

Effect of different methods of weed management on soil erosion in tea lands at low elevations

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This experiment was conducted to study the effect of different weed management methods on soil erosion in tea lands during south west monsoon period. Vacant patches of a slopping land were selected. On the slope, 20 plots measuring 2x1m (2m down the slope) were demarcated by using wooden flacks right round the plot leaving 5cm above the soil surface. Eroded soil from each plot was collected in to a polythene bag kept in a soil pit immediately below the plot. Five methods of weed management i.e.(1.spraying paraquat, 2.Spraying Glyphosate, 3.Hand weeding, 4.Scraping with sorandies and the 5.control (Un weeded) were tested. There were four replicates in a RCBD design. Weights of eroded soil were measured after each rain and were recorded for 10 weeks after imposition of treatments. The collected data were statistically analyzed using GLM procedure. Results showed that the soil loss from the tea lands at the experimental site at low elevation varied from 1-8 t/ha during south west monsoon, depending on different weed management methods. The use of systemic weedicides contributed to more soil erosion than contact weedicides. Among the all the weed management methods, Scraping resulted the highest amount of soil erosion on slopping tea lands.

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