A close-up photograph of a Fall Armyworm caterpillar (Spodoptera frugiperda) on a green leaf. The caterpillar is brown and white with dark spots and is shown in profile, facing left. The background is a blurred green leaf.

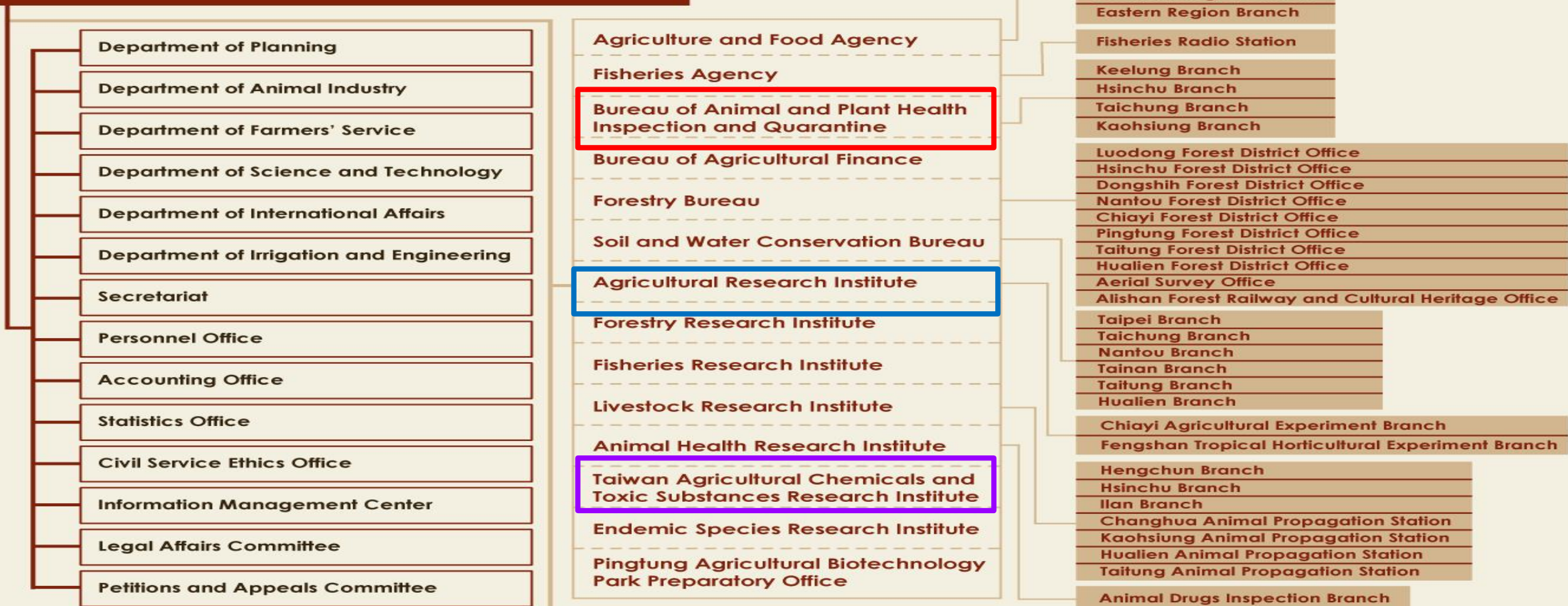
Risk Management Measures for Fall Armyworm (*Spodoptera frugiperda*) in Taiwan

Yi-Tzu Weng¹, Hui-Wen Wang¹, Shih-Tsai Yang¹, Yu-Bing Huang²

¹Bureau of Animal and Plant Health Inspection and Quarantine, Taipei City, Taiwan

²Taiwan Agricultural Research Institute, Taichung City, Taiwan

Council of Agriculture, Executive Yuan



Note: The budget for 2016 for the COA and all affiliated agencies provided funding for a total of 7,734 persons, including: 4,674 full-time staff, 102 hirees, 404 contract employees, 7 security personnel, 2,141 technical staff, 149 drivers, and 257 custodial workers. The offices of the COA per se (i.e. excluding affiliated agencies) accounted for 402 of these persons, including 330 full-time staff, 15 hirees, 12 contract employees, 7 security personnel, 10 technical workers, 15 drivers, and 13 custodial workers.

Taoyuan District Agricultural Research and Extension Station

Miaoli District Agricultural Research and Extension Station

Taichung District Agricultural Research and Extension Station

Tainan District Agricultural Research and Extension Station

Kaohsiung District Agricultural Research and Extension Station

Hualien District Agricultural Research and Extension Station

Taitung District Agricultural Research and Extension Station

Tea Research and Extension Station

Taiwan Seed Improvement and Propagation Station

Fall Armyworm (FAW; *Spodoptera frugiperda*)

Lepidoptera, Noctuidae



Native to tropical and subtropical Americas



Adult: high propagation ability, long-distance migration



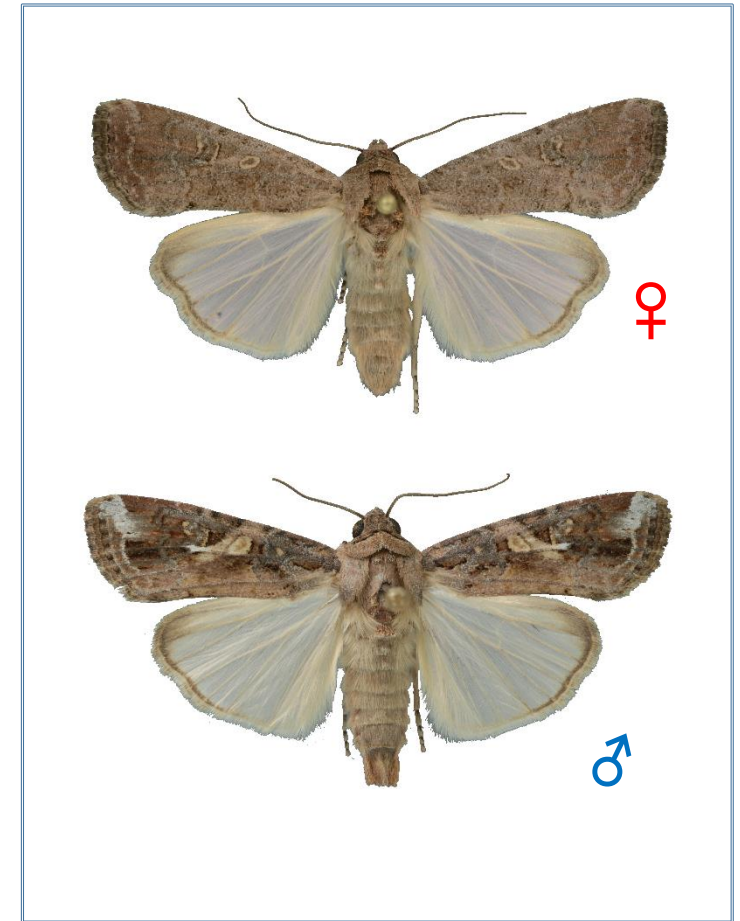
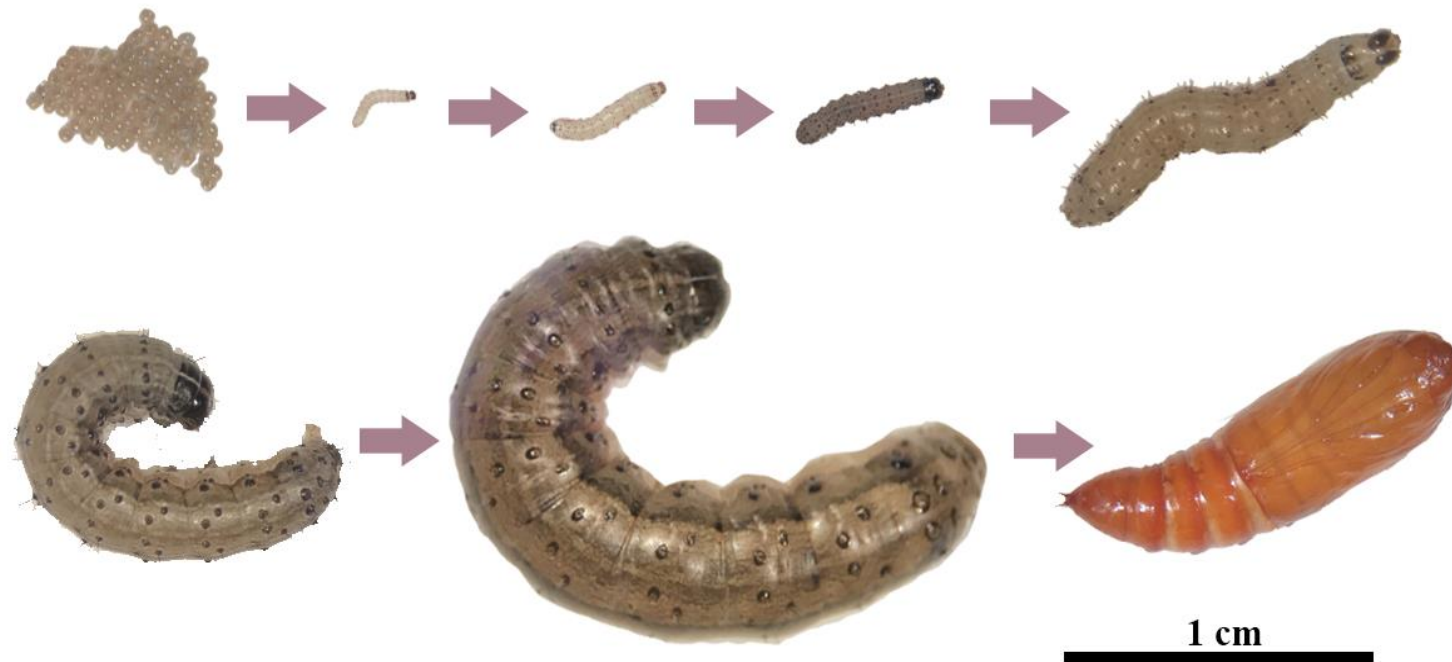
Larva: over 353 species of crops, may cause huge damage



Pest of maize, rice, sorghum, sugarcane and so on




Fall Armyworm (FAW; *Spodoptera frugiperda*)




FAW Invasive Areas




2016 to Africa

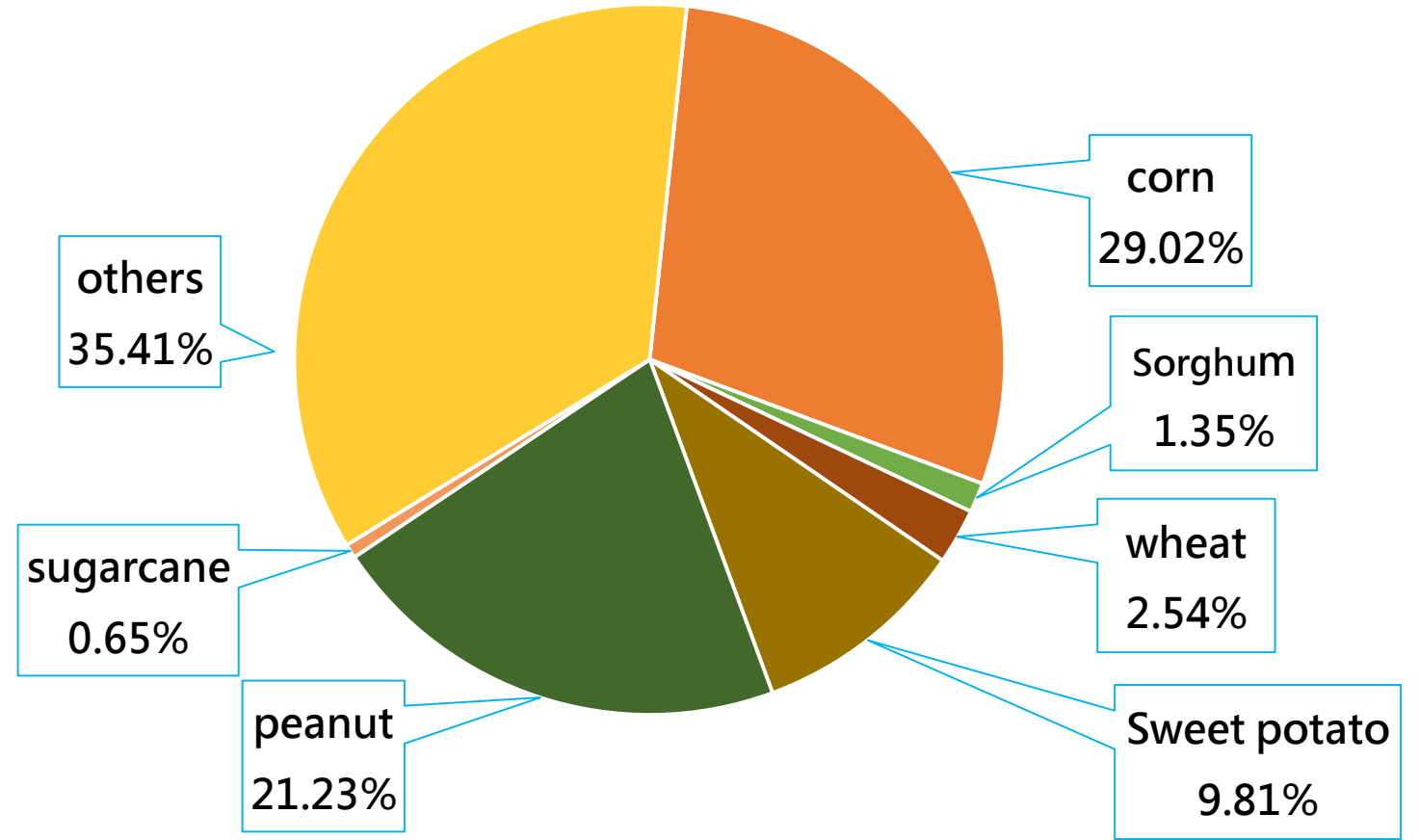

2018 to South &
SouthEast Asia


2019 to East &
NorthEast Asia


2016 to Africa

Estimate loss caused by FAW

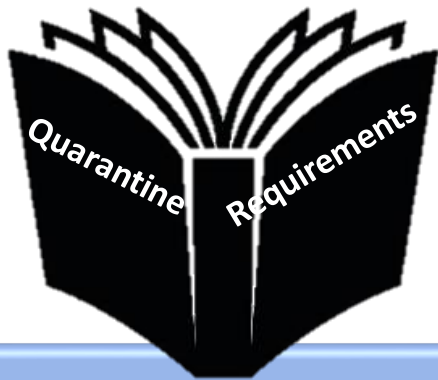
- FAW may cause 5-20% loss in Florida.
- Host plants (excluded rice) - 65% of planting area in Taiwan and may cause NT\$3.5 billion (US\$111.46 million) loss.



FAW

--is listed as an quarantine pest

--was not distributed in Taiwan before 2019



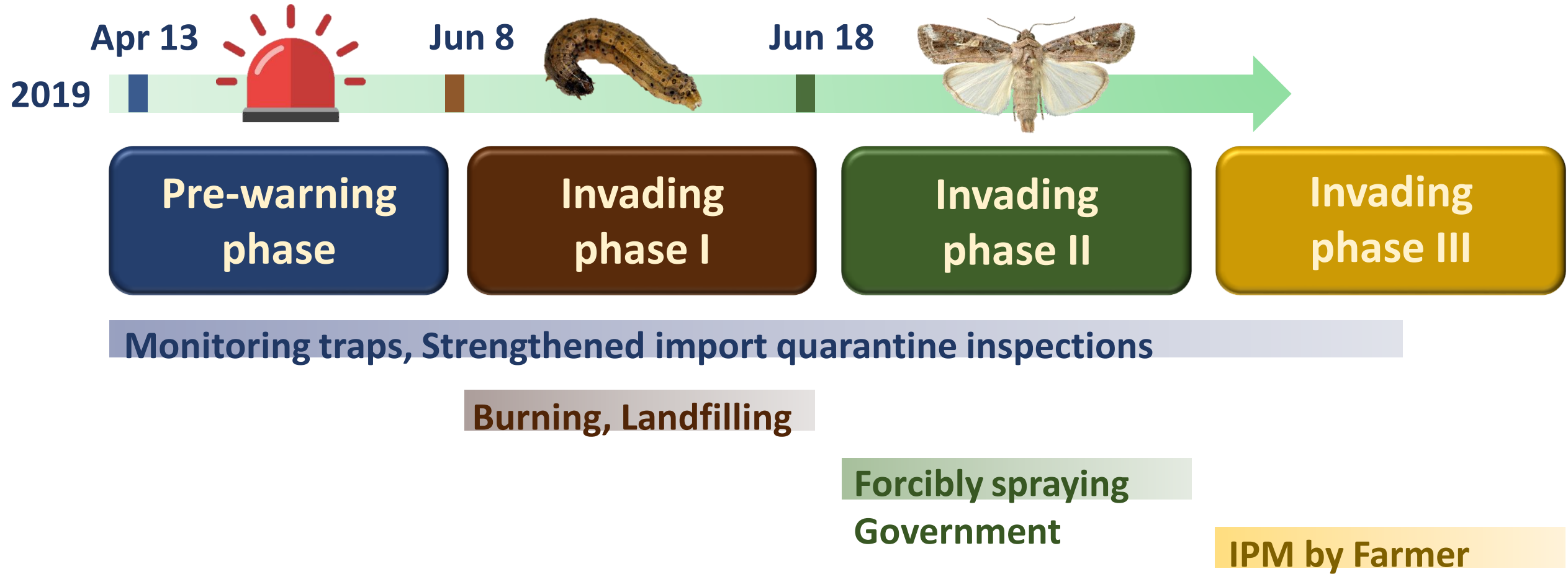
“Quarantine Requirements for The Importation of Plants or Plant Products into The Republic of China”

Importation of plants or plant products shall be subjected to appropriate **quarantine treatment** for mitigating **FAW** if they are intercepted.



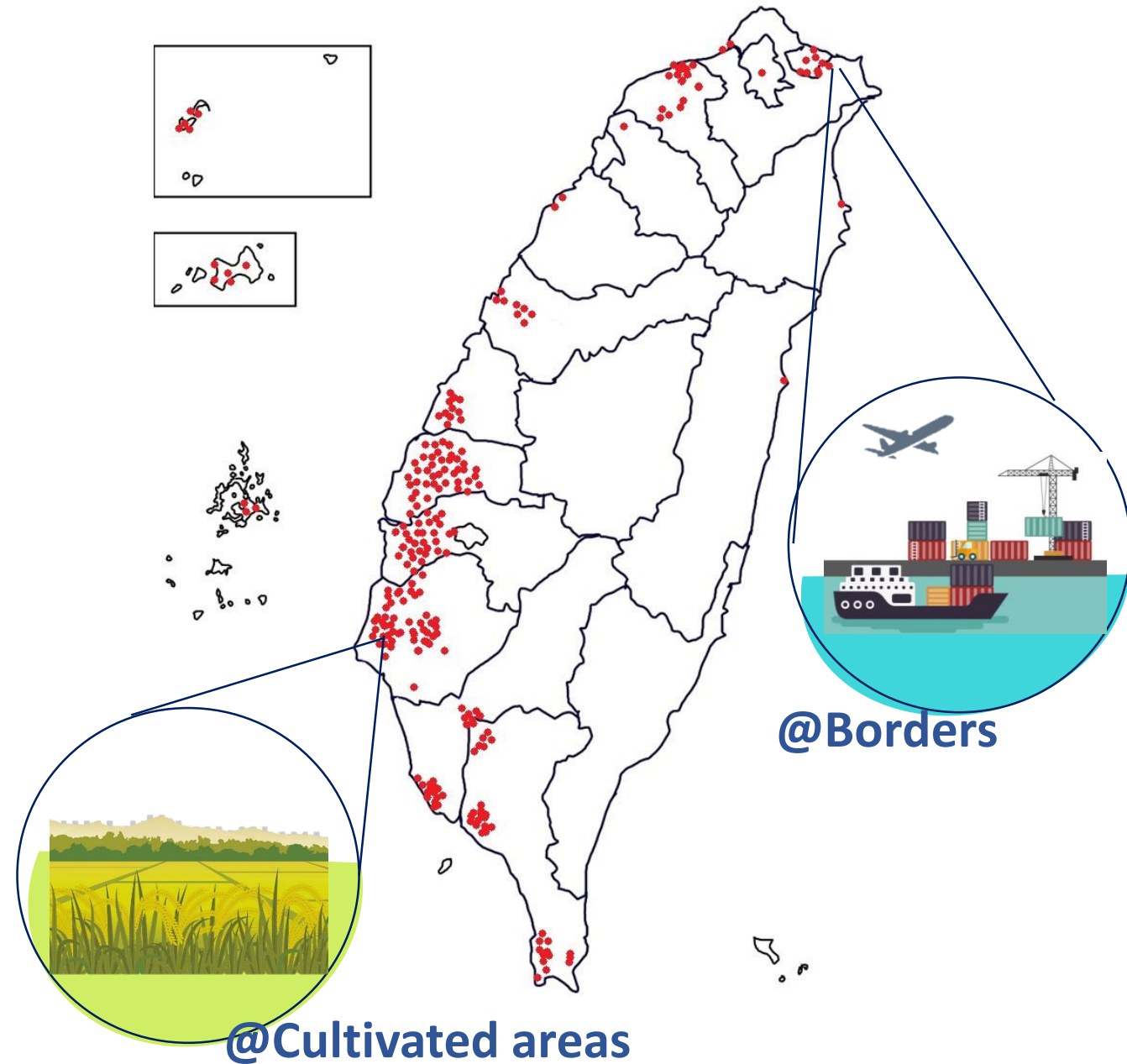
Quarantine treatment, reshipped, or destroyed

FAW Invading into Taiwan



Pre-Warning Phase

500 monitoring traps

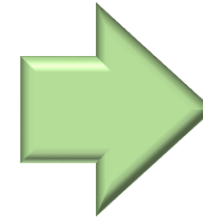
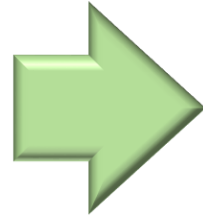


Pre-Warning Phase

- Strengthened **import quarantine inspections** for high risk products



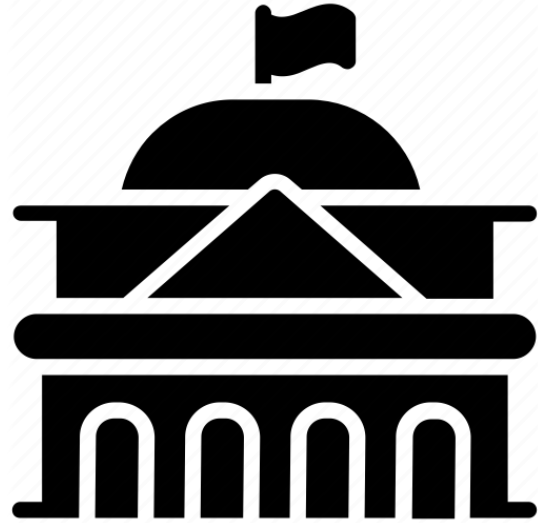
Invading Phase I



**Burning or Landfilling
(monitored for 3 Mons)**



Central Authority



COA, BAPHIQ

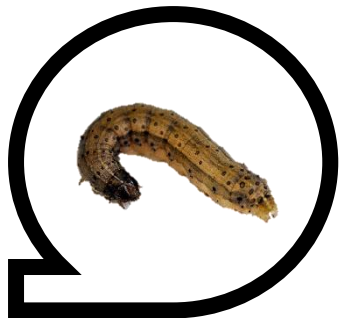
Research Institute

Local government



Policies, Measures, Task Force, Timing...





Free Call

寄主植物

目前有危害紀錄之寄主達353種，共包含76科，其中主要為害科別為禾本科，臺灣常見者如水稻、小麥、高粱、玉米、甘蔗、盤固拉草等；菊科，如萵苣、鬼針草、向日葵等；以及豆科，如花生、大豆、豇豆等。

與斜紋夜盜蟲寄主重疊性高，依秋行軍蟲偏好作物種類估計，恐造成每年高達 35 億元損失。

田間巡查與通報

田間巡查

於清晨或傍晚時巡查田間植株，目視檢查有無疑似蟲體或危害狀。

通報

看到疑似蟲體請通報防檢局
0800-039-131

通緝！

秋行軍蟲

學名 *Spodoptera frugiperda* (JE Smith)
 英名 Fall armyworm (FAW)
 別名 草地貪夜蛾
 原產於美洲，為國際重要檢疫害蟲，108年1月入侵中國大陸，並持續於南方省份擴散危害。

幼蟲



雄成蟲



雌成蟲



看到疑似蟲體請立即通報防檢局

如何鑑別秋行軍蟲

秋行軍蟲與斜紋夜盜蟲(黑肚蟲)的比較



秋行軍蟲的危害狀



越南 Chú ý!

Loại sâu hại chủ yếu Sâu keo mùa thu

Thuốc phòng chống khẩn cấp
 Thuốc phòng chống khẩn cấp bao gồm 11 loại như: Spinetoram, Novaluron, Flubendiamide, Chlorantraniliprole, Flucythrinate, Etofenprox, Thiodicarb, Bacillus thuringiensis, v.v.
 Nếu thấy loại sâu có nghi vấn, hãy lập tức thông báo Cục Phòng kiểm dịch Động Thực vật

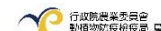
Ố trứng

Ố trứng tập trung lại với kích thước tương đương đồng xu 1 Đái lè. Ố trứng có thể sẽ được bao phủ bởi lớp lông màu trắng - vàng.

Sâu non

Thân dài 0,2-3,2 cm. Mỗi đốt thân có 4 đốm đen phân bố theo hình bậc thang.

Đường dây thông báo 0800-039-131



Perhatian! Hama Penting

印尼 Fall Armyworm

Obat pencegahan dan perawatan darurat meliputi 11 jenis produk seperti Spinetoram, Novaluron, Flubendiamide, Chlorantraniliprole, Flucythrinate, Etofenprox, Thiodicarb, Bacillus thuringiensis, dll.
 Jika melihat hama berbentuk cacing yang dicurigai, segera laporkan kepada Dinas Pencegahan dan Karantina Epidemi Hewan dan Tanaman.

Massa telur

Massa telur berkumpul, sekitar ukuran kecil 1 NTD. Bagian atas telur kemungkinan ditutupi dengan bulu kuning-putih.

Larva

Panjang tubuh adalah 0,2-3,2 cm. Ada 4 bintik hitam pada setiap segmen tubuh, dengan bentuk trapesium.

Hotline Pelaporan 0800-039-131





Facebook



動植物防疫檢疫局-防疫小尖兵

政府機關



已說讚

發送訊息



Angela Chiu、Yu-Tang Hung、Caviar Chang 和其他 33,083 人...

首頁 貼文 影片 相片 關於 社群



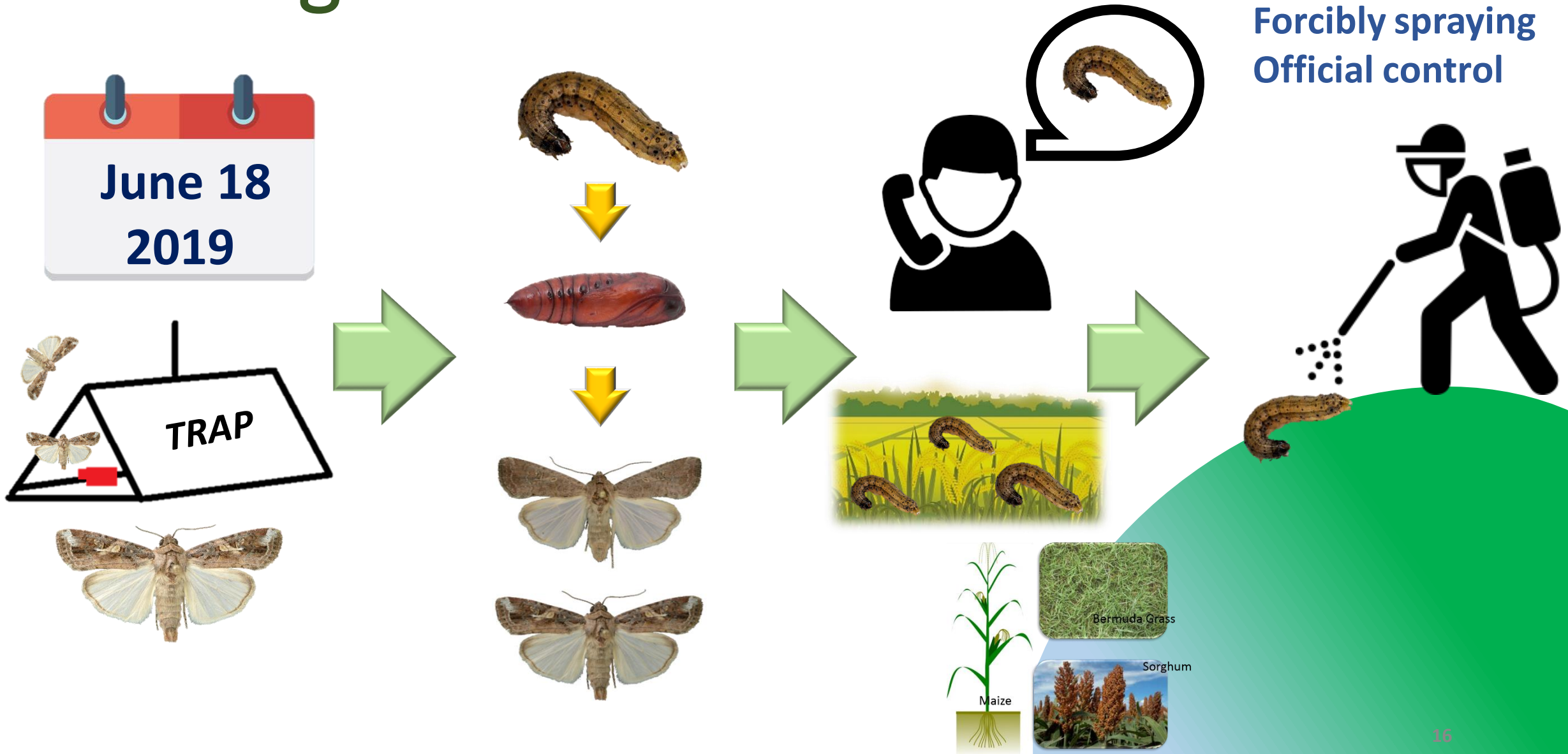
LINE@



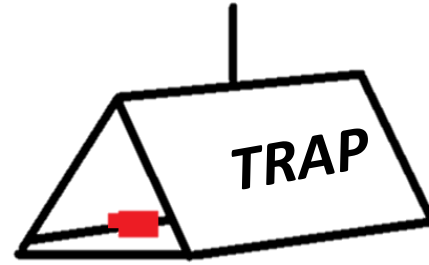
Reporting APP



Invading Phase II



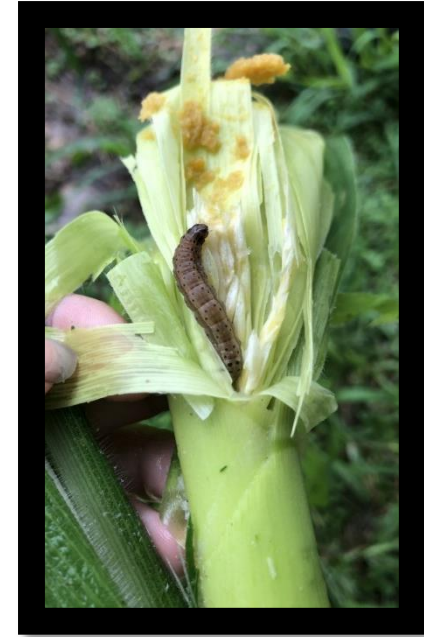
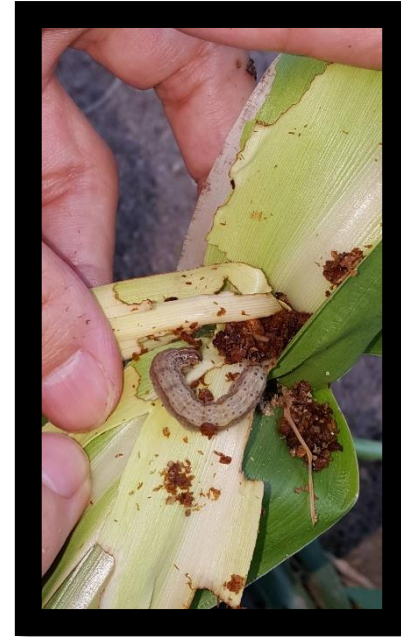
Invading Phase II Official Control



Field Patrol & Inspect



Egg Mass



Larval Eaten Marks & Feces

Invading Phase II Official Control

Website

秋行軍蟲災害緊急應變小組 回首頁 | 網站導覽

國內疫情

FAW累計通報與確診案件之處理方式

FAW幼蟲總數截至8/20累計
通報案件總計: 6,226件
形態確認的通報案件: 230件

國內疫情 **New!**

性費洛蒙偵查誘捕發現FAW成蟲分佈圖

FAW成蟲截至8/20累計
發現數量: 455隻

國際疫情

秋行軍蟲中國現況

秋行軍蟲災害緊急應變小組 回首頁 | 網站導覽

防疫作為

檢疫作為

相關法規

宣導資料

秋行軍蟲災害緊急應變小組 回首頁 | 網站導覽 | 🔍

秋行軍蟲專區

通報方式

1. 防檢局Line@
2. 防疫小尖兵FB
3. 農作物天然災害即時回報APP
4. 服務專線: 0800-039-131

最新消息

新聞 | 公告

<http://faw.baphiq.gov.tw/>

FAW幼蟲通報截至9/3累計

通報案件總計：**6,262件** (不含0800)

形態確認的通報案件：**258件**



Invading Phase II Official Control

Emergency Chemicals

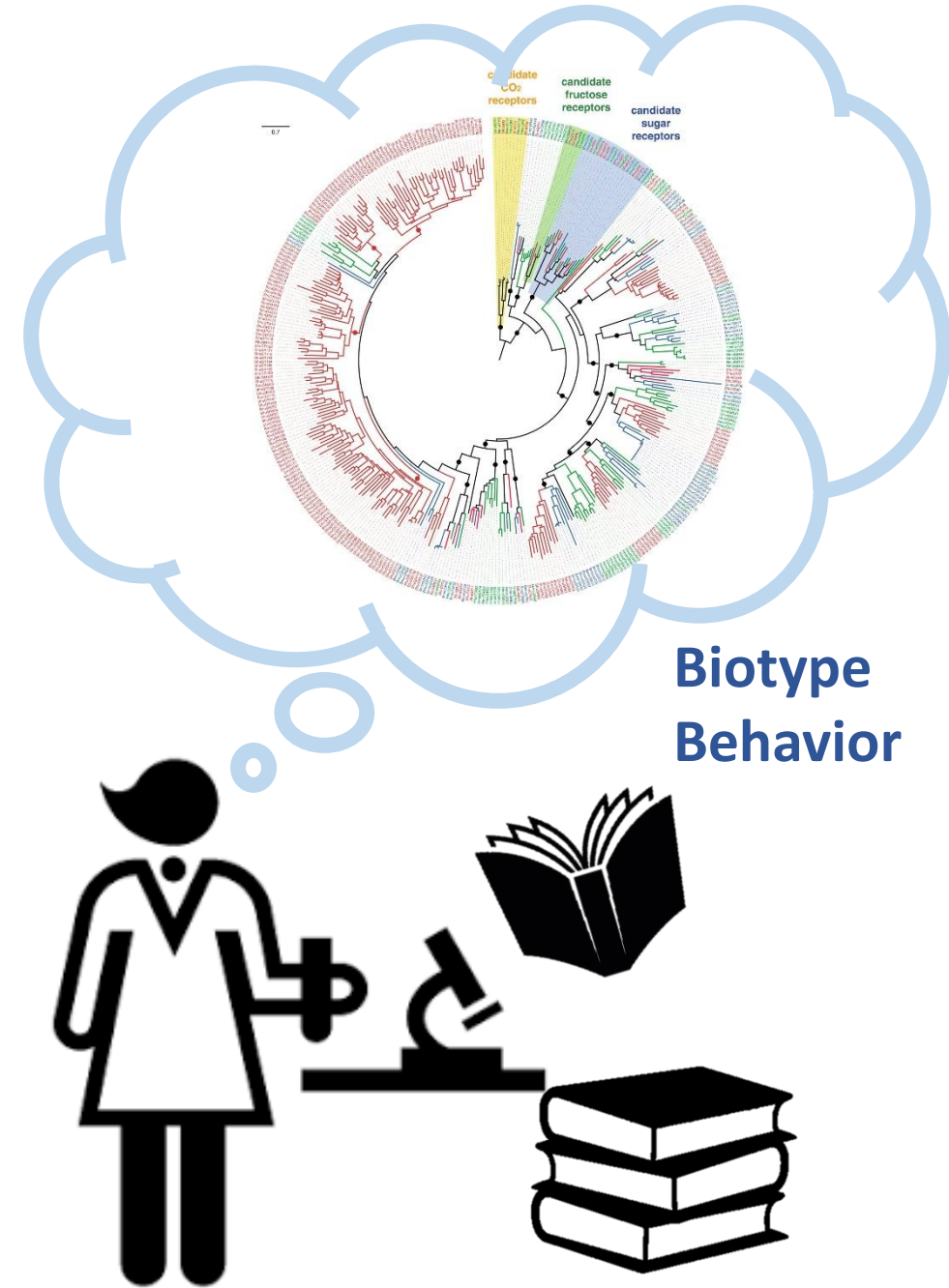
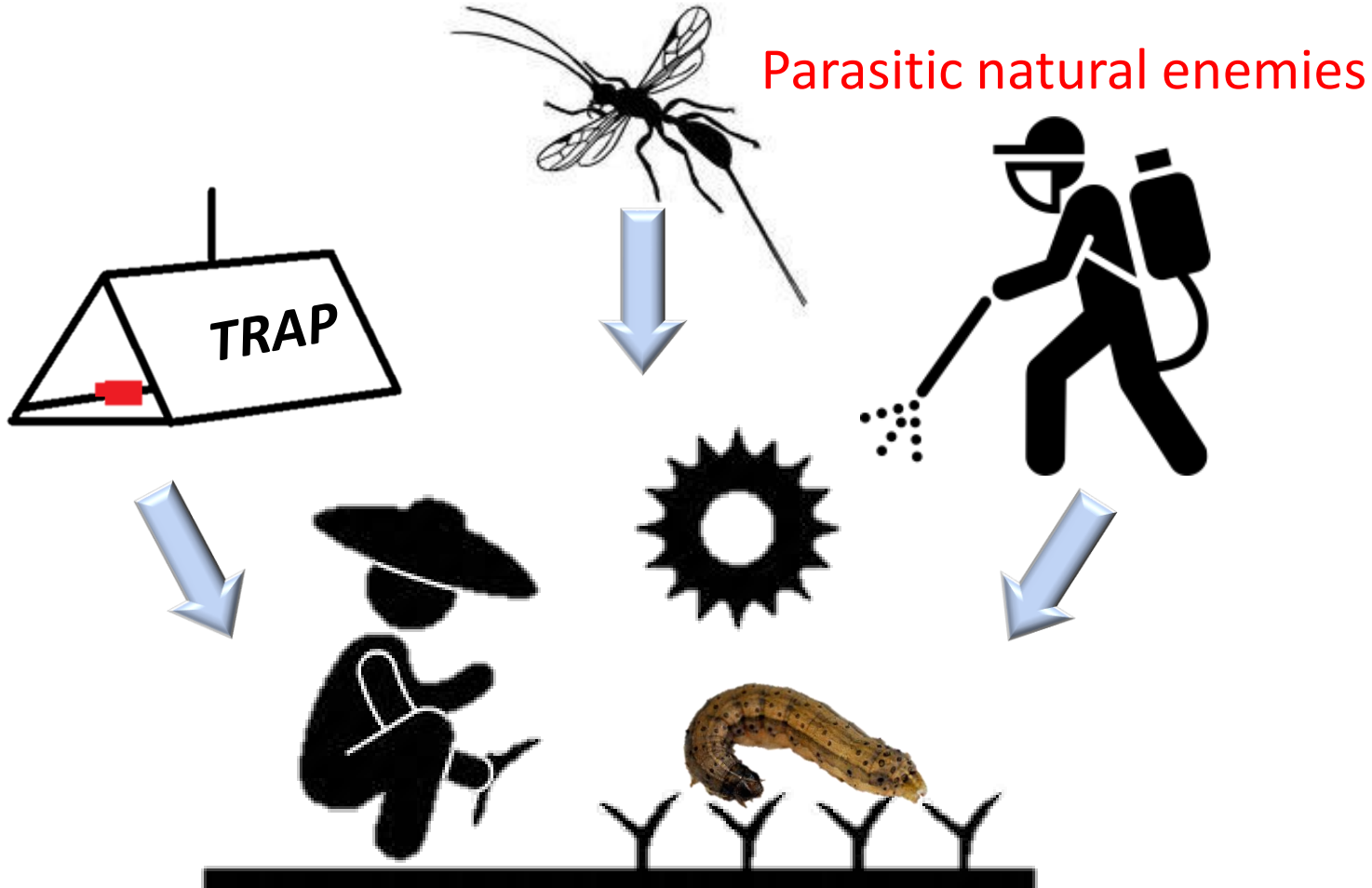
- Chlorantraniliprole
- Etofenprox
- Novaluron
- Spinetoram
- Thiodicarb
- Flubendiamide
- Flucythrinate
- Bacillus thuringiensis

- Maize
- Sorghum
- Bermuda Grass
- others



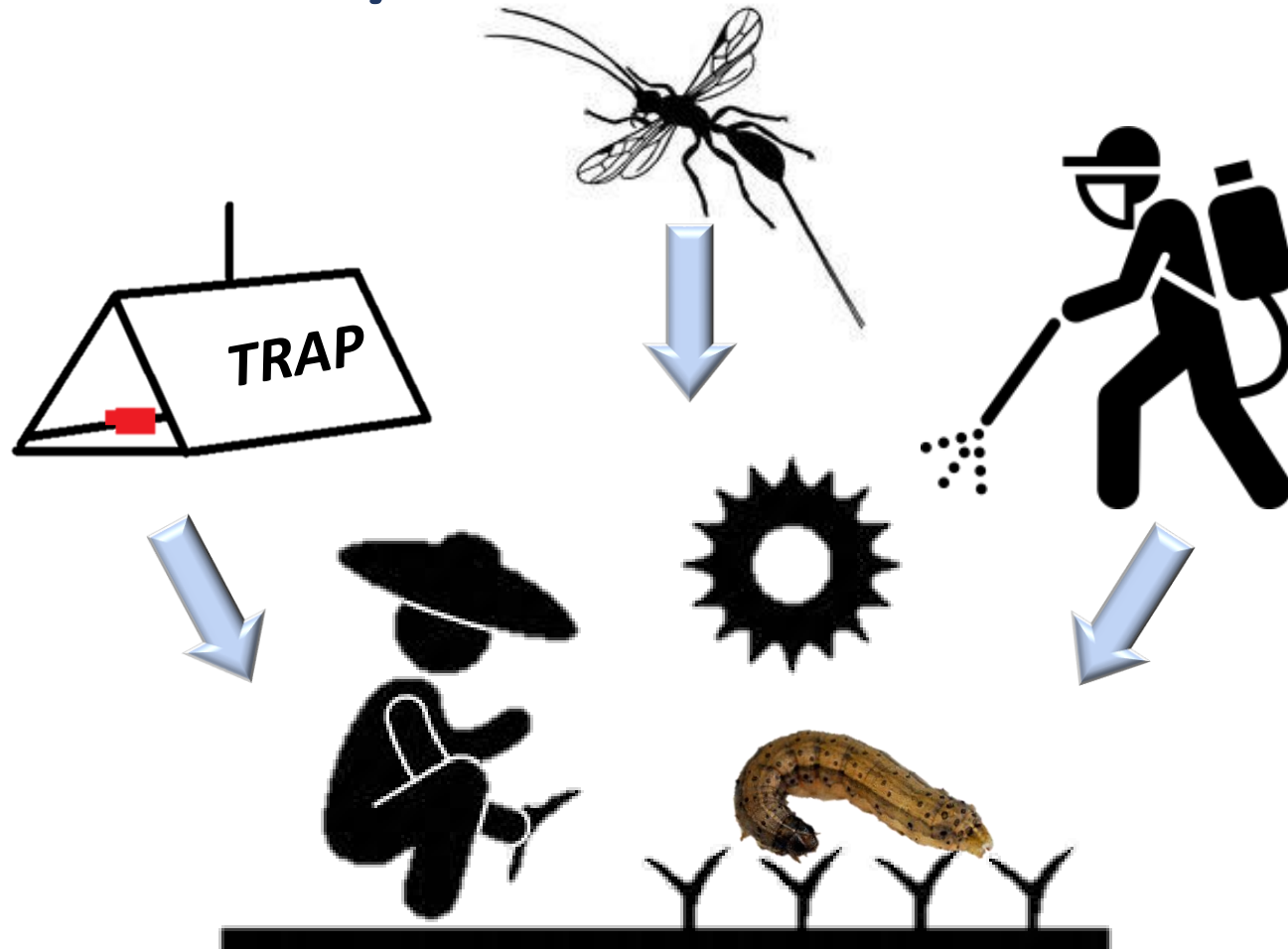
Working on...

IPM Development; Population Genetic Structure Analysis



Invading Phase III (Future)

IPM by Farmers, Assistance By Government

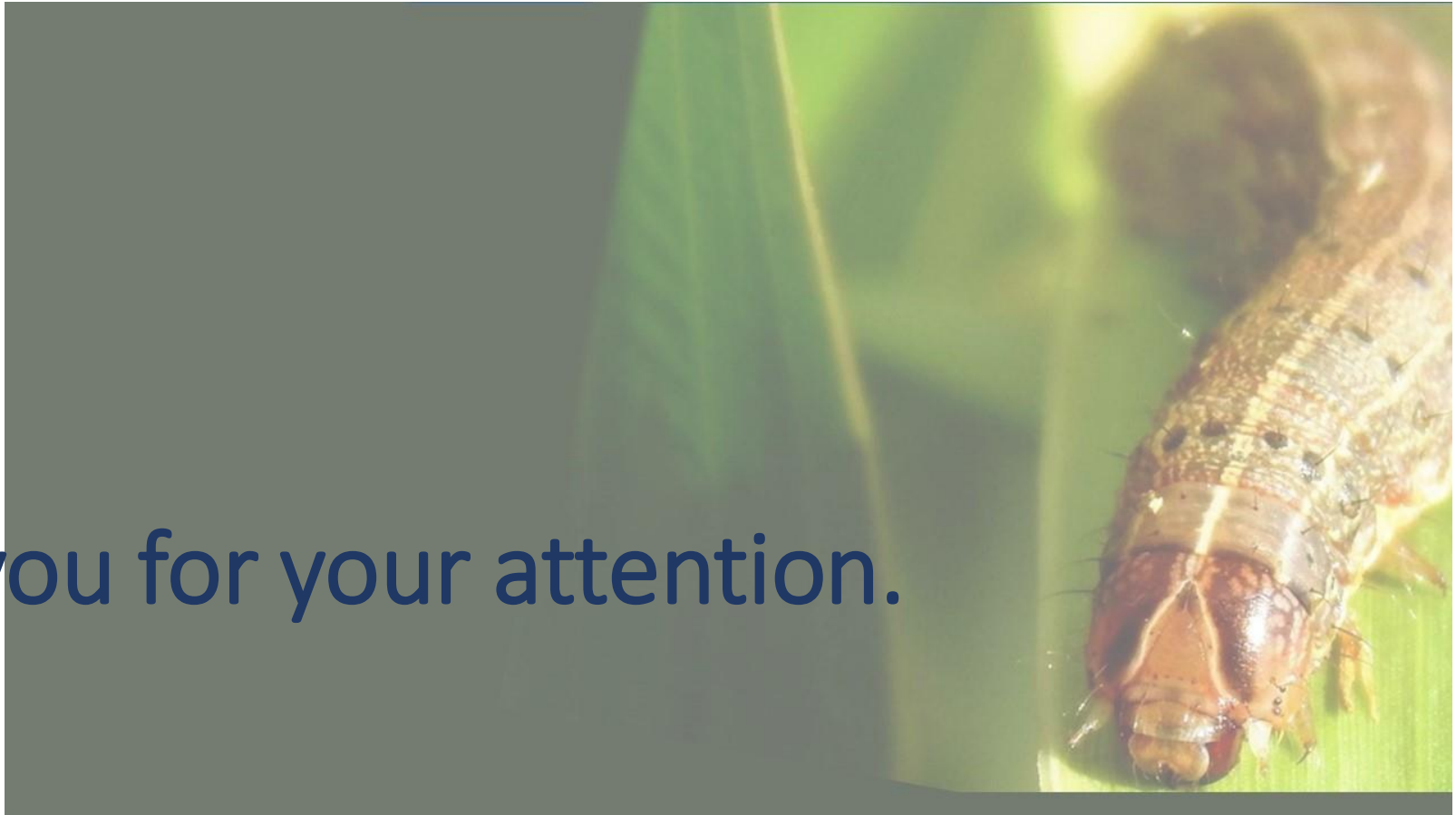


IPM

FAW Control

Agriculture &
Environment Protect

Thank you for your attention.



For further contact
cindyweng@mail.baphiq.gov.tw