

The Role of Flowering Pesticidal Plants for Sustainable Pest Management

Authors : Baltazar Ndakidemi

Abstract : The resource-constrained farmers, especially those in sub-Saharan Africa, encounter significant challenges related to agriculture, notably diseases and pests. The sustainable means of pest management are not well known to farmers. As a result, some farmers use synthetic pesticides whose environmental impacts, ill health, and other negative impacts of synthetic pesticides on natural enemies have posed a great need for more sustainable means of pest management. Pesticidal plant resources can replace synthetic pesticides because their secondary metabolites can exhibit insecticidal activities such as deterrence, repellence, and pests' mortality. Additionally, the volatiles from these plants can have positive effects of attracting populations of natural enemies. Pesticidal plants can be grown as field margin plants or in strips for supporting natural enemies' populations. However, this is practically undetermined. Hence, there is a need to investigate the roles played by pesticidal plants in supporting natural enemies of pests and their applications in different cropping systems such as legumes. This study investigates different pesticidal plants with a high potential for pest control in agricultural fields. The information sheds light on potential plants that can be used for different crop pests.

Keywords : natural enemies, biological control, synthetic pesticides, pesticidal plants, predators, parasitoids

Conference Title : ICAACS 2023 : International Conference on Agriculture, Agronomy and Crop Sciences

Conference Location : Amsterdam, Netherlands

Conference Dates : November 06-07, 2023