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ABSTRACT

Vegetation assessment was done in twenty-one (21) sampling locations to determine the most dominant plant species and subsequently, the best heavy metal accumulator. Seven plant species were identified dominants: *Typha equisetifolia*, *Saccharum spontaneum*, *Acrostichum aureum*, *Dicranopteris linearis*, *Leucaena leucocephala* L., *Acacia mangium*, and *Paraserianthes falcataria*. The best metal accumulator among tree species is *Leucaena leucocephala* L. (ipil-ipil), with the ability to bioaccumulate heavy metals and effectively translocate them to its aerial parts for phytoextraction. The best metal absorber among the studied non-tree species is the *Dicranopteris linearis* (forked fern), which has the ability to bioaccumulate cadmium and mercury, phytostabilizing mercury in its root system while translocating cadmium in the aerial parts for phytoextraction.

Keywords: heavy metals, dominants, bioaccumulation, translocation, phytoextraction, phytostabilization