Nutrient Management Research at **GPCRC**, Agriculture and Agri-Food Canada

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Agriculture and

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Phosphorus Cycling in Agro-Eco-Systems - research direction

- Determination of phosphorus transformation pathways in short-term and especially long-term fertilized and manured soils
- Identification of soil P loss pathways and determination of soil P losses as related to various management practices (tillage, manure application, crop rotation, water management, etc.)
- Development of tools for risk assessment of soil and manure P losses
- Development of P-based manure materials (solid, liquid, manure compost) application techniques

Auto-samplers for surface runoff and tile drainage water collection

Cumulative soil P loss in tile drainage water as related to long-term fertilization and crop rotation, Harrow, ON, Canada



Soil phosphorus loss from surface runoff and tile drainage, Harrow, ON, Canada



Zhang et al, 2001

Effectiveness of various soil P tests as indicators of surface runoff P loss



Phosphorous solubility coefficients (PSC) of various manures in Ontario soils



Research focus:

Phosphorous & land use

Collaboration: welcome