

# 郭予元院士在创建中国主要粮棉作物多病虫复合群体综合防治技术体系上的学术贡献

90

郭予元院士是我国著名植物病理学家、昆虫学家、作物保护专家，长期从事作物多病虫复合群体综合防治技术体系的研究与推广工作，为我国作物保护事业的发展做出了重要贡献。本文回顾了郭予元院士在创建中国主要粮棉作物多病虫复合群体综合防治技术体系上的学术贡献，总结了其在作物保护领域的研究成果，并对我国作物保护事业的发展提出了展望。

关键词：郭予元；水稻；小麦；玉米；棉花；多病虫复合群体；综合防治技术体系；IPM

中图分类号：S 471      A      10.16688/j.zwbh.2022673

## Contribution of Academician Guo Yuyuan in the integrated management technology strategies for comprehensive group of multiple diseases and pests in major grain and cotton crops of China

——To commemorate the 90th anniversary of the birth of Academician Guo Yuyuan

NI Hanxiang\*, CHEN Julian, ZHANG Yong, CAO Yazhong

(  
,      ,  
,      100193,      )

**Abstract** This paper reviews Academician Guo Yuyuan's important research and practice in the field of integrated management technology strategies for comprehensive group of multiple diseases and pests in major grain and cotton crops of China during 1980s — 1990s, including the innovative ideas for developing integrated management technology strategies for the comprehensive group of multiple diseases and pests, creating integrated pests management (IPM) technology systems for rice, wheat, corn and cotton in the main grain and cotton crops growing areas, which had made the remarkable achievements after the implementation, and having proposed the development prospects and goals in China in the 21st century. Academician Guo's scientific thoughts and contributions in the field of comprehensive control of multiple diseases and insect pests in China had a profound impact on mapping out the strategies of IPM, sustainable control, green prevention and control, and the development of plant protection discipline in China, which has made an important contribution to the sustainable control of crop biological disasters in China.

**Key words** Guo Yuyuan; rice; wheat; corn; cotton; comprehensive group of multiple diseases and pests; integrated pests management (IPM)

、 ，  
 。 ，  
 ， ，  
 、  
 ，  
 [1]。 “ ”“ ” ，  
 。  
 1989 —1994 6 ，  
 ， 1990 1993 3  
 。 ， *He-*  
*licoverpa armigera* ，6 4  
 (1990 、1992 —1994 ) ， 1992  
 400 hm<sup>2</sup>  
 ， 30% 。 6  
 2 (1990 、1993 ) ，  
 30% 。 1990 ， ‘  
 10 ’  
 ， 26.5 kg。 199



IPM

20 70

*Sitobion avenae*(

*Sitobion miscanthi*<sup>[11]</sup>)、

*Rhopalosiphum padi*

( )、

,20 80

[5]

) / 1)

[3] 2)

4 ( 15 d)

[12]

,3 -5

[9]

[9-10] 3)

200

[9-10] :

100 , 4 8

, 30

*Ovomermis sinensis*

*Calosoma chinense*。

‘ 7107’

[9-10] 4)

20

0.3 ;





o

o

,

,

o

,

,

[15] o

o

[6] o

. .

,

,

,

,

,

,

o

,

,

,

o

IPM

+

1

,

,

,

o

,

[28],

,

[18] o

,



：“ ”

；“ ” ，

。

1999 433.

[7,33]。

，

，

。

[1] . [J]. , 1998,37(12):1-3.

[2] . [J]. , 1995(5): 21-22.

[3] , , . [C]// —2007 ( ). 2007: 582-585.

[4] , , . [J]. , 1999, 10(1):119-122.

[5] . IPM 21 [J]. , 1998, 24(1): 35-38.

[6] . [J]. , 2006, 32(2):1-4.

[7] . 21 [J]. , 2002(7): 4-7.

[8] , . [C]// ( ) . : , 1991: 61-68.

[9] , . 5 [