

## Mission

The NSF Center for Integrated Pest Management (CIPM) develops new strategies, analytics and decision support systems to advance IPM and plant biosecurity.

We serve and partner with government, industry, and university stakeholders locally, nationally, and internationally.



## Vision

Champion innovative IPM and plant biosecurity strategies using data analytics and decision support systems to solve 21st century pest management challenges.



## Contact Us

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National Science Foundation

# Center for Integrated Pest Management



**NC STATE**

College of Agriculture  
and Life Sciences

# Focus Areas

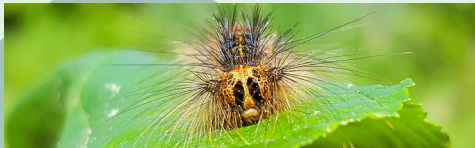
## Social-Ecological Pest Analytics

eco-efficient crop protection

Pest management is crucial for ensuring a reliable food supply but there is concern about the impacts of pesticides on human health and the environment.

At CIPM, our aim is to reduce these harmful impacts by creating new strategies for eco-efficient crop protection. Eco-efficient crop protection uses big data, informatics, analytics, and situation modeling to help make pest management smarter.

Magarey, R.D. et al., (2019). Social ecological system tools for improving crop pest management, *Journal of Integrated Pest Management*, 10:2



## Regulatory Pest Informatics

stopping pests at borders

CIPM works closely with federal and international stakeholders to safeguard U.S. agriculture and natural resources while facilitating international trade.

This focus area includes knowledge assimilation and analyses of pest biology, geographical distribution, host range, epidemiology and ecology; development of surveillance methods, identification and diagnosis; and modeling for pest prioritization, introduction, spread, establishment and economic impact.

Meissner, H. E., et al. 2015. PestLens: an early-warning system supporting U.S. safeguarding against exotic plant pests. *EPPO Bulletin* 45:304-310.

Venette, R.C., et al. , 2010. Pest Risk Maps for Invasive Alien Species: A Roadmap for Improvement. *BioScience* 60, 349-362



## Strategic Pest Management

fostering the development and adoption of IPM

The Southern IPM Center seeks to address issues at the state and regional level:

Pesticide Resistance  
Regulatory Loss of Pesticides  
Environmental Change  
Public Opinion  
Grower Needs  
& New and Emerging Invasive Pests

[SouthernIPM.org](http://SouthernIPM.org) • [IPMdata.ipmcenters.org](http://IPMdata.ipmcenters.org)

## CIPM Projects

We partner with federal, state, international, and industry stakeholders in over 40 projects to develop innovative information solutions and address the challenges of invasive and domestic pests.

**Our work spans across disciplines:**

Plant Pathology  
Crop Science  
Risk Analysis  
Data Science  
Economics  
Entomology  
Geospatial Analytics  
Ecology  
Computer Science