



Introduction

- ❖ The Shot hole borer is an emerging pest of Robusta coffee in India and the severe infestation leads to crop loss
- ❖ Though the recommended control measures are effective, they are not economically feasible as it needs a large workforce.
- ❖ Traps baited with chemical attractants are becoming more popular, and if a strong attractant is available, mass trapping is one of the finest IPM tactics (Burbano *et al.*, 2012).
- ❖ Hence, the current study was conducted in order to identify an effective attractant for the management of SHB.

Materials/Methods

- ❖ The relative attractiveness of six attractants were evaluated initially and the best attractants were further evaluated at different concentrations.
- ❖ The attraction efficiency was validated through multi location field trails.
- ❖ All the field trials were carried out using the Broca traps and each treatment was replicated 5 times.
- ❖ Trapped borers were collected at weekly intervals and differences between treatments were studied using ANOVA.

Conclusion/Perspectives

Based on the research findings, the identified attractant was released as a technology and named as XYCOM trap & deployed as an effective attractant for Shot Hole Borer. This technology is an efficient and environmentally safe method that has been incorporated as an IPM component for Shot Hole Borer management.

References:

Burbano E G, Wright M G, Gillette N E, Mori S, Dudley N, Jones T, Kaufmann M. 2012. Efficacy of traps, lures and repellents for *Xylosandrus compactus* (Coleoptera: Curculionidae) and other ambrosia beetles on *Coffea arabica* plantations and *Acacia koa* nurseries in Hawaii. *Environmental Entomology*, 41(1): 133-140.

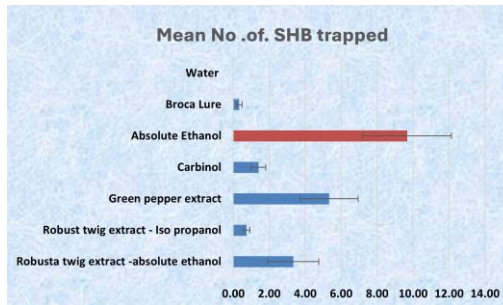


Fig. 1. Attraction Efficiency of Different lures

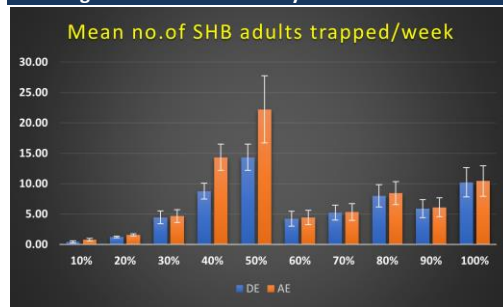


Fig. 2. Attraction efficiency of different concentrations

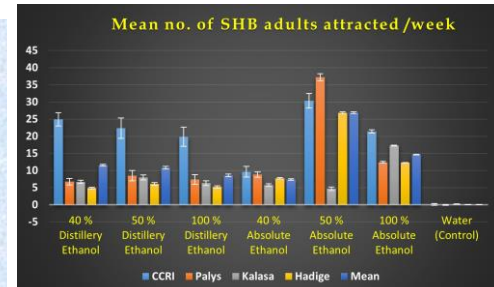


Fig. 3. Multilocation field trail on the attraction efficiency of different concentrations



Fig. 4. Shot Hole Borer Trap

Results/Discussion

- ❖ The preliminary studies revealed that absolute ethanol attracted maximum number of adults (10.35 beetles/trap/week) compared to other attractants.
- ❖ Further studies established that 50% absolute ethanol is more efficient with an average trap catch of 22.22 beetles/trap/week over other attractants.
- ❖ Multi-location field studies also confirmed 50% absolute ethanol-baited traps captured the highest number of beetles (27.50 beetles/trap/week).