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Heavy metals content in fadama soils, root, leaf and seed of African locust bean tree (*Parkia biglobosa*) along the river Dilimi in Jos north local government area of Plateau, Nigeria

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ABSTRACT : The aim of the study is to assess the levels of some heavy metal contamination of fadama soils, root, leaf and seed of African locust bean (*Parkia biglobosa*) due to irrigation with sewage –fed river water. Samples of water, soils, *Parkia biglobosa's* root, leaf and seeds were analysed for four heavy metals; Pb, Cd, Mn and Fe using Atomic absorption spectrophotometry (AAS). The results showed the presence of some of the heavy metals in *Parkia biglobosa* roots, leaves, seeds and as well in soil and water which were beyond the limits of World Health Organisation. Iron (Fe) was found to be the most abundant in soil samples possibly as a result of drains from mining activities in the area under study. The soil samples gave 1900 – 29500 (ppm) Fe, the water samples 7- 7.20 (ppm) Fe while the Parkia tree samples gave (Root 686 - 4800 ppm Fe ; 37.32 – 59 ppm Mn ; Seed 134- 3460 ppm Fe ; 0.40- 1.92 ppm Pb; 15- 46.80ppm Mn ; Leaf 198-580ppm Fe ; 30.80-148.80ppm Mn). The values of Fe and Pb recorded for soil, water, root, leaf and seed were higher than the WHO (1993) Standard and FAO/ WHO(2001).Comparing the result of heavy metals in soil,water, root, leaf and seed, it was observed that the concentration of heavy metals were more in the soil and root, confirming a positive correlation between the content of metallic element in the plant and its native soil.

KEY **W**ORDS : Heavy metal, Fadama soil, African locust bean tree (*Parkia biglobosa*)

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