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Farmers’ and academia’s views”

The fascinating arthropod pest in apple (*Malus domestica*) fruit gardens: a review

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Abstract

Apples (*Malus domestica*), is one most important fruit tree crops cultivated in temperate regions and newly introduced in Uganda for income and nutritional importance. However, apples are known to be susceptible to arthropod pests, known to cause damages on both the plant and fruits. To tropical researchers and other stakeholders including, apple growers in Uganda, arthropod pest that damage apple are unknown. In this paper, systematic information on arthropod pests that damage apple fruit trees has been analyzed. Here, recent literature on arthropod pests damaging *M. domestica* trees and their preferred host varieties under different farming systems in apple growing regions of the world have been assessed. The review focused on classifying common arthropod pests, preferred varieties and their distribution. This was achieved by using the ISI Web of Science bibliographic database and using the search terms such as apple entomofauna and arthropod pests in apples with keywords [apple*] AND [arthropods*] AND [pest]. It was found out that, arthropod pests that damage apples belong to several groups of invasive pests which include Coleoptera and Polydrusus (beetles, weevils), Diptera (leaf, seed, fruit flies), Hemiptera (aphids, psyllids, bugs and scales), Hymenoptera (sawflies, wasps ants, bees), Thysanoptera (thrips), Trombidiformes (mites) and Lepidoptera (moths and butterflies) that attack different parts of an apple tree (leaves, fruits, stems and roots). This review endeavoured to piece together the known information about the arthropod pests that attack apples in relation to host varieties in different geographical locations. But little to none work about arthropod pests in apples of Uganda could be found. This calls for an immediate detailed study in the same. Because, for the last 10 or so years, Uganda has been growing apples yet the industry is not growing quickly due to many problems including arthropod pests that are still unknown.

Keywords: Apple varieties and geographical locations, apples, arthropods pests, distribution