Heavy metal levels of pasture grasses in metropolitan area

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Abstract
Urban agriculture is becoming an important lucrative activity in Dar es Salaam City even though the city is subject to traffic and industrial pollution pressures. Poor planning has left only limited spaces, particularly road reserves, for cultivation and foraging animals. While there is increasing road traffic no study bas been conducted determine levels of trace metals in pasture grasses. This study, therefore, reports on the levels of cadmium, manganese, lead and zinc of cynodon grasses in road vicinity in the city. Results show that the trace metal levels (ppm ± SDE) in *Cynodon* grass species were: Cd (0.24 ± 0.06-2.58 ± 0.15), Mn (41.5 ± 13.6-345.0 ± 124.3), Pb (1.15 ± 0.64-25.53 ± 1.29) and Zn (25.97 ± 3.69-95.36 ± 19.61). The mean levels of lead and zinc varied exponentially with distance off the road up to 15 m distance. Lead and zinc levels correlated with average daily traffic in the roads while cadmium and manganese did not. This suggests that lead and zinc in grasses owe their sources from the passing motor vehicles in agreement with other reported studies. It is recommended that pasture grasses in road vicinities must not be used for foraging dairy cattle and goats for public health reasons.