

Greywater recycling has been identified as an efficient method to conserve water. The purpose of this study was to investigate some selected hydrochemical characteristics, plant nutrients and metal content of greywater and soils in residential areas of Homa Bay town. Laundry greywater had the highest pH ( $9.1 \pm 0.01$ ), Electrical conductivity ( $2900 \pm 215 \text{ S cm}^{-1}$ ) and salinity ( $0.4 \pm 0.02 - 0.8 \pm 0.01 \text{ mg L}^{-1}$ ). The lowest electrical conductivity ( $400 \pm 50 \text{ S cm}^{-1}$ ) was recorded in bathing greywater. The highest SAR ( $4.63 \pm 0.23$ ) was recorded in laundry greywater from non-sewered households and the lowest SAR ( $0.72 \pm 0.12$ ) in kitchen greywater from sewerred households. The SAR values of greywater in Homa Bay were lower than the acceptable limit of 6 for moderate restriction on the use of such water for irrigation. The SAR values for soils in Homa Bay were  $2.12 \pm 0.13$  and  $4.21 \pm 0.11$  in soils that had received kitchen and bathing greywater respectively and  $27 \pm 0.5$  for rainfed soil. Nitrogen, Phosphorus, Sodium, Iron, Copper, Cadmium and Chromium concentration were highest in laundry greywater. The highest values of Zinc and Manganese were in kitchen greywater from non-sewered households. Levels of metals in soils that had been exposed to greywater were lower than the recommended limits. A significant ( $p < 0.05$ ) positive correlation was recorded between concentration of Cd in bathing greywater and in the soil. A significant ( $p < 0.05$ ) negative correlation between the concentration of Cu in kitchen greywater and in soils was also recorded.