THE EFFICACY OF AZADIRACHTIN ON TEA TORTRIX *Homona coffearia* NIETNER (LEPIDOPTERA: TORTRICIDAE)

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Tea tortrix is a pest of seasonal occurrence in many of the tea plantations especially in the upper and mid elevations. Usage of synthetic pesticides has become a concern in recent times as a result of residues in made tea. Use of Azadirachtin, a naturally occurring compound in neem (*Azadirecta indica*) with pesticidal properties has been viewed as an environmentally friendly alternative for pest management programmes. With a view to explore this possibility, a study was initiated to find out the efficacy of 1% commercial formulation of Azadirachtin against tea tortrix. A laboratory bioassay using different dosages of this formulation, range from 250 ml/ha to 1250 m/ha basis, showed that all tested dosages were effective in controlling tea tortrix compared to untreated control. Seven days after application, the highest mortality of 53% and the lowest of 46% were achieved with the doses 1000 ml/ha and 500 ml/ha respectively. Bioassays also showed that Azadirachtin had affected growth as seen in the reduction in length of larvae. The affect on growth can be attributed to the anti feedant properties of this chemical. The study on field efficacy showed that dosages of 500 ml/ha and 1000 ml/ha were effective in retarding the growth compared to control but the effects were not seen after 2 days of application. This could have been attributed to its low persistency under field conditions. Thus, repeated application of Azadirachtin at short intervals is needed to obtain a satisfactory control of Tea tortrix caterpillars. Since commercial formulations of Azadirachtin are relatively expensive, it should be used when early signs of tortrix population developments are noticed.

Key words: Azadirachtin, Efficacy, Tea tortrix