THE EFFECT OF GROUND COVER TREATMENTS ON SOIL EROSION, SOIL MOISTURE STATUS AND YIELD OF YOUNG TEA

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The effects were studied of ground cover treatments such as mulching, growing cover crops, selective weeding and leaving the soil bare on soil erosion, soil moisture status and yield of tea in the first two years of plucking. Soil loss from bare plots was estimated to be about 88 and 51 tonnes ha^{-1} in the first and second year respectively after planting tea. Soil loss in the first year was lower (5–7 tonnes $ha5^{-1}$) from the mulched plots than from plots which were selectively weeded or under cover crops (11–31 tonnes ha^{-1}). In the second year soil loss from plots with Crotalaria as ground cover was higher (4.72 tonnes ha^{-1}) than that from plots with other ground covers (1.2 to 2.5 tonnes ha^{-1}). In the third and fourth years soil loss ranged from 0.88 to 1.95 tonnes ha^{-1} in the various treatments. Mulching conserved more soil moisture than did cover crops. There was a trend to indicate that yield of of tea from mulched plots was higher than that from plots under other ground covers.