The landfill leachate is a dark-liquid rich in ammonia nitrogen, resulted by anaerobic decomposition of the organic portion of urban solid waste. The effect of fertilization applying five increasing doses of leachate (0; 32.7; 65.4; 98.1 and 130.8 m$^3$/ha) and urea (120 kg/ha) was evaluated on physico-chemical composition, sanitary quality and yield in maize. The yield and protein, lipid and ash content increased with leachate doses in soil. The concentrations of calcium, magnesium, sodium, zinc and lead in leachate fertilized maize did not differ with control without fertilization, except copper and manganese, where the levels increased with leachate application (p<0.05). On the count of yeasts and molds, observed that the genera *Fusarium* spp. and *Penicillium* spp. were the most frequent with 100% and 92% respectively. Fumonisins were detected in 100% of samples, with higher level found in the control without fertilizer (8.43 mg/g), and land treated with 130.8 m$^3$/ha of leachate (6.19 mg/g), i.e., superior than maximum tolerable limit by ANVISA-MS (5.00 µg/g). The data indicated that further investigation is required concerning the safe use of landfill leachate on agricultural soils.