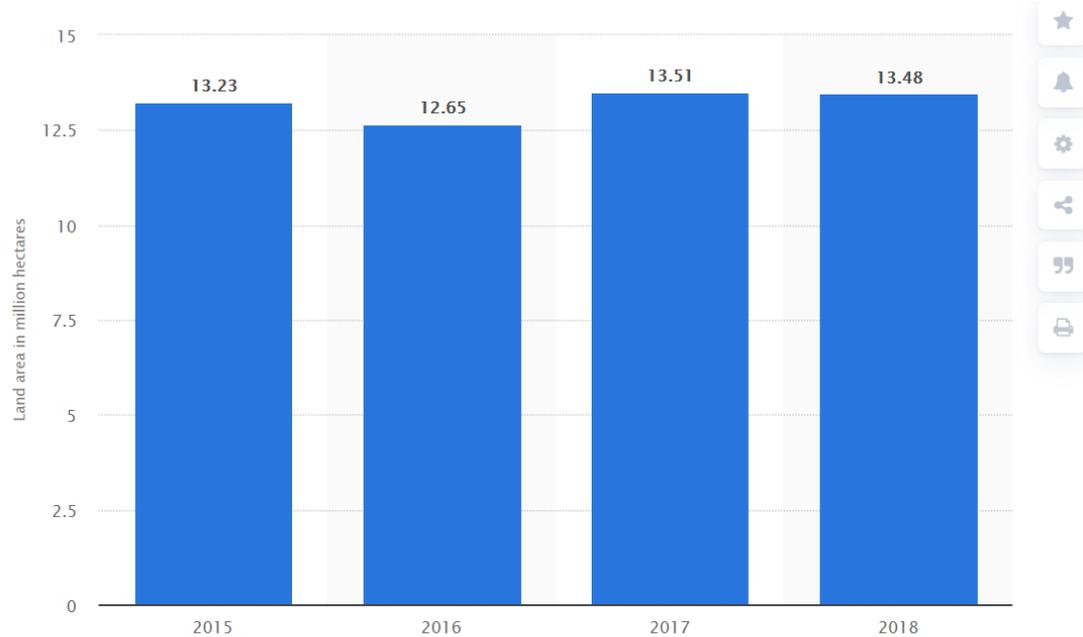


Importance of Judicious Use of Crop Protection Products as Critical Component of IPM

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BASF Phil. Inc.

Why is there a need for Judicious Use of Crop Protection Products?



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Land Area Used in Agriculture for Crop Production in the Philippines



- Current World Population: 7,827,654,040
- Philippine Population: 110,178,355 as of Nov. 25, 2020 with a Growth rate of 1.36%
- Land Area used for Crop Cultivation : 13.32 Million ha. In 2019
- Crop Production: Agricultural production grew by 0.5% in Q2 and 0.7% in Q3.



BASF
We create chemistry

Yield Loss due to Pest and Diseases

30 – 40 %

Globally, farmers lose 30 to 40 percent of their crops due to pests and diseases, according to the UN Food and Agricultural Organization

To help reduce these losses, farmers use an approach known as Integrated Pest Management (IPM)



<http://www.knowledgebank.irri.org/step-by-step-production/growth/pests-and-diseases>

Integrated Pest Management (IPM)

- Range of management practices using simple approaches that reduce the incidence of pests and diseases on the farm

INTEGRATED PEST MANAGEMENT (IPM)

KEY COMPONENTS OF AN IPM STRATEGY



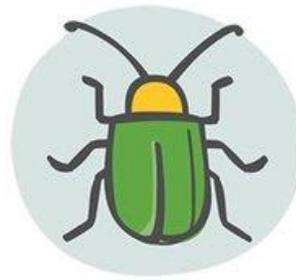
PREVENT
the build-up
of pests



MONITOR
crops for pests
and natural control
mechanisms



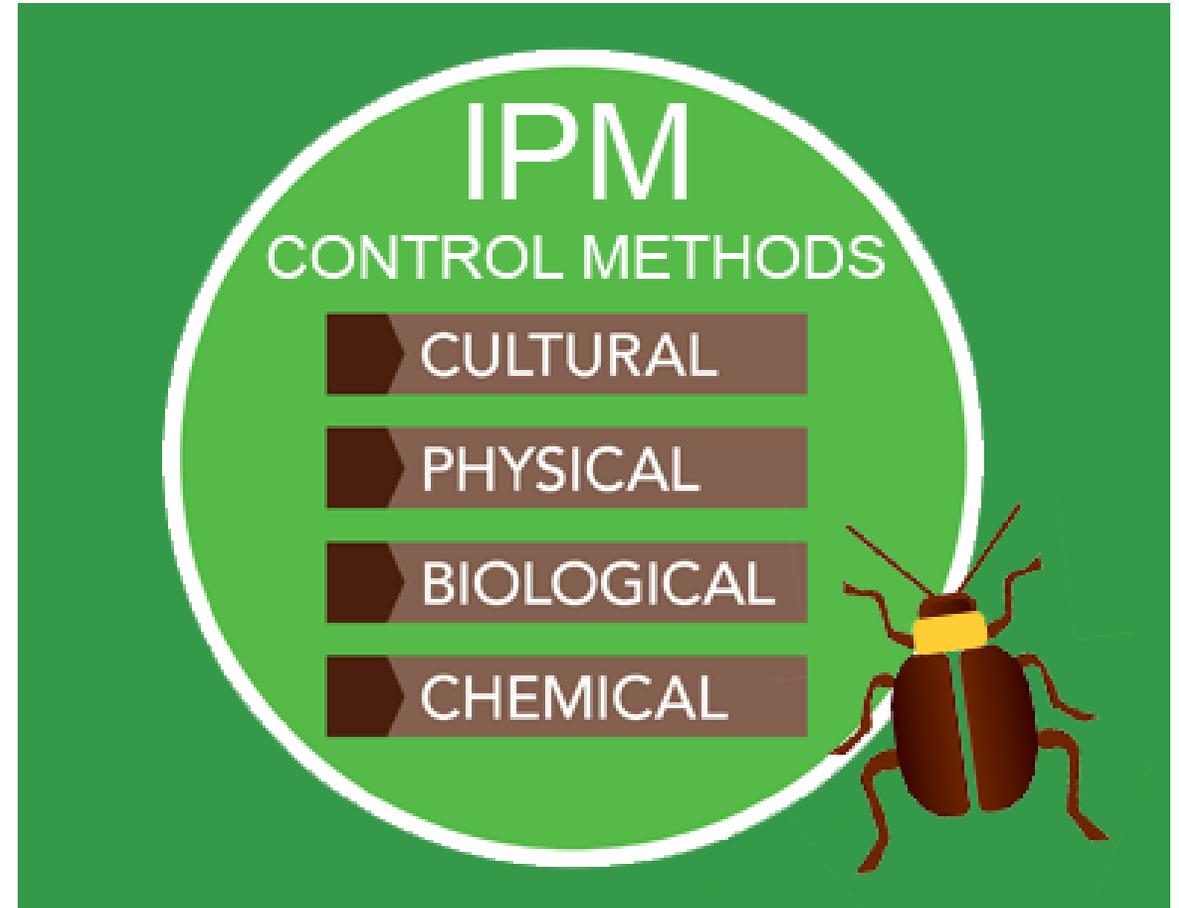
INTERVENE
when control
measures are
needed



- 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

Integrated Pest Management (IPM)

- IPM programs combine management approaches for greater effectiveness
- The most effective, long-term way to manage pests is by using a combination of methods that work better together than separately.



Integrated Pest Management (IPM)

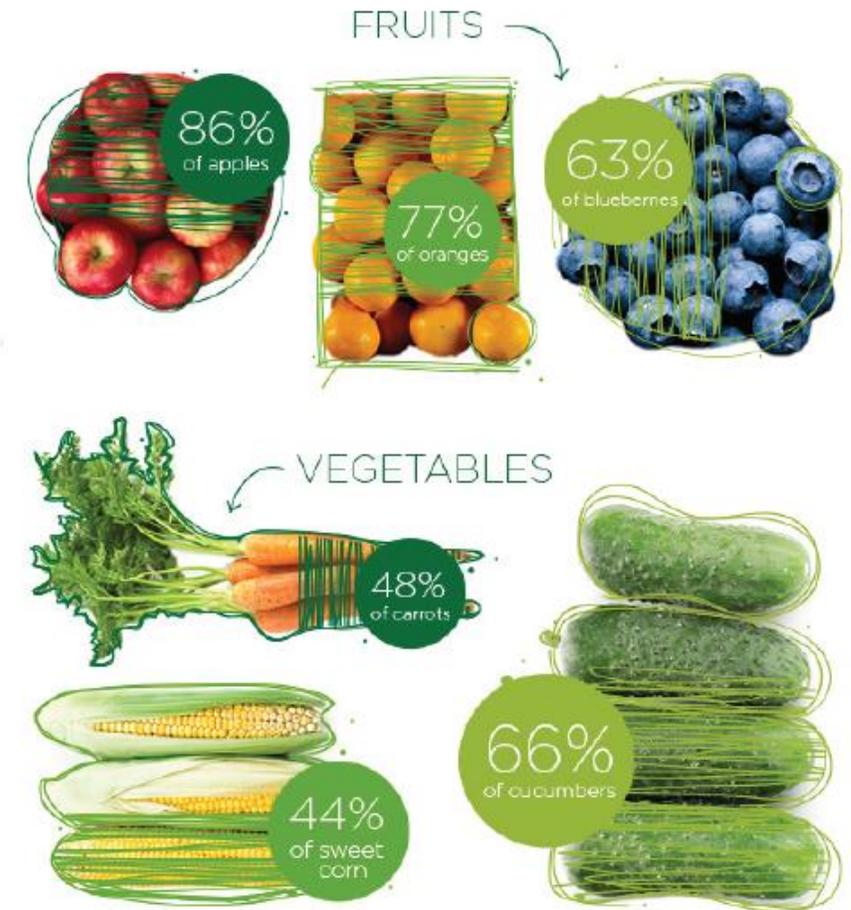
- Cultural – manipulation of cultural practices to the disadvantage of the pest
- Physical – techniques that limit pest access to the crop, induce behavioral changes or cause direct pest damage/death
- Biological – use living organisms such as predators, parasites, pathogens and competitors to manage pests
- Chemical – use of crop protection products or pesticides to help control insects, diseases, weeds, fungi and other undesirable pests.

Chemical Control

Three main categories of Chemical control:

- **Herbicides:** These kill or stop the growth of unwanted weeds. Worldwide, farmers have to contend with more than **30,000 species of weeds** which fight with food crops for space, water and soil nutrients.
- **Insecticides:** These kill insects and mites. More than **10,000 species of plant-eating insects** and **3,000 species of roundworms** can attack farmers' crops around the world leaving food damaged and inedible.
- **Fungicides:** These destroy or prevent the growth of disease-causing fungi. There are more than **50,000 diseases** that get inside crops and poison or kill plant

WITHOUT CROP PROTECTION PRODUCTS, we could miss out on:



<https://croplife.org/news/why-we-need-crop-protection-products/>

Eight Benefits of Crop Protection Products



1. Pesticides help farmers produce more with less land
2. Pesticide ensure bountiful harvest
3. Pesticides help keep food affordable
4. Pesticides help reduce waterborne and Insect transmitted diseases
5. Pesticides help conserve the environment
6. Herbicides have removed the hardship of hand weeding
7. Pesticides have transformed developing countries into food producers
8. Securing what's in storage

Crop Protection Products

- The use of chemical crop protection in all contexts is highly regulated.
- The regulatory framework of pesticides encompasses national, regional, and international legislation and conventions that help assure safety for users, consumers and the environment

- <https://www.croplife.org.ph/>





"You cannot have a happy,
healthy and peaceful continent
without food."

John Muhaise-Bikaleme