

New bio-pesticide regulation: Governments commitment towards reducing usage of pesticides



Dr. Md. Kafil Uddin

PhD & PostDoctoral (China)

**Senior Scientific Officer, Entomology Division
Bangladesh Agricultural Research Institute**

Email: mkafil77@yahoo.com



Evolution of Bio pesticide in Bangladesh

- The Govt. of Bangladesh has piloted integrated pest management (IPM) **since the 1980s**
- The Pesticide Act, 1985 did not contain the wording “**bio**” and, therefore, did not allow commercial marketing of Bio-pesticides in Bangladesh.
- **In 2010, the amendment of the Pesticide Rules 1985 include Bio-pesticides registration protocols and Private sector obtained registration of Bio-pesticide from 2012.**
- FAO, Swiss contact-Katalyst, USAID, PKSf and BCPA greatly influence Govt. for giving priority to promote Bio-pesticides.
- Realizing the global demand on residue-free Agricultural produces, pesticide companies are investing to advance bio-pesticide market.



Evolution of Bio pesticide in Bangladesh



2009

Demand for IPM
products at farmers
end



2010 (February)

Policy recommendation
paper as result of
national workshop



2010 (May)

Amendment of
the pesticides act, 1985

Evolution of Bio-pesticide in Bangladesh



2012

Ispahani Biotech first
licensed for 2 IPM
products



2015

Promoting IPM
in Bangladesh
with 2 companies
and 6 products for
vegetables



Farmers

more than 56,700
farmers increased their
income due to readily
available IPM



2017

Mohsin Enterprise
first got registration
for microbial bio
pesticide (Dicoprime)



Proposed Bio-pesticide Regulations 2022

This bio-pesticide regulation aims to-

- To further improve farmers' availability to safer and effective pest control tools.
- To improve farmers' ability to produce safer food for the nation.
- To further promote and streamline the registration and adoption of safer pest control tools, in order to protect human health and the environment.
- To promote the incorporation of safer pest control tools into existing agricultural integrated pest management programs.
- To improve the nations' ability to export agricultural products.



Scope of Bio-pesticide Regulations 2022

- ❖ These regulations **describe** the registration requirements for all biopesticide products to be approved and be commercially available for use on all agricultural crops (including forestry and aquatic plants)
- ❖ **Produced in Bangladesh that are destined for human and animal consumption and other non-agricultural uses. It also regulates the domestic production, export and import of all biopesticide products in the country.**
- ❖ **Bio-pesticide – Very promising for futur agriculture.**
- ❖ **National Agricultural Policy 2018 –**
Give emphasis on bio-pesticides and Category (WHO)- eco friendly and safe pesticides.



Pesticides Registration Status (Up to 89th (PTAC))

Pesticides	Active Ingredient	No. Formulated Brand
Insecticides	98	3693
Fungicides	72	1780
Herbicides	58	1261
Biopesticides	43	123
Rodenticides	2	25
Public Heath Pesticides	54	1835

Source: BCPA-2025



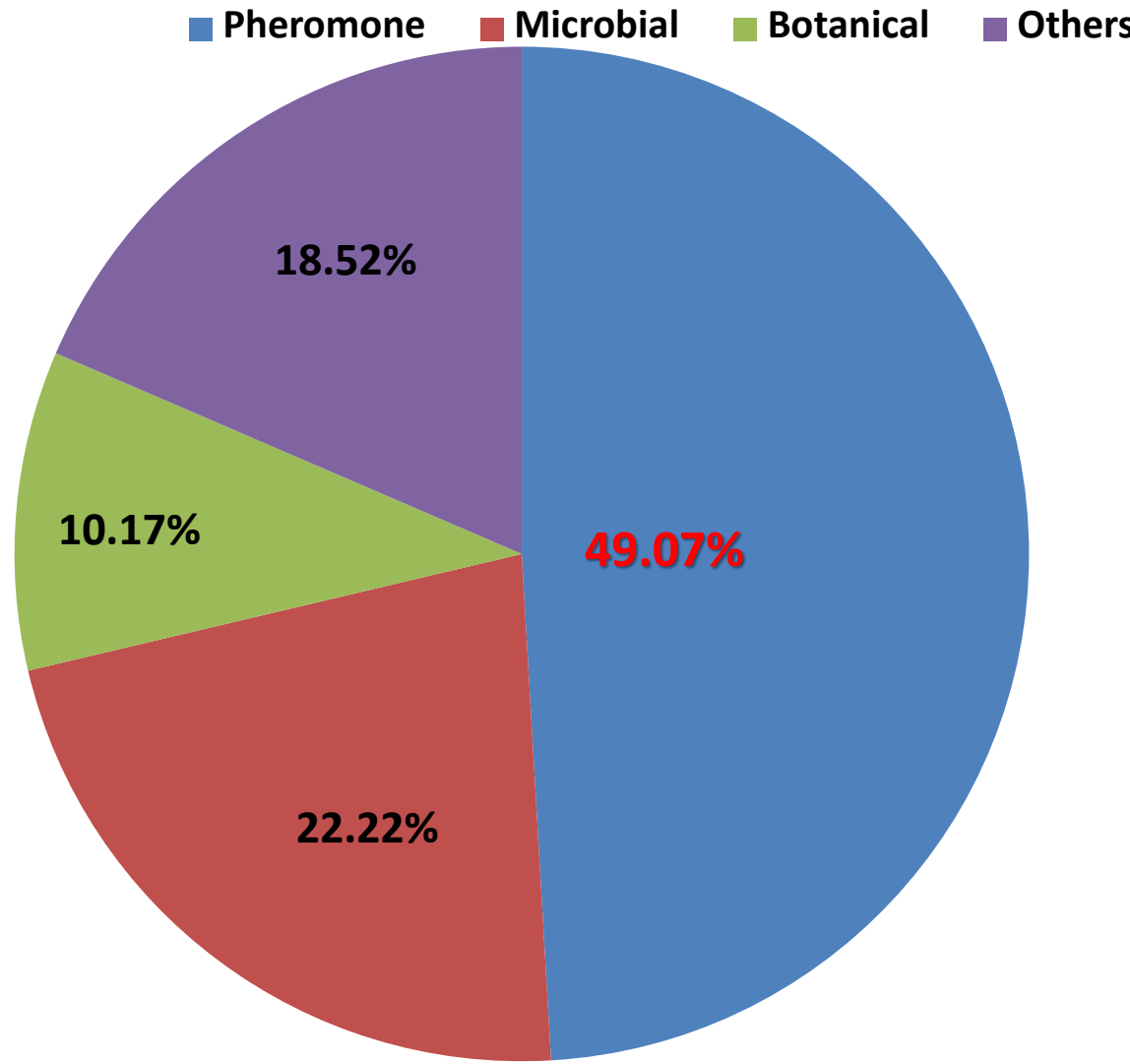
Development of alternatives of synthetic pesticides in Bangladesh

- ❖ A total of **123** brands of bio-pesticides (**43** active ingredients/ formulations) are now registered in Bangladesh.
- ❖ Around **44** private companies are involved in bio-pesticide marketing/ dev. among them three companies are marketing only bio-pesticides.



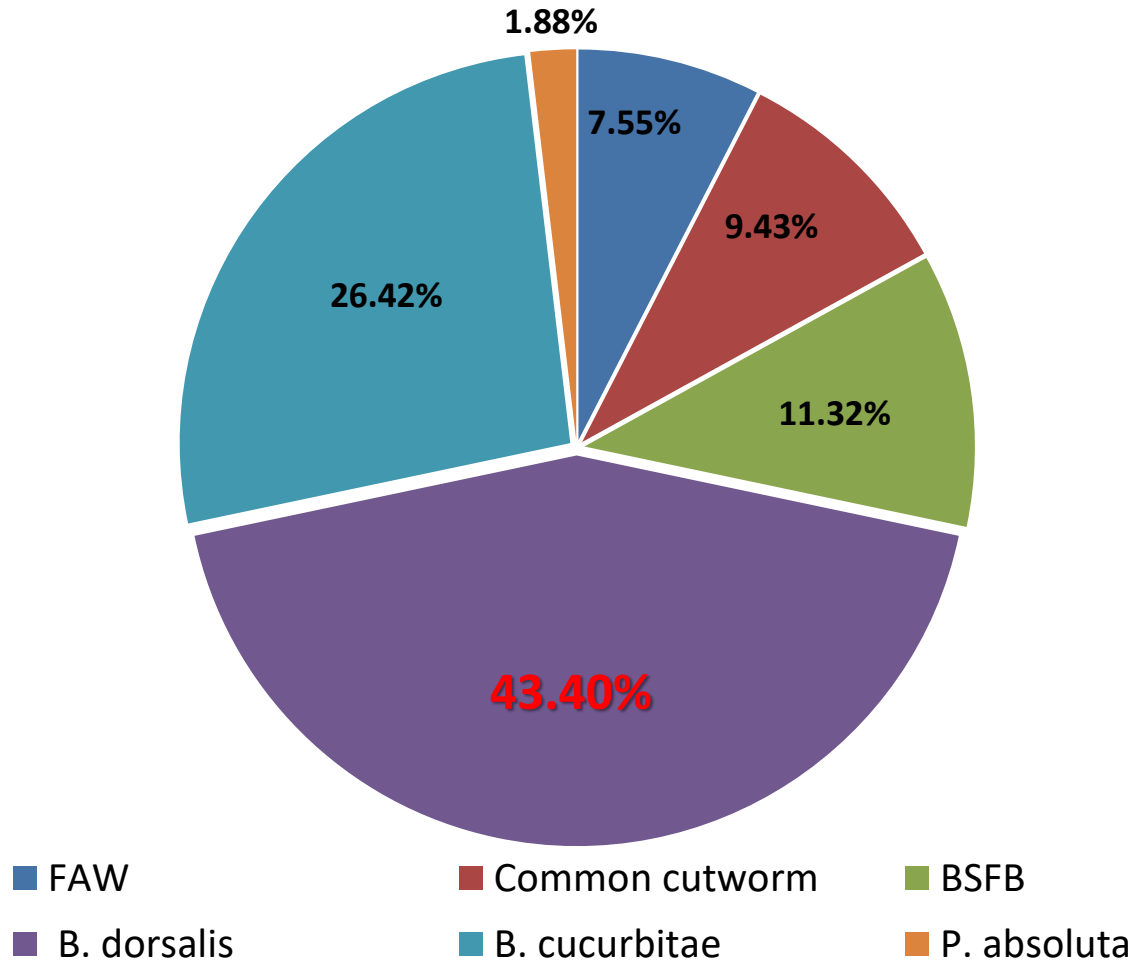
(Source-BCPA-2025)

Different types of registered bio-pesticides

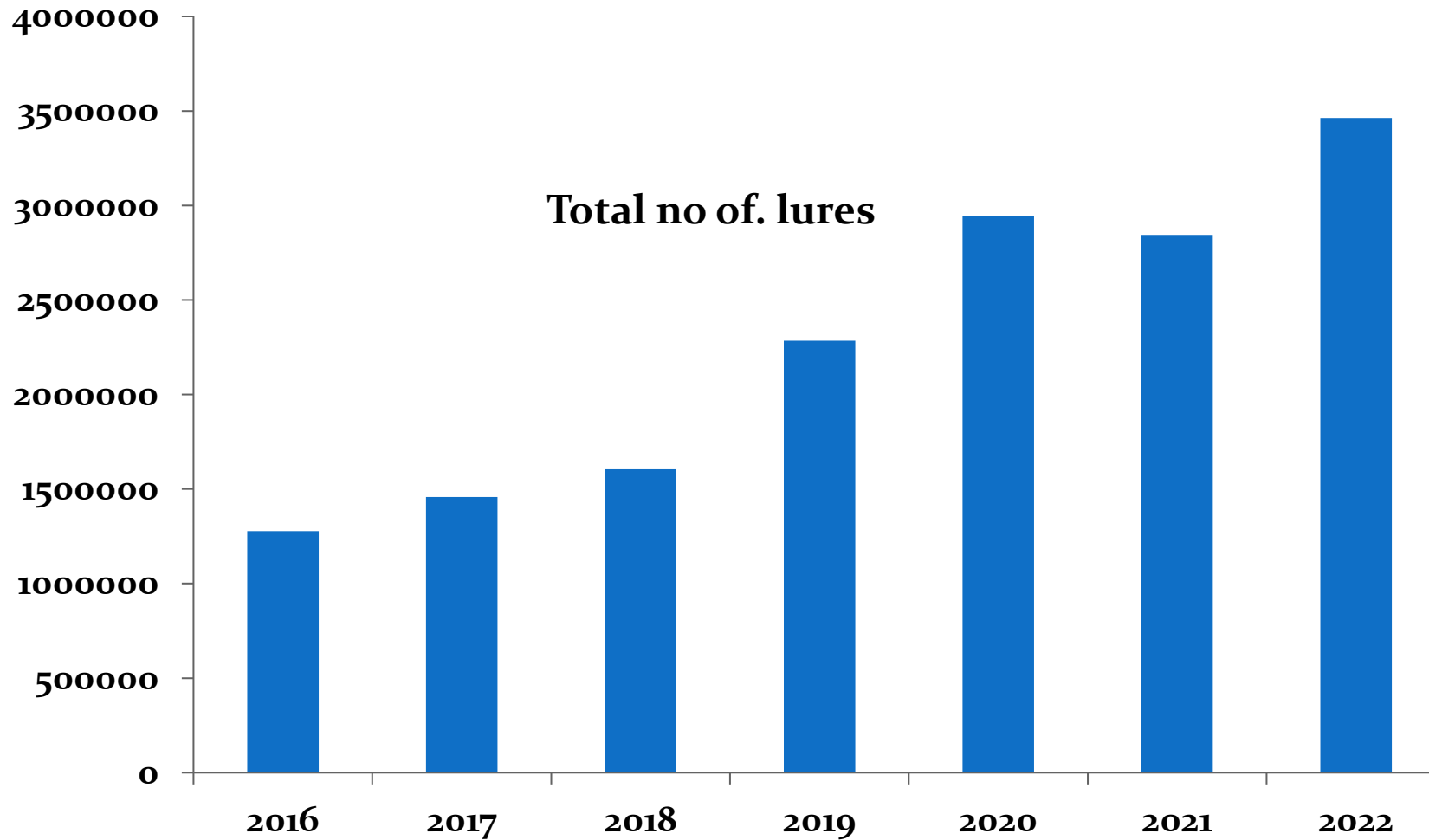


Source: DAE 2023

Different types of pheromones in Bangladesh



Adoption of pheromone lures in Bangladesh



Gradually increasing trend
of Pheromone lures in
Bangladesh

Source: BCPA 2022

Some ways to reduce the risk of pesticides

Recent research studies done by APAARI under STDF project

- Undertake residue decline studies on combination of major pest-pesticides
- Use selected biopesticides as the last spray
- Work out the best period of last spray before harvest
- Conduct biopesticide efficacy studies
- Use the right biopesticide spray at the appropriate pre-harvest interval in IPM programme
- This will avoid residues in the harvest and make it fit for the market/export
- **Hence it will reduce reliance on pesticide and eliminate unjustified use**



Way forward....

- ✓ Cross country capacity building program for researchers, extension officials & private sector on production, quality control and use of bio-pesticides
- ✓ Strengthen national research initiatives for development and adoption of bio-pesticide and eco-friendly crop protection technologies
- ✓ Influence Government for needful policies & support to the private sector in the form of incentives, positive acknowledgement could make much bigger impact





Thanks To All

Reduce reliance on pesticide & eliminate unjustified use