

## Influence of Selected Extension Methods in Creating Awareness about Plant Protection Practices for Rice Crop\*

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### ABSTRACT

In order to find out the influence of the 9 selected extension methods generally used by the extension workers to educate the farmers in Thondamuthur block, Coimbatore district Tamil Nadu State, an investigation was carried out. Only five extension methods viz., individual contact, group meeting, indirect influence, use of radio, use of literature contributed to the awareness of plant protection practices. Invariably the individual contact was the most effective method followed by indirect influence in creating awareness of all the three plant protection practices.

### INTRODUCTION

One of the main reasons attributed to the low production is that farming is still based on many traditional methods. Hence, the important task of extension education is to help the farmers change from traditional agriculture to scientific agriculture. It requires a complete though gradual change in attitude, knowledge and skill in agriculture of the farming community. The change in human behavior can be brought out by proper education. For this purpose extension employs various teaching methods. These methods influence the farmers differently according to varied socio-economic and other conditions.

Wilkening (1949) found that farm papers and magazines and the mass media and agency officials were important at the first knowledge stage and getting further information and making final decision stage respectively. Rahim (1960) reported that impersonal source was found to be important at awareness stage. Rao and Moulik (1960) reported that at awareness and trial stages, the most frequently used sources were the personal type of formal sources like extension agencies, followed by informal community sources and impersonal formal sources like extension teaching aids and methods. According to Lakshmana and Satyanarayana (1967) for spacing and use of tobacco marker the most utilised source was

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commercial agency followed by neighbours, other mass media and government agency at awareness stage. In the present investigation the objective was to study the effectiveness of various extension methods used in Thondamuthur panchayat union, Coimbatore district at awareness stage of plant protection practices for rice crop.

## MATERIALS AND METHODS

Thondamuthur panchayat union in Coimbatore district, in which rice is extensively grown was selected for this study. This panchayat union consists of 18 revenue villages. Out of these 18 villages, 6 villages were selected at random. The total number of rice cultivators in the selected 6 villages was 353. Out of this, 120 rice cultivators were selected on the basis of probability proportion to size.

The effectiveness of the 9 extension methods *viz.*, individual contact, group discussion, demonstration, exhibition, use of literature, use of radio, indirect influence, visual materials and film show, that were generally used by the extension workers of this block to make the farmers aware of the major plant protection practices, seed treatment, dusting and spraying for rice crop was studied.

Awareness refers to mere knowing of the plant protection practices, by the farmer, but he may lack full information

about it. The totality of awareness varies with different extension methods. So, the effectiveness of any method for a given practice was assessed by the formula,

$$\text{Effectiveness of an extension method at awareness stage for a practice} = \frac{\text{Awareness of the practice due to the extension method}}{\text{Total number of farmers aware of the practice.}} \times 100$$

The most effective extension method for a given practice was decided by the largest percentage with in the practice.

## RESULTS AND DISCUSSION

The extension methods that were used in Thondamuthur block to make the farmers aware of the plant protection practices are listed in Table 1. The number of farmers who were made aware of the 3 plant protection practices by the influence of the 9 extension methods are also presented in the table.

Out of 120 respondents selected, only 85 became aware of seed treatment through five extension methods. The individual contact had influenced 80 per cent of the farmers to become aware of seed treatment, followed by indirect influence (12.94 per cent), literature (3.53 per cent), radio (2.35 per cent) and group meeting (1.18 per cent). Hence individual contact was found to be most effective at



TABLE 1. Number of farmers aware of plant protection practices due to the influence of extension methods

Extension Methods	Numbers of farmers aware of seed treatment	Number of farmers aware of dusting	Number of farmers aware of spraying
Individual contact	88	69	66
Group meeting	1	2	1
Demonstration	—	—	—
Indirect influence (Friends, relatives neighbours)	11	46	51
Use of radio	2	1	—
Use of literature	3	2	2
Use of visual materials	—	—	—
Exhibition	—	—	—
Film show	—	—	—
Total	85	120	120

awareness stage of seed treatment for rice crop followed in order by indirect influence, literature, radio and group meeting.

Regarding dusting, all the 120 respondents were aware of the practice. Individual contact was found to be the most effective method (57.50 per cent) at awareness stage of dusting followed by indirect influence (38.33 per cent), literature (1.67 per cent), group meeting (1.67 per cent) and lastly radio (0.83 per cent.). Literature and group meeting were on par regarding their effectiveness.

In the case of spraying all the 120 respondents were aware of the practice. Individual contact was found to be the most effective method (62.46 per cent) at the awareness stage of spraying followed by indirect influence (33.23 per cent), literature (2.16 per cent), group meeting (1.23 per cent) and radio (0.93 per cent).

When the mean percentages of extension methods towards creating awareness of plant protection practices as a whole were worked out, individual contact was found to be the most effective one (62.44 per cent) followed



Nearly three fourth of farmers were aware of the plant protection practices earlier than the year 1966. The utilisation of sources like radio, film show, visual materials and literature towards agricultural extension work has been on the increase only during recent times. It is thus possible that these methods played a smaller role at the awareness period.

All the foregoing methods are formal methods and the variations arising among them have been explained in terms of their use at a specific period of time. Indirect influence is however an informal method and thus cannot be explained in the same line for its greater effectiveness. This method includes friends, relatives, neighbours and local leaders like president of panchayats, president of co-operative societies, and village officers. The above group which influenced the respondents in creating awareness of plant protection practices, has certain specific and exclusive attributes which are lacking in

the formal methods. Some of the attributes are: proximity of habitation, increased frequency of contact and mutual desire on the part of the rural people to share the experiences with them. These factors might have been responsible for creating higher awareness through this method.

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