Repercussion Of Organophosphate Function Prevalence On Pandemic Levels Of Mango Seed Beetle *Cryptorhynchus Mangiferae* Fabricius

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Abstract

Field studies were administrated in 3 sites in Mbeere district to see the impact of prevalence of organophosphate band application on mango fruit pandemic levels by the mango seed beetle *Cryptorhynchus mangiferae* Fabricius. the target was to assess the impact of organophosphate band application prevalence on the pandemic levels of the Mango seed beetle (MSW) on mango fruits. Four application levels particularly once per month, once each 2 months, once each 3 months and once per mature season were studied. woodlet sanitation was combined with these treatments. organophosphate applied once monthly performed the simplest altogether sites and differed considerably from all the opposite treatments. This performance was consistent altogether months. Effectiveness of organophosphate in reducing mango fruit pandemic levels is part keen about prevalence of application. A closely spaced application regime leads to a better reduction of the pandemic levels. A monthly application of this product within the manner tested seems to allow a big population reduction leading to higher yields of marketable fruits. This regime is suggested for incorporation to the mango farming practices.

Key words: Organophosphate, Mango seed beetle, *Cryptorhynchus Mangiferae*

Introduction

The Mango seed beetle, *S. mangiferae* is associate insidious gadfly that spends most of its life cycle within the mango seeds (Pena, et al. 1998). woman weevils oviposit on fruits into boat-shaped cavities that they create on the fruit (Anon, 2005; Follet, 2002; Smith, 1996). The larvae burrow through the pulp to the developing seed on hatching. The tunnel created by the larvae

becomes undetectable once a brief time (Joubert, 1998; Woodruff and Fasulo, 2006). the next larval and immature stages occur within the seed (Follet and Gabbard, 2000). The larvae go after the seed and create intensive tunnels on the seed surface. A copious quantity of frass is deposited in these feeding tunnels. The strategy of feeding within the seed capsule makes it tough to manage the gadfly by use of such typical ways as foliar application of chemical pesticides.

Control of this gadfly has been hampered by each its cryptic nature and absence of effective natural enemies. The management approach envisaged during this work is predicated on making a barrier between the resting web site of the insect and therefore the developing fruits and so preventing infestation. the target of this study was to assess the impact of organophosphate band application prevalence on the pandemic levels of the Mango seed beetle (MSW) on mango fruits.

The farmer oversubscribed fruits to each the native and export market retailers. The Karurumo web site on the opposite hand diagrammatical an oversized scale mango woodlet (over a hundred hectares), planted with the elite mango cultivars and active sensible woodlet management. The woodlet oversubscribed most of the fruits to exporters and extremely very little to the native market. The Kanyuambora web site diagrammatical alittle scale mango woodlet (1.0 hectare) planted with the elite mango cultivars however with irregular management practices like weeding, gadfly and unwellness management, fertiliser application etc. All the orchards were pronto accessible; the farmers were willing and had a history of mango seed beetle infestation.

Materials And Ways

Altogether the 3 sites, the treatment blocks were deliberately organized to line the mango rows so as to eliminate potentialities of mix-ups throughout treatment applications. organophosphate was diluted with water at the speed of 40ml of economic product in one l of water. The chemical mixture was unreal mistreatment methylthionine chloride to differentiate the treated and untreated mango trees. A 5cm wide paint brush was wont to apply a 15cm wide band round the fruit tree trunk at a height of 30cm from the bottom.

The treatments were as follows: one. organophosphate band applied once per mature season + sanitation a pair of. organophosphate band applied once per month for six months + sanitation three. organophosphate band applied once each a pair of months for six months + sanitation four. organophosphate band applied once each three months for six months five. Sanitation alone (All fallen fruits were collected once per week and buried deeply within the soil) vi. No sanitation, no chemical treatment

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The once per month application prevalence of organophosphate combined with sanitation is each effective and economical because it reduced the pandemic to terribly low levels (2.02 ± 0.14) and value solely KES five.00 per month (excluding labour) to color one tree. The calculation was supported the actual fact that forty cc of the chemical was wont to paint concerning ten trees which 200ml of the chemical was priced at KES 250.00.

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