

# 綜合式病蟲害管理 ( IPM )

IPM 是一套全面的永續農業方案，將具有成本效益、環保且為社會所接受的種植方式、生物辦法和化學措施結合運用，以有效管理昆蟲、雜草和疾病；<sup>1</sup> 其中包括對作物保護及植物生技產品的負責使用。

## IPM 的重要性何在？



## IPM 策略的主要元素



<sup>1</sup> 國際作物保護聯盟CropLife International及其會員企業均支持國際農藥管理行為守則（FAO, 2012）所制定之IPM定義。

# 植物科學產業的角色

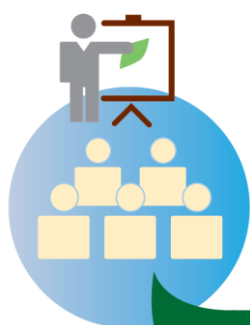


## 研究與開發

- 開發創新化學品及其他防治藥劑，以管理昆蟲、雜草和疾病
- 以抗蟲及抗病特性改良作物品種



病蟲害可能隨時間而對不同的防治方式產生抗性。植物科學產業致力提供策略及知識，幫助農民管理昆蟲、雜草和疾病抗性。



## IPM訓練

植物科學產業承擔管理責任，為農民提供IPM最佳實務訓練。

國際作物保護聯盟PM計畫始自2005年

迄今培訓人次  
已超過**200萬**



### IPM訓練包括：



益蟲的  
辨識



管理害蟲的  
時機和方法



作物保護產品的  
負責使用



空瓶或未用產品的  
適當處置



## 建立 官方民間合作

(PPP) 植物科學產業相信PPP對IPM訓練有其必要，因為能夠：

- 增加接觸新科技的機會
- 提供資訊、教育和訓練

全球CropLife網絡共有超過  
**340個IPM合作對象**

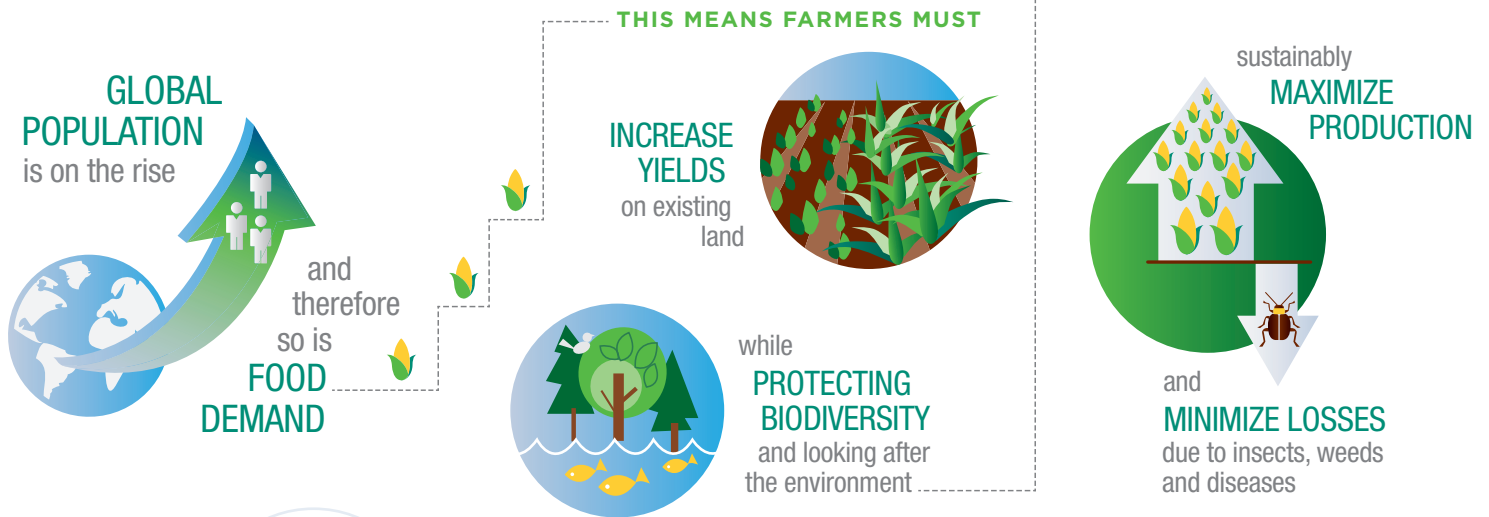


- 民間企業
- 政府
- 非政府組織
- 大學
- 農業協會
- 捐贈者
- 國際研究組織

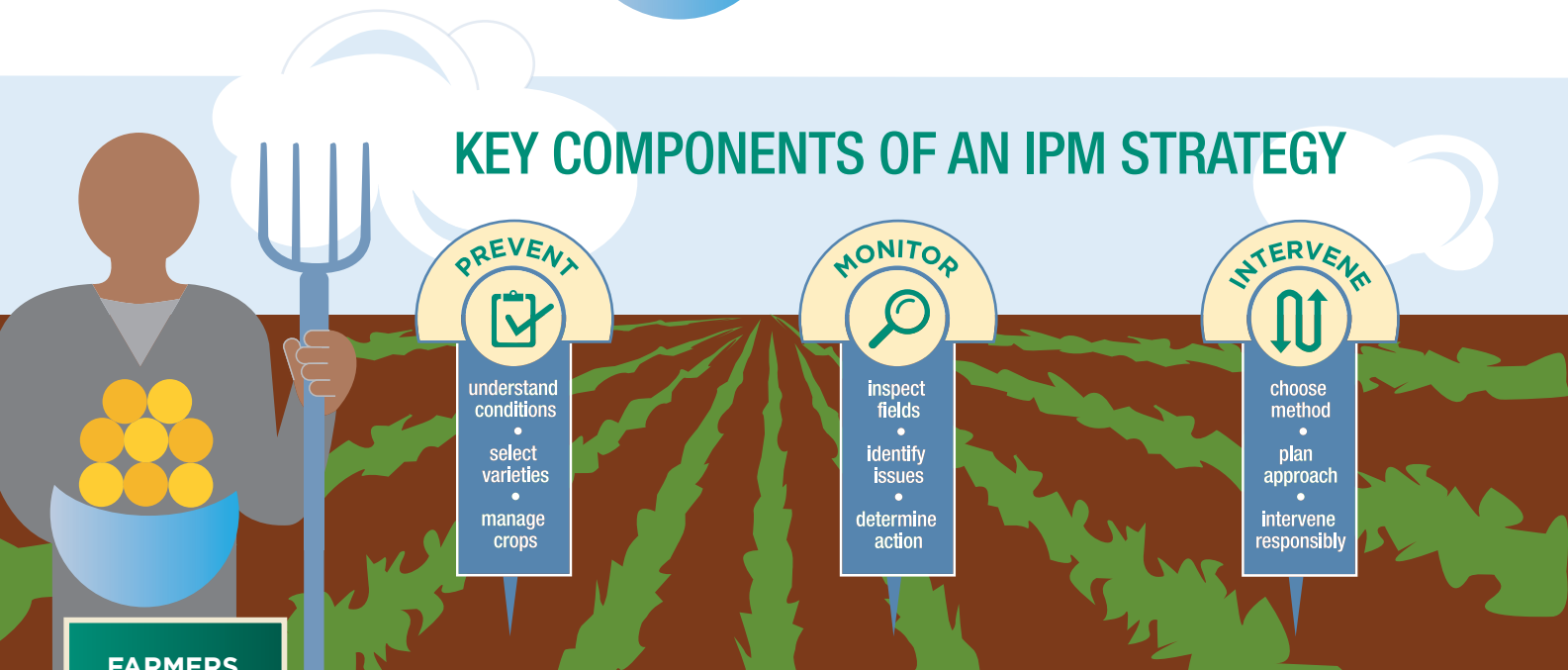
# INTEGRATED PEST MANAGEMENT (IPM)

IPM is a holistic approach to sustainable agriculture that focuses on managing insects, weeds and diseases through a combination of cultural, biological and chemical measures that are cost effective, environmentally sound and socially acceptable.<sup>1</sup> This includes the responsible use of crop protection and plant biotech products.

## WHY IS IPM IMPORTANT?



## KEY COMPONENTS OF AN IPM STRATEGY



**FARMERS** are the primary decision makers in implementing IPM strategies.

### PREVENT the build-up of pests

- Select the best crop varieties for local growing conditions.
- Employ crop rotation, irrigation and tillage practices that help manage pests.
- Manage habitats for beneficial insects.
- Reduce carry-over of weeds and disease by appropriate harvesting, seed cleaning and storage.
- Use seed treatments when necessary.

### MONITOR crops for both pests and natural control mechanisms

- Inspect crops to monitor for pests (including weeds and diseases).
- Distinguish between pests and beneficial insects.
- Determine if intervention is necessary.

### INTERVENE when control measures are needed

- Determine the most appropriate intervention to control pests; one that is cost-effective and environmentally sound.
- Interventions can be physical, cultural, biological or chemical.
- If crop protection products are required, use them responsibly.

<sup>1</sup> CropLife International and its member companies support the IPM definition put forth by the International Code of Conduct on Pesticide Management (FAO, 2012).

# ROLE OF THE PLANT SCIENCE INDUSTRY

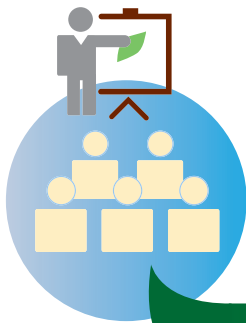


## RESEARCH & DEVELOPMENT

- Developing innovative chemistry and other control agents to manage insects, weeds and diseases
- Improving crop varieties with pest and disease resistant traits



Over time, pests can develop resistance to different control methods. The plant science industry works to provide strategies and information that can help farmers manage insect, weed and disease resistance.



## IPM TRAINING

As part of an on-going commitment to stewardship, the plant science industry trains farmers on IPM best practices.



have trained over  **2 MILLION** individuals

### IPM TRAINING INCLUDES:



**IDENTIFYING**  
beneficial insects



**WHEN and HOW**  
to manage pests



**RESPONSIBLE USE**  
of crop protection products



**PROPER DISPOSAL**  
of empty containers or unused products



## Establishing PUBLIC-PRIVATE PARTNERSHIPS (PPPs)

The plant science industry believes PPPs are essential to IPM training as they can:

- Scale up access to new technologies
- Provide information, education and training

The global CropLife network has over **340 IPM PARTNERSHIPS** worldwide



- Private sector
- Governments
- NGOs
- Universities
- Agricultural associations
- Donors
- National research organizations