OCCURRENCE AND EVALUATION OF INSECTICIDES AND BIOPESTICIDES FOR THE MANAGEMENT OF COFFEE SNAILS AND SLUGS IN SOUTHERN TANZANIA

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Introduction

In recent years the Tanzania coffee industry has witnessed an outbreak of snails and slugs attacking coffee in the Southern Highlands of Tanzania, a problem first reported in the 2019/20 season. The pest attacks coffee stems, branches and leaves during the rainy season and causes substantial damage. Farmers had taken control initiative by collecting and destroying the adults and eggs.

Materials/Methods

TaCRI was surveyed to establish the extent and distribution of the pest by interviewing farmers about the original and its causative agent. We performed a pilot screening of various chemicals, botanicals & baits for the pest as an alternative management practices. As a short-term plan, TaCRI has created awareness to farmers on the recommended control measures.

Figure 1:Snails attacking coffee

Figure 2: Farmers training on how to control snail

Results/Discussion

Results from interviewed farmers indicate that the distribution of the pest covers the whole coffee growing areas in the area, and the causative agent of the pest was speculated to originate from the natural forestry and forced to follow new niches due to climate change. Results from screening Konokono Bait Pellets 4%, Polytrin 40 EC, garlic and mixture of honey + yeast to affect the pest. In addition, we trained 67 farmers as a short-term plan for the recommended control practices such as farm sanitation, proper pruning, scouting and killing of adults, regular turning of mulch, trapping, use of barriers, biological control agents and avoidance of evening irrigation.

Conclusion/Perspectives

Perfecting the appropriate dosages of chemicals, botanicals and baits for the traps are recommended for further evaluation and be incorporated in the IPM package. Identification of the pest to species level, biology and ecology are required for its proper management in the future. Also, sensitization on the occurrence and how to manage the pest in the field is an area of priority for farmers.

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