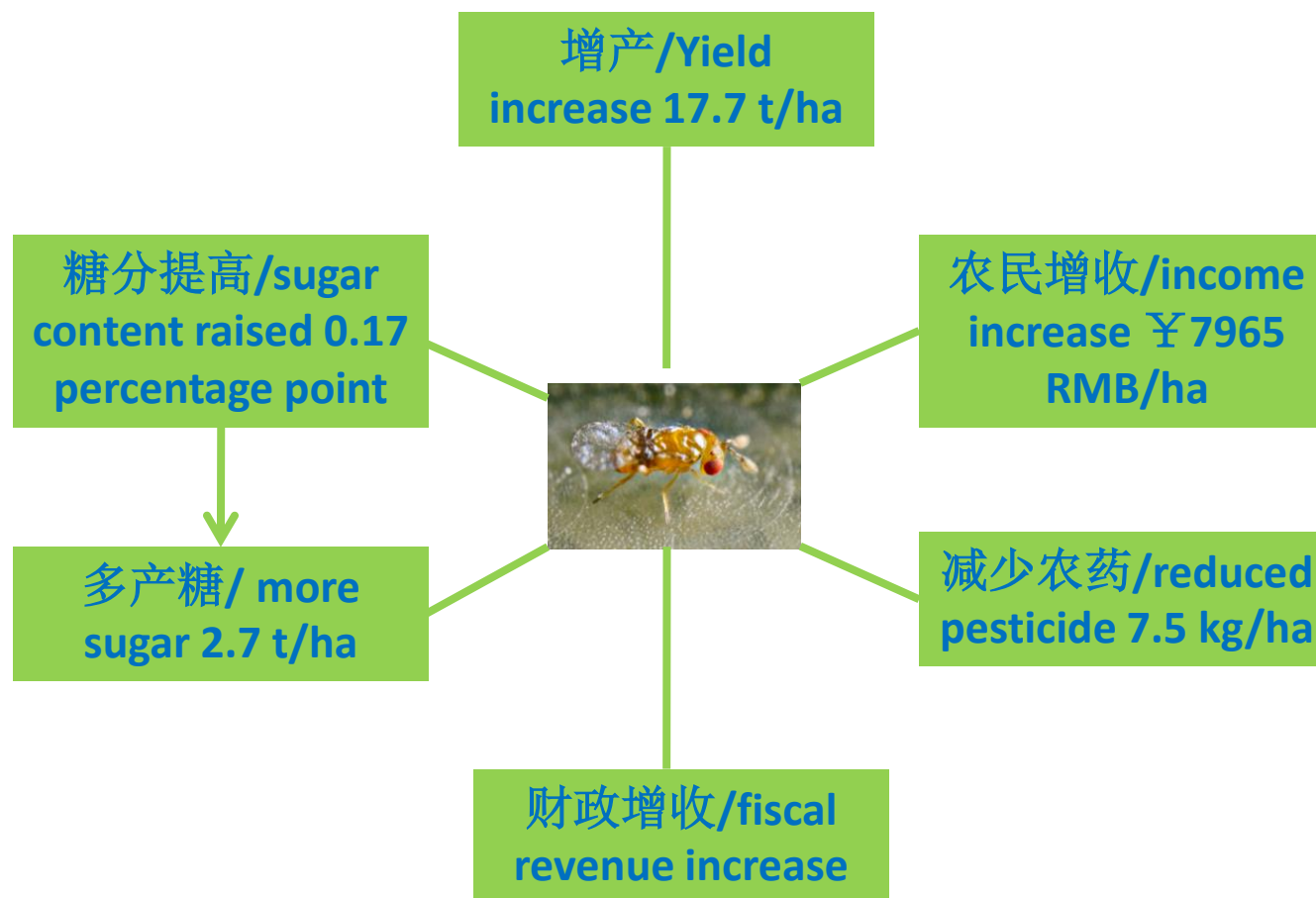
- 释放赤眼蜂后禁止使用化学杀虫剂 Chemical pesticides must be banned following the wasp release
- 放蜂治螟蔗区第一年即可停止使用化学农药 release of trichogramma can replace the chemicals from the first year of its use
- 保护天敌和环境，减少残留 Protect natural enemies and environment, reduce residue





# 优良防效和回报

## Effective and Good Return



# 产品+全套技术服务

## Product+Technology and Support

- 螟虫发生监测 Monitoring
- 技术培训 Training
- 技术支持 Technical support to end users
- 田间调查 Field Investigation
- 效果评估 Efficacy Evaluation



## 培训Training



2012-2018  
年举办甘  
蔗和水稻  
放蜂治螟  
培训班，  
培训人员  
超过2万人，

Training were provided to over 20,000 people for wasps release against sugarcane and rice pests from 2012 to 2018

# 发展前景和目标

## Future perspective and objectives

- 不断地创新并提升生物防治产业的发展/**Innovation to lead the industry**
- 与所有利益相关者合作并成长/**Collaboration with all stakeholders to thrive**
- 向所有利益相关者宣传和提倡生物防治/**Promotion of biological control to all stakeholders**



# 鸣谢Acknowledgments

感谢

农业农村部

广西农业厅

广西农垦局

广西糖办

广西农垦糖业集团

南宁市政府

等单位对生物防治技术研发和推广的大力支持

**Our sincere thanks to**

**Ministry of Agriculture and Rural Affairs**

**Dept. of Agriculture of Guangxi**

**State Farm Bureau of Guangxi**

**Guangxi Admin. Office of Sugar Industry**

**Guangxi State Farm Sugar Industry Group**

**Government of Nanning**

**for supporting biological control**

**感谢您的关注！**  
**Thank you for your attention!**

**Guangxi Nanning Heyi Biological Control LTD.**  
**34 Guangmingnan Road, Wuxu, Nanning, Guangxi**  
**Postal Code: 530227**  
**Phone: 0771-4737839**

**Manager: [syl@heyisf.com](mailto:syl@heyisf.com)**  
**Technical: [shiaoxiang@heyisf.com](mailto:shiaoxiang@heyisf.com)**