POSTER SUMMARY

WETLAND MANAGEMENT FOR PEDEST REGULATORY ECOSYSTEM SERVICES

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Abstract

Pest regulation is recognised as an important ecosystem service in agricultural environments, and wetlands have been shown to provide such pest regulatory services on sugarcane farms. Although sugarcane farmers are encouraged to manage wetlands on their farms, the high cost of wetland rehabilitation and management, including the clearing of invasive alien plants (IAPs), means that many landowners do not practise good wetland management. A more focused approach to management of wetlands on sugarcane farms, in which the emphasis is placed on the benefits of pest regulation which wetlands can provide, is presented here. Push-pull, a form of habitat management, is proposed for the management of Eldana saccharina on sugarcane farms within an integrated pest management (IPM) framework. Wetlands provide habitats for the growth of ‘pull’ plants which are alternate habitats for E. saccharina and its natural enemies, and can thus contribute to reducing pest pressure in the sugarcane crop. By completing wetland health assessments on four model farms, a tool was developed to assist farmers in better managing wetlands on their farms, thus maximising the pest regulatory ecosystem services which these can provide. The ‘Wetland Action Plan for Push-Pull’ is presented, along with generalised recommendations and information for farmers on how to increase natural habitat for E. saccharina and its natural enemies on their farms.

Keywords: decision support system, ecosystem services, Eldana saccharina, habitat management, push-pull, wetland management