

# **Crop Protection and Pesticide Application Based on Food Safety in China**

**--Introduction of ENDURE to China and Design of Chinese Version**

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# Content



**Situation of Crop Protection, Pesticide Application and Food Safety in China**



**Scientific Research and Technology in China**



**Design of “ENDURE in China”**



# Main Crops in China (2009)



Crop

Area (ha)

Yield (t)

rice

29 627 000

195 103 000

wheat

24 291 000

115 115 000

corn

31 183 000

163 974 000

rape

7 278 000

13 657 000

cotton

4 952 000

6 377 000

Vegetables

18 414 000

444 000 000

apple

2 667 000

31 681 000

citrus

2 067 000

25 211 000

tea

1 849 000

1 359 000





# Important Pests on Crops in China



Important crop pests: > 1600 species



**Insects** 830

**Pathogens** 720

**Weeds** 60

**Rodents** 20



Invasive species from abroad: > 40

# **Pesticide Registration, Production and Sale in China**

## **Pesticide Registration**

**Pesticide ingredients: about 600**  
**Pesticide products: about 22, 000**

## **Pesticide Production**

**Companies: over 2700**  
**Annual production--million tons**  
**pesticide technical materials--1.3**  
**pesticide formulation--over 2.0**

## **Pesticide Production**

**Annual sales: 72.9 billion RMB (2006)**





# Pesticides Application in China (2006)

460,000 tons

=

300,000 tons

+

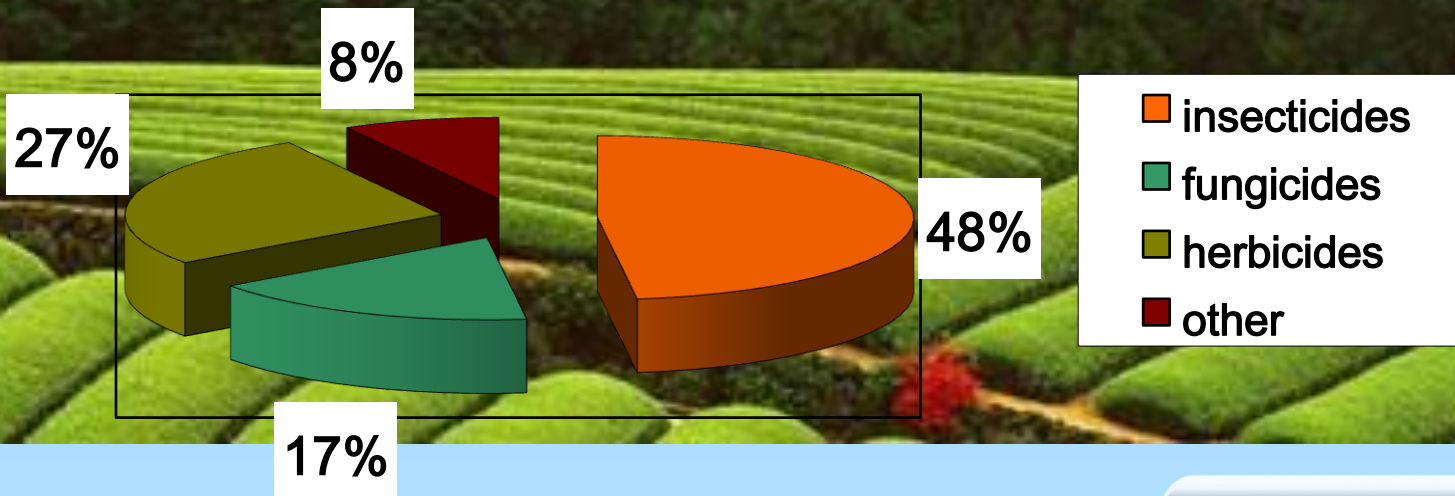
160,000 tons

**Total amount  
of use:  
(ingredients)**

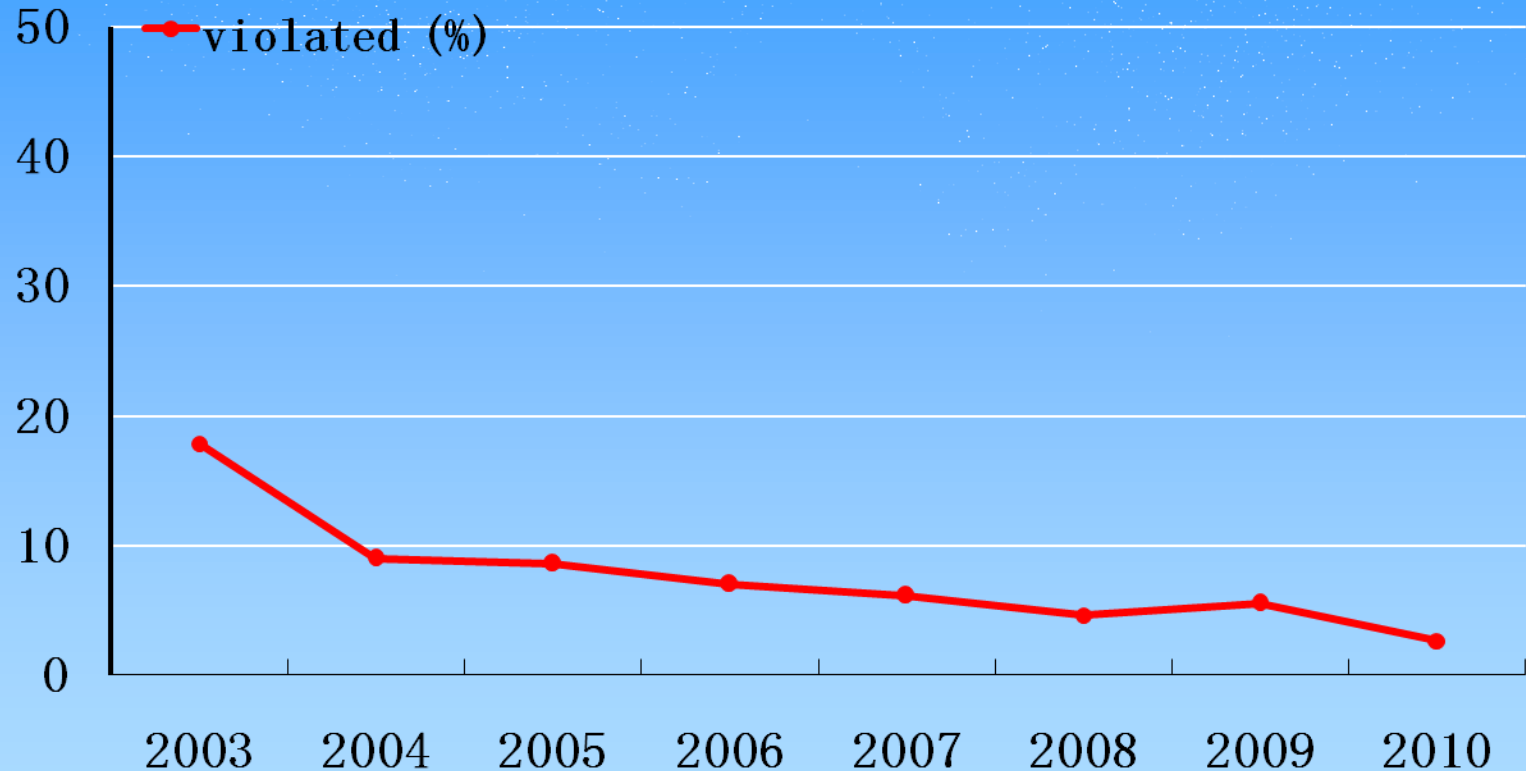
**For  
agriculture**

**For  
forestry,  
hygiene,  
gardening,  
industry**

**Control area: 320 million ha•time**



# Regular Inspection Results of Pesticide Residue in Vegetables in China ( 2003-2010 )





# Management of Food Safety in China



**administrative  
management**

**laws and  
regulations**

**5 systems**

**risk assessment and  
standards**

**inspection  
and control**

**quality  
accreditation**





# Deficiency of Scientific and Technological Support on Food Safety in China

**strategies of sustainable crop protection**

**techniques of replacement and reduction for pesticide use**

**methods of risk assessment and inspection for food safety**



# Attending ENDURE Activities

2008.6.16-17.

Meeting of the core team of ENDURE, UK

2008.10.13-15.

2008 annual meeting of ENDURE, La Grand Motte , France

2009.9.20-23.

2009 annual meeting of ENDURE, Wageningen ,  
Netherland



# International Seminar

**2009.4.15-17., Hangzhou, China:**  
**“Sino-Denmark Seminar on Sustainable Crop Protection strategies”**



# Visiting and Cooperation

2009.10.13

## Delegation from Aarhus University to ZAAS, Hangzhou, China





# Support from China Central Government



An international cooperation Project has got approval from Ministry of Science and Technology, China

“Research on practical techniques for reduction of pesticide use based on the EU food safety standards”

Bilateral cooperation

ZAAS, China; AU, Denmark

Duration

2010-2012

Funding

Funding: 1 million RMB



# ENDORE in Chinese version ( 1 )



## Our Vision

**High quality, safety and competitiveness**

## Objectives

**Aiming to use the multiple sustainable crop protection and pesticide use reduction to reduce the pesticide residue, to enhance the agricultural products quality and ensure the food safety.**





# ENDURE in Chinese Version ( 2 )

## Cooperation plans: cooperation :

Strengthening exchanges with European ENDURE research units and initiating more international cooperative researches following up ENDURE progress and participating in some activities, e.g. ENDURE 2010 Conference, graduate studies programs and summer school, etc.

Applying for more supports from the Ministry of Science and Technology.

Establishing the network and platform to launch out the research of *ENDURE* in Chinese Version.

Participating in the research work of European ENDURE.



# To initiate ENDURE in Chinese Version



**Based on the formal research projects,  
reference**

**Bringing the research resources  
in the**

**Introducing the fruits of ENDURE to China and  
carry out the research on crop protection—  
pesticide use reduction — whole process  
control for agricultural product safety, and  
then popularize the research outcomes in the  
main farming regions in China.**





**Thank you !**

