# A study on knowledge level of farm women on sustainable plant protection technologies in onion cultivation

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### **ABSTRACT**

Role of farm womens in sustainable agriculture is very important and distinct in different farming systems. Increased production is greatly dependent upon available technologies and knowledge level of farm women. The findings on the knowledge level of farm women in sustainable agricultural activities, would enable the extension organization and other policy makers to develop strategies to enhance the knowledge on sustainable agricultural technologies in onion. Hence, a study was taken up to assess the knowledge level of garden land farm women on sustainable plant protection technologies in onion. The study was conducted in Dindigul district with a sample of 120 small farm women belonging to four villages of Oddanchathiram block, selected based on proportionate random sampling technique. Overall knowledge level of farm women on sustainable plant protection technologies was found to be low in onion. It is apparent that special efforts should be taken to improve the knowledge level of garden land farm women on sustainable plant protection technologies in onion.

**Key words:** Knowledge, Farm women, Sustainable agriculture, Plant protection, Onion.

### **INTRODUCTION**

Agriculture is considered as backbone of Indian economy. In India around 70.00 per cent of the population is dependent on agriculture and allied activities for their livelihood. A massive application of science and technology has enabled the Indian agriculture to face serious challenges of poverty, food security and malnutrition in the recent past. FAO reports that sustainable agriculture should involve the successful management of the resources for agriculture to satisfy the changing human needs while maintaining or enhancing the quality of environment and conserving natural resources (Anonymous, 1989). The involvement of women in agriculture is as old as the advent of agricultural practices in the world. Women were intimately involved in all the farm operations. According to 2001 census, there were 127.62 million cultivators and out of them only 32.35 per cent constituted female cultivators. The women farmers almost always had different production objectives than a man. Hence, a study was taken up to assess the knowledge level of farm women on sustainable plant production technologies in onion crop.

## MATERIALS AND METHODS

The study was taken up in Dindigul district of Tamil Nadu. Oddanchathiram taluk which had the maximum area under onion crop was chosen for the study. A sample

of 120 small farm women belonging to four villages with maximum area under onion were chosen based on proportionate random sampling procedure. In order to measure the knowledge level of the farm woman on sustainable plant protection practices in onion cultivation, a knowledge test was developed using the steps viz., item collection, item analysis, item difficulty index, discrimination index and item validity. A list of 16 knowledge items under onion were selected finally among the 32 items. The validity and reliability of the items were also checked. The items were administered to the respondents in the study area. The responses were obtained over a dichotomized scale as correct and incorrect responses. Each correct response was assigned a score of two, while incorrect response was assigned one score. The total knowledge score of each respondent was calculated by summing up the scores obtained by individual respondents. The knowledge level of farm women on sustainable plant protection technologies in onion crop was obtained by using a pre-tested interview schedule.

## RESULTS AND DISCUSSION

Adequate knowledge on plant protection technologies is the most important aspect of sustainable agriculture where excessive use of chemicals need to be reduced. Hence, the information on knowledge level of farm

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