

**PERFORMANCES OF DOMESTICATED HONEYBEES (*Apis cerana*)  
IN ENDANE BIODIVERSITY CORRIDOR: INITIATION OF  
BEEKEEPING AS A COTTAGE FARM INDUSTRY**

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Beekeeping in biodiversity corridors can be a potential avenue in cottage farm industry. The major objective of this study was to compare performance between domesticated honey bee colonies with a natural colony. The field experiments were carried out in *Endane* Biodiversity Corridor, *Kahawaththa*, Sri Lanka. Performances of six established bee colonies in selected home gardens were evaluated with a natural colony as a control. Colony performance index (CPI), comb area, brood area, pollen area, honey area and weight of the colony was measured at weekly interval for three months. Further, knowledge and experiences of beekeepers in home gardens were assessed before and after the study period using a structured questionnaire. Minitab statistical software was used with ANOVA and Wilcoxon signed rank test for data analysis. Results showed a significantly higher CPI (7.25) in wild colonies during 8.00 am and 9.00 am compared to established colonies (3.56). However, the CPI was not significantly different ( $p > 0.05$ ) among the wild and established colonies during 10.00 am hour. The growth rate of comb area was not significantly different ( $p > 0.05$ ) among the established colonies. However, the brood area ( $p = 0.039$ ) and honey area ( $p = 0.006$ ) showed a significant difference in growth among the domesticated colonies. Moreover, the pollen storage had no significant difference ( $p > 0.05$ ) in growth among the domesticated colonies as all the home gardens comprise similar foraging plant diversity. Results of the questionnaire survey revealed that most people (85%) have no skill and knowledge about basic beekeeping practices. However, few (15%) villagers had basic skill about beekeeping practices. The post-survey result showed that there were some improvements of basic beekeeping skills (50%) in those who were engaged and established colonies in their home garden. Beekeeping was identified as a potential cottage level enterprise based on the CPI values and grow over the time, in the study area.

**Keywords:** Growth and development, Colony performance index