B-10: Effect of flower bud-removal on canopy development and yield performance of a hybrid coffee cultivar *Catimor*

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The main disadvantage of coffee cultivar Catimor is the rapid deterioration of canopy followed by early bearing. Therefore an experiment was conducted during 1995-1997 at the Research Station, Matale. The objective of this study was to investigate the effect of flower bud removal on canopy development and yield pattern of Catimor.

Flower removal treatments were commenced at 18 months after field planting. There were 4 treatments i.e. Plants were allowed to bear from the first flowering year onwards (control), second flowering year onwards, third flowering year onwards and fourth flowering year onwards. Growth parameters and berry yields were recorded on treatment basis.

A significant ($p \geq 0.05$) effect on canopy development was observed. The maximum plant height (206 cm) and canopy diameter (151 cm) were observed in plants allowed to bear from fourth flowering year onwards and the minimum plant height (157 cm) and canopy diameter (102 cm) were detected in control plants during mid 1997. Observations suggest that the removal of flowers in early years can be used as a tool to arrest the canopy deterioration in Catimor. The growth and yield trends of the experimental plants indicated that removal of flower buds in the first flowering year seems to be a beneficial practice to extend the economic life span of Catimor. In this treatment, yield loss in the first flowering year due to removal of flowers was compensated by the yield increase in the subsequent years due to better canopy growth. Since manual deflowering is a tedious process, a physiological manipulation is suggested to be explored.