

ABSTRACT

Improper pesticide use on crops causes adverse effects on humans, livestock, crops and the environment. Decreasing crop losses because of pests is also a necessary factor to consider. Need of using environmental friendly pest control measures in paddy cultivation is emphasized in Sri Lanka. Integrated Pest Management (IPM) practices introduce minimal use of pesticides in controlling pests, and their adoption by farmers can reduce the use of pesticides and their adverse impact. Agriculture extension activities encouraging adoption by farmers of IPM practices in rice cultivation started in Sri Lanka long ago. However the number of farmers who are practicing IPM is fewer. Therefore, necessity of identification of factors affecting adoption IPM in paddy cultivation is justified. The study was conducted in Gampaha administrative district of Sri Lanka, during 2014/15 maha season. Research instrument was personal interviews and 5 ranges out of 26 agrarian divisions of Gampaha district was randomly selected for data collection. Data were analyzed using Statistical Package for the Social Sciences (SPSS 16). Ten socio-economic and institutional factors were tested to find their influence on adoption of IPM by paddy farmers in the study area. There was a significant correlation between the number of extension officer visits and IPM adoption as well as training received on IPM and IPM adoption (significant at the 0.05 level). The level of adoption of IPM technologies significantly co-related with the non-chemical weed control and maintain of weeds free bunds, practice of pest monitoring and mechanical pest removal methods, use of knowledge of natural enemies and practicing DOA pesticide recommendations. Results from this study reinforce the requirement of good agriculture extension service. Improving farmers' access to information from researchers and training in pest control activities is essential. These services have been part of an ongoing agriculture extension programs via farmer field schools. However, there is still much room for improving the state of IPM in rice in Gampaha. Therefore, identification of methods to improve extension service for the area can be suggested. Various effective training methods to develop farmers' capacity on decision-making and finding appropriate solutions is vital. Investment in IPM education and training will have long-term beneficial impact.