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TO STUDY THE EXTENT OF ADOPTION OF I.P.M TECHNOLOGY IN TOMATO PRODUCTION IN AMBEDKAR NAGAR DISTRICT OF UTTAR PRADESH

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ABSTRACT

To study the extent of adoption of IPM technology in tomato production in Ambedkar Nagar district of UP was carried out in agricultural year 2016-2017. The finding presents the rate of adoption of IPM technology has increased over the period, because of increased yield, gross income and net returns in IPM adopters. Secondly the profit of IPM adopters in terms of net returns was more as compared to IPM non-adopters therefore the findings of the study enforced to the adoption of IPM technology.

KEYWORDS: IPM, Technology, Tomato

India is a agricultural country and it has most diverse climate regions owing to its geographic features. Total available land area is 16.58 million hectare and major part of it falling under tropical climate and a variety of cereals, oil seeds, pulses, vegetable and horticultural crops are being cultivated. The potential increase in the productivity of cultivated Tomato is some how hampered by the narrowing of the genetic base of the crop, which leads to increased susceptibility to different biotic and abiotic stresses. As a result, tomato production is highly on strained by several factors. Farmers get lower yields mainly due to diseases and pests and due to the lack of tolerant tomato cultivators to such disease and pests. Therefore cultivation of tomato is severaly hindered by several biotic agents, such as disease caused by pathogens like phytopthora species, fungus such as powderlymeldews, virus, bacteria and several pests.

World wide losses due to these pests are estimated to be about 34% of attainable tomato yield under current production practices. Without crop protection, losses would increase up to 77.70% of attainable yield. Crop protection practices employed in the European Economic country (ECC) and northern America reduce yield losses from pests to about 15% and 28% attainable yield respectively. In some area of world tomato production losses due to all categories of pests continue to exceed 50% of attainable production. There is an urgent need to assess such losses, in order to frame strategies to overcome them. To overcome such problems we should, use advanced technique like Integrated Pest Management (IPM).

Integrated Pest Management (IPM) is a service decision making process thatidentities and reduces hazards from both pest and pest management related strategies, IPM was formalized in 1970 and continues to be exchanges to meet the challenges of keeping pest and pest damages to acceptable levels while minimizing collateral damages. IPM can be practically defined for a specific area, such as a crop and region, by cataloging the IPM practices that are available for that setting. IPM focused on long term prevention of pests or their damages by managing the ecosystem with from becoming a problem, such as by growing a healthy crop that can withstand pest attacks using disease resistant plants or cauling cracks to keep insects or rodents from entering a building.

The study extent of adoption of IPM technology in tomato production is undertaken in Ambedkar Nagar district of Uttar Pradesh state. Out of Nine blocks in Ambekar Nagar district two block namely Bhiti and Katehri was selected randomly. Total five villages was selected from both blocks also selected randomly. total Total100 respondents were selected, with in which 50 were IPM adopter and remain 50 were non IPM adopter

CONCLUSION OF THE STUDY

When we find out the adoption rate of IPM. The study shows that the adoption of IPM was increased from 6.26% in 2012 to 40.59% in 2016. IPM practices followed by farmers were mostly regular distruction of pest (100%), Summer ploughing (100%), use of chemical pesticides (84%), use of botanical pesticides (90%), use of bio-fertilizers (82%), crop rotation (72%), use of NPV (70%), egg parasite terichogranmacholnis (60%) and use of pest

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resistant seeds (56%), was very common practices for the control of pests but other practices was followed by farmers i.e. Trenching the field (36%), Hand picking of larvae (34%),water management (34%), use of lite trap (18%), trap crop (14%), use of phenomena trap (10%) and Baccilusthurigininsis (04%). It was found that no farmer adopting predators like chysoperlaearnea and lady bittle. It was because of lack of impulse.

The impact of IPM Technology in Tomato production over traditional technology was observed using some indicators like cost of production, yield, returns and B.C Ratio between the IPM adopters and IPM non-adopters. It was found that costof cultivation of IPM adopter was Rs.132146.73 per hectare and Rs.135572.05 per hectare in non IPM adopter. The returns of IPM adopter was Rs.396900 per hectare and Rs. 341400 per hectare in non IPM adopter. It shows that the income of IPM adopter was higher than non IPM adopter.

Thus the finding presents the rate of adoption of IPM technology has increased over the period because of increased yield, gross income and net returns in IPM adopters as compared to IPM non-adopters. Secondly, the profit of IPM adopters in terms of net returns was more as compared to IPM non adopters, therefore the finding of the study enforced to the adoption of IPM technology.

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