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P15. HEAVY METAL CONTAMINANT IN PHOSPHORUS FERTILIZERS

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Phosphorus fertilizers are the most important source of toxic metals in agricultural soils. While heavy metal toxicity in soil occurs via excessive use of phosphorus fertilizers, leads to changes in the soil chemicals properties.The concentrations of heavy meta lin soil can be influenced by many factors, such as climate, parent material and agricultural activities. Heavy metals may be added to soil with chemical and organic fertilizers. Heavy metal toxicity in soil and plant occurs via overuse of chemical and organic fertilizers. Cadmium, arsenic, nicel and lead found in fertilizers applied to agricultural soils. Cadmium concentration passes 3 mg/kg via applied of excessive phosphorus fertilizers in soil. Cadmium is a heavy metal that is easily pass from soil to plant. Cadmium accumulation inedible portions of the plant's is threat to environmental health. Cadmium concentration in soil depend on parent material, organic material, iron, aluminumoxides, agricultural activities such as irrigation or fertilizer use.In addition, crop rotation and tillage have a important impact upon the Cd content of both plant and in soils. Cadmium quantity in agricultural soil increases via unconsciously used of DAP, TSP and compose fertilizers. As, Cd and Pb concentrations in soil were correlated with excessive the use of phosphorus fertilizers. When Cd concentration of soils exceeds 150 ppm, this cadmium creates hazard in both plant and human health. Soiltype, plant uptake and leaching are determined the levels of heavy metals in soil. Heavy metal contamination of the agricultural soils occurs due to long term agricultural activities. Heavy metals combined with organic acids are carry in depth in the soil and may also lead to groundwater and irrigation waters pollution. In this review, the causes of the toxic effects of phosphorus fertilizers in agricultural soils and effects on environment health of phosphorus fertilizers will be discussed.