

FIELD EVALUATION OF DIFFERENT COFFEE CULTIVARS
(*Coffea sp.*) AGAINST THE INFESTATION OF COFFEE BERRY
BORER (*Hypothenemus hampei* Ferrari)

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ABSTRACT

One of the major constraints to coffee production throughout the world is the damage caused by the Coffee Berry Borer (CBB), *Hypothenemus hampei* (Ferrari). The first report of the occurrence of CBB appears to be that of 1935 in Rathnapura District in Sri Lanka. It is now prevalent in all areas, at varying degree of damage to both Arabica and Robusta coffee. Damage on coffee berries brings in heavy losses on economical production of coffee in developing countries, including Sri Lanka. The objective of this study was to identify the infestation level of CBB in six selected coffee cultivars and to assess the CBB populations in coffee fields. Six selected coffee cultivars were, Catimour, S4711, HDT of Arabica species and IMY, CCI, BS5 of Robusta species. The experiment was laid out in randomized complete block design, with six treatments and three blocks. Damage severity was recorded on fifty-four tagged coffee plants. Ten branches were selected for a coffee plant where each branches contained more than fifty berries. Data were collected on the same berry cluster, during three months at weekly intervals. Starting from zero damaged berries, diameter of coffee berry was measured by using a Vernier Calliper (0.1mm). Ninety coffee berries were randomly selected from each of Arabica and Robusta for measurements. The data were recorded continuously during the three months at weekly intervals. The results showed that there were significant CBB damage differences among the coffee cultivars. Among the selected cultivars BS₅ was the least damage by CBB and HDT was the most susceptible cultivar and S4711 was also found to be susceptible but to a lesser extent. Berry Borer population is high in Arabica field than in Robusta field. When the diameter of the Coffee berry increase, the level of infestation of CBB also increases.

Keywords- Coffee, Coffee Berry Borer, infestation of Coffee Berry Borer, *Hypothenemus hampei* Ferrari