
AGROCHEMICAL USAGE AND FARMERS PERCEPTION ON SELECTING PESTICIDES IN UPPER KUMBUKKAN OYA WATERSHED IN SRI LANKA

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Abstract

Pesticides are widely applied in paddy and crop fields in Kumbukkan Oya watershed to prevent crop yield losses due to the pest infestations. The study area is one of the main paddy and crop cultivated areas in the intermediate agro-ecological zone of Sri Lanka. This study was carried out to evaluate the farmers' perception of pesticide usage and the selection of pesticides. Through a random farmer survey ($n=65$) and key informant interviews, primary data were collected in two main seasons (*Yala and Maha*) of 2019/2020. The study has identified 17 active ingredients of herbicides, 15 active ingredients of insecticides, and 8 active ingredients of fungicides widely used in the area. The most frequently used pesticides are herbicides followed by insecticides. Results further showed that more than 80% of farmers utilized pesticides are herbicides (*MCPA 600g/l, MCPA 400g/l, and Bispyribac-sodium*). Further, the study found that most of the farmers were incompetent to select appropriate pesticides for certain pests, and more than 90% of respondents select pesticides based on the opinion of pesticide retail shop owners/dealers. Meanwhile, 4% of farmers have selected pesticides with their-own knowledge. Only 15% of farmers seek advice from agriculture extension officers on pest management. However, 20% of respondents have had training on the correct use of pesticides conducted by the private sector organizations involved in pesticide marketing. It has been found that the farmers in the study area are not following recommended pesticide usage practices. Hence, it is essential to educate the farmers on proper pesticide usage practices and the use of organic farming practices to reduce the adverse effects of pesticides on the environment.

Keywords: Farmers' Perception, Herbicides, Paddy Cultivation, Pesticides