

4th International Conference on Agriculture & Horticulture

July 13-15, 2015 Beijing, China

A survey report on application of pesticides on tomato (*Lycopersicon esculantum*) in Bishnupur district, a major commercial vegetable producing area in Manipur, India

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Tomato is one of the main items in daily food we eat. Off-season production of tomato is widely accepted by the farmers in Manipur for higher returns because of the ideal soil and climatic conditions for cultivation of vegetable. Like other states of India it is seriously affected by pest attack. To reduce damage and increase in yield for commercial purpose farmers in Manipur generally use various pesticides. The investigations were carried out during the month of Sept 2014 to April 2015. The aim of present study is to identify the commonly used pesticides on tomato and to study the attitudes and practices developed by vegetable growers about pesticide applications. Questionnaires which include socio-professional factors, provisions and operations concerning the use of varieties of pesticides were addressed to vegetable growers in various vegetable farms. In order to complete the data regarding the commonly used pesticides on tomatoes in Bishnupur District various vegetable growers were cross-examined and information were also collected from various agrochemical agents and Farm Science Centre, Utlou. The survey showed that farmers have an acceptable knowledge to exploit instructions concerning the pesticide use but majority of them do not use the recommended tools. Most of them did not received training on pesticide used and no recommendation from agriculture expert. They used pesticides only after consulting with the agrochemical dealers. None of the vegetable growers usually wear goggles while handling and spraying of pesticides, very few wear gloves and maximum of them wear oro-nasal mask. Failure to observe minimum intervals between pesticide application and sale is worrying because toxic (Mancozeb, Carbofuran, Bipyridyl) and moderately toxic (Cypermethrin, Imidacloprid, Profenofos, Chlorpyrifos, Propineb, Dichlorvos) are the products currently used in Bishnupur District. The present investigation indicates that pesticide application in Bishnupur District represents a possible risk for the environment, farmers and consumers. Research studies are very much needed to measure pesticide residues on tomatoes currently consumed in Manipur. Survey on pesticide applications in other districts of Manipur are also necessary and moreover to determine the potential effect of those products on human and animal health.

Biography

Ningthoujam Shovarani is working as Research Scientist at Indian Council of Agricultural Research, India.

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