

DIFFERENT METHODS OF WEED MANAGEMENT ON
SOIL FERTILITY AND GROWTH OF YOUNG TEA
(CAMELLIA SINENSIS(L) O.KUNTZE) IN MID COUNTRY WET ZONE.

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A study was conducted in mid country wet zone with the objective of comparing different methods of weed management on soil fertility and growth of young tea. A clonal tea field of TRI 2026 at 18 months old was selected in Kurugama estate (825 to 850m amsl) for this study.

Twelve different methods of weed management were tested in a randomized block experiment. Mulching at 8 weeks interval gave the best performance on soil fertility with regard to total soil N,P,K, soil moisture and organic matter content, followed by chemical weed control using paraquat. However, there was no significant difference in two treatments in respect to the growth of young tea, although it was significantly better compared to other treatments. Mulched plots had 7% and 0.13% more moisture and organic matter respectively compared to chemical weed control.

Mechanical weed control using scrapers, which is commonly practised in the estate gave very poor performance, even compared to no weed control. Scraping the top soil in this method accelerated the soil erosion resulting poor growth of young tea.

Therefore, this study strongly suggests that mulching is the best method of weed management in young tea. Although mulching is relatively more expensive, it is a sound investment in the long run. However, mechanical weed control using scrapers should be stopped at any cost.