

Heavy Metal Accumulation in Medicinal Plants Collected from Environmentally Different Sites

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Objective To estimate the heavy metal content in soil and selected medicinal plants procured from environmentally different sites of the same city. **Methods** Soil and plant samples of *Abutilon indicum*, *Calotropis procera*, *Euphorbia hirta*, *Peristrophe bycaliculata*, and *Tinospora cordifolia* were collected from 3 environmentally different sites of the city: heavy traffic area (HTA), industrial area (IA), and residential area (RA). Pb, Cd, Cr, and Ni were estimated in soil and plant samples by inductively coupled plasma emission spectrometry and compared. **Results** The level of heavy metal was higher in soil than in plant parts studied. Accumulation of heavy metals varied from plant to plant. Pb was the highest in *Calotropis procera* root from HTA site and the lowest in *Peristrophe bycaliculata* whole plant from IA site. It was also lower in residential area than in heavy traffic area. **Conclusion** The level of heavy metal content differed in the same medicinal plant collected from environmentally different sites of the same city. Thus, it reiterates our belief that every medicinal plant sample should be tested for contaminant load before processing it further for medication.

Key words: Heavy metals; Medicinal plants; Lead; Cadmium; Chromium; Herbal raw material

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