

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

RAJYA SABHA
UNSTARRED QUESTION NO.961
TO BE ANSWERED ON 10/02/2023

BIOPESTICIDES

961. SHRI HARBHAJAN SINGH:

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:-

- (a) the details of the market share of biopesticides in the pesticide market in the country;
- (b) whether Government is contemplating to increase the use of biopesticides due to adverse effect of chemical pesticides on the crops, livestock and human health; and
- (c) if so, the details thereof along with the various steps taken by Government to encourage the use of biopesticides during the last three years?

ANSWER

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI NARENDRA SINGH TOMAR)

(a): The details of market share of bio-pesticides in terms of consumption of Bio-pesticides against the total pesticides consumption is given below:

Year	Consumption (in MT TG)			Share of Bio Pesticides
	Chemical Pesticides	Bio-Pesticides	Total	
2017-18	63406	7174	70580	10.16%
2018-19	59669	7203	66872	10.77%
2019-20	61701	8847	70548	12.54%
2020-21	62193	8647	70840	12.21%
2021-22	58720	8899	67619	13.16%

(b) to (c): The Registration Committee (RC) constituted under section (5) of the Insecticides Act, 1968 registers the pesticides including biopesticides, for use in the country after evaluation of their safety and efficacy. RC while registering the pesticides provides the details of doses, crops, precautionary measures, antidotes etc. on Label and Leaflets. The

registered pesticides if used as per Label and Leaflets do not pose any harm to human beings, animals, living organisms, other than pests.

The Government of India has taken various steps to promote the use of bio pesticides. Simplified guidelines have been formulated by RC for the registration of bio pesticides. For bio-pesticides provisional registration is being granted under Section 9(3B) of the Insecticides Act, 1968 alongwith the permission for commercialization during the provisional registration period of two years. Thereafter, extension is also granted thrice on yearly basis, to generate requisite data to be submitted for permanent registration under section 9(3). Besides this, if the strain of a bio-pesticide is already registered for use in the country, no data generation is required by the subsequent registrants, except for confirmation of molecular identity of the strain from ICAR-National Bureau of Agriculturally Important Microorganisms (ICAR-NBAIM), MaunathBhanjan (UP) and quality verification of the product from Central Insecticide Laboratory (CIL).

Further, Ministry of Agriculture and Farmers Welfare through its KVKs, ICAR and CIPMCs located in 28 States and 2 UTs, etcconduct various training programmers such as Farmers Field Schools, two/five days HRD programmers, Kisan Goshthis, IPM Exhibitions and Seed Treatment Campaigns where awareness is created amongst farmers, NGOs/Pesticide dealers/State agriculture functionaries on use of bio pesticides, bio control agents and botanical formulations as an alternative to chemical pesticides for pest management, safe and judicious use of chemical pesticides, usage, dose and label claim instructions as approved by RC.

Registration Committee has registered Entomo-pathogenic fungus *Verticillium lecanii* which is approved for the management of insect pest on various crops. Presently, CIPMC's are successfully producing many biopesticides such as *Metarhizium*, *Beauveria*, *Pseudomonas*, *Bacillus*, *Trichoderma* spp., *Isariafumosorosea*; biocontrol agents such as *Trichogramma* spp., *Chilonusblackburni*, Reduviid bug, *Rhynocorismarginatus*, *Chrysoperlazastrowisillemi*, *Cryptolaemus montrouzeri*, *Goniozusnephantidis*, *Sycanuscollaris*, *Psuedomallada astur* and releasing the same in fields for management of various pests and pathogens. In Rabi season 2021-22CIPMCsalso demonstrated importance of seed treatment by using Biopesticides.Details of various IPM activities carried out during last three year is enclosed as ***Annexure - I.***

Physical achievements of the Schemes (2019-20 to 2021-22)

Component/Activity	2019-20		2020-21		2021-22	
	Target	Achievement	Target	Achievement	Target	Achievement
IPM-Survey area (in lakh ha)	9.00	8.10	10.35	9.80	10.00	11.10
Lab production of bio-control agents (in millions)	2200	2111.20	3000	2500.02	3300	2890.19
Area Augmented (in lakh Ha)	0.90	0.89	1.50	1.32	1.65	1.44
Area Conserved (in lakh Ha)	8.50	8.42	9.00	8.09	8.85	8.95
No. of FFS	720	712	351	351	282	282
No of Farmers trained	21,600	21,360	10,530	10,530	9,870	9,870
No. Of HRD (2 Days)	120	101	30	28	80	80
No of Farmers trained	4,880	4,120	1,200	1,120	3,200	4,368
