PAPER TITLE :- Documentation of different pests and their natural enemies on tomato

DATE:- February, 2023

JOURNAL/CONFERENCE:- J. Farm Sci

AUTHOR:- ROHIT R. PATIL, K. P. GUNDANNAVAR , G. S. GURUPRASAD, V. R. KULKARNI

PROBLEM MENTIONED/SOLUTION OBTAINED:- The field study conducted in Main Agriculture Research Station, Dharwad revealed that tomato crops are affected by various pests, including aphids, leafhoppers, whiteflies, thrips, mites, leaf miners, fruit borers, and pinworms. The peak incidence of these pests varies throughout the crop period, with different pests reaching their highest population at different times. Correlation analysis showed that maximum temperature had a significant positive correlation with the population of whitefly, thrips, mites, leaf miner, fruit borer, and pinworm, but negatively correlated with aphid and leafhopper. The presence of natural enemies such as coccinellids and spiders was observed in the tomato ecosystem, which can help in controlling the pest populations. Understanding the population dynamics of pests and their natural enemies, as well as the correlation with weather parameters, can help in developing effective pest management strategies for tomato crops

ALGORITHM USED:- Correlation analysis was performed to assess the relationship between pest populations and weather parameters such as temperature, rainfall, and humidity. The paper provides valuable information on the pests affecting tomato crops and their population dynamics, as well as the role of natural enemies in pest control. However, the specific algorithm used for data analysis is not mentioned in the paper.

RESULTS AND DISCUSSION:-

The field study conducted on tomato crops documented the presence of various pests and their natural enemies, including aphids, leafhoppers, whiteflies, thrips, mites, leaf miners, fruit borers, and pinworms. The incidence of these pests varied throughout the crop season, with peak populations observed at different times for different pests . The study also analyzed the correlation between pest populations and weather parameters. Maximum temperature showed a significant positive correlation with the population of several pests, including whiteflies, thrips, mites, leaf miners, fruit borers, and pinworms . However, maximum temperature was negatively correlated with aphids and leafhoppers. Other weather parameters such as rainfall and humidity also influenced the population dynamics of certain pests, such as pinworms and fruit borers. The presence of natural enemies, such as coccinellids and spiders, was observed throughout the crop season, indicating their potential role in pest control

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