

TOPICS

- Bridging Research, Governance and Commercials for sustainability in bioinputs
- Prospects of development of Biopesticides in Pakistan
- 'Solution Finder' and how it can help to develop biocontrol solutions



iii 31 October, 2024

2.00 PM - 3.15 PM (GMT + 07.00)



Opening Remarks



Dr. Richard T. Roush Immediate Past Dean College of Agricultural Sciences Pennsylvania State University, USA

Our Speakers



Dr. Mukhdoom Mashhood Head Secretariat, Regenerative Production Landscape Collaboratives, WWF Pakistan



Prof. Bina Siddiqui HEJ Research Institute of Chemistry, ICCBS, University of Karachi, Pakistan



Mr. Fritz Schuster Managing Director, Lexagri SAS, France



Mr. Pablo CID Project Manager, Lexagri SAS, France









Presentation 1: Developing a BioInputs Ecosystem in Pakistan

Presented By: Dr. Mukhdoom Mashhood Head Secretariat, Regenerative Production Landscape Collaboratives, WWF Pakistan

Abstract: In 2018/19 Pakistan officially produced its first certified organic bales. From a mere 800 bales to now more than 55K certified organic bales, the sector has shown a very positive growth. It now has developed a strong appetite for certified organic bio-inputs in fertilizers and especially biopesticides or bio-pest-managers. This short discussion is to share the start of the initiative, its current and future markets and the challenges.

Presentation 2: Prospects of development of Biopesticides in Pakistan

Presented By: Prof. Bina Siddiqui, HEJ Research Institute of Chemistry, ICCBS, University of Karachi, Pakistan

Abstract: Our team at HEJ, Research Institute of Chemistry, ICCBS, University of Karachi has been exploiting plant based environment friendly bio pesticides and bio fertilizers for years which can safeguard and increase agricultural yields thereby protecting the environment and biodiversity, ensuring food security and improving the living conditions of small farmers. With this objective in mind, many plants of Pakistan were studied and eventually safe botanical pesticides and fertilizers were developed from neem (Azadirachta indica). The products are easy to prepare and environment friendly. Based on basic research a project was granted by the Ministry of Science and Technology, Government of Pakistan to establish a demo pilot plant unit for production of bio pesticides and bio fertilizers on pilot scale. Their use in fields was demonstrated and farmers trained through lecturing in Farmers Field Schools, TV talks etc. A patent on this bio pesticide has been granted by the Government of Pakistan. The Department of Plant Protection, Government of Pakistan finally registered the bio pesticide, BIOSAL, after three years' independent thorough trials by the government agencies and regulatory authorities on various agricultural crops and allowed its large scale use. Biosal is effective in protecting several crops like cotton, rice, sugarcane, vegetables including onions, brinjal, tomato, pumpkins, cucumber, chilies, fruits including mango, guava and zizyphus, ladyfinger, cabbage and peas etc. Its prophylactic use gives up to 100% protection. The current Pilot Plant facility at the University of Karachi can yield up to 100 Liters of EC formulation per day which can be used for 100 acres of agricultural lands per spray. A very important outcome is that the product is effective in preventing locust attack. This was manifested in 2021 when locusts attack in Tharparkar ruined all the crops except those sprayed with neem pesticides. The news was aired on TV and newspapers. In order to increase

this capacity, this pilot plant needs to be translated into commercial scale and hence needs support from Government and/or private sector.

Presentation 3: Presentation of "Solution Finder" and how it can help to develop biocontrol solutions

Presented By: Mr. Fritz Schuster, Managing Director, Lexagri SAS, France and Mr. Pablo CID, Project Manager, Lexagri SAS, France

Abstract: There is a significant demand for reducing the use of pesticides that pose risks to human health and the environment. One potential solution is the development of biocontrol products. Lexagri's "Solution Finder" assists in identifying existing solutions on a global scale and facilitates the search for development partners in other countries.

The "Solution Finder" is comprehensive, encompassing data on all approved and expired crop protection products, both synthetic and biocontrol, from approximately 90 countries. It includes information on about 350,000 products.