World Academy of Science, Engineering and Technology
International Journal of Biological and Ecological Engineering
Vol:13, No:01, 2019

A Review on the Vulnerability of Rural-Small Scale Farmers to Insect Pest Attacks in the Eastern Cape Province, South Africa

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Abstract : The Eastern Cape Province of South Africa is characterized by subsistence farming, which is mostly distributed in the rural areas of the province. It is estimated that cereal crops such as maize and sorghum, and vegetables such as cabbage are grown in more than 400.000 rural households, with maize being the most dominant crop. However, compared to commercial agriculture, small-scale farmers receive minimal support from research and development, limited technology transfer on the latest production practices and systems and have poor production infrastructure and equipment. Similarly, there is limited farmers' appreciation on best practices in insect pest management and control. The paper presents findings from the primary literature and personal observations on insect pest management practices of small-scale farmers in the province. Inferences from literature and personal experiences in the production areas have led to a number of deductions regarding the level of exposure and extent of vulnerability. Farmers' pest management practices, which included not controlling at all though there is a pest problem, resulted in their crop stands to be more vulnerable to pest attacks. This became more evident with the recent brown locust, African armyworm, and Fall armyworm outbreaks, and with the incidences of opportunistic phytophagous insects previously collected on wild hosts only, found causing serious damages on crops. In most of these occurrences, damage to crops resulted in low or no yield. Improvements on farmers' reaction and response to pest problems were only observed in areas where focused awareness campaigns and trainings on specific pests and their management techniques were done. This then calls for a concerted effort from all role players in the sphere of small-scale crop production, to train and equip farmers with relevant skills, and provide them with information on affordable and climate-smart strategies and technologies in order to create a state of preparedness. This is necessary for the prevention of substantial crop losses that may exacerbate food insecurity in the province.

Keywords : Eastern Cape Province, small-scale farmers, insect pest management, vulnerability
Conference Title : ICPPF 2019 : International Conference on Plant Protection and Fertilisers
Conference Location : Paris, France
Conference Dates : January 24-25, 2019