



## Current MITHE-SN Projects Metadata

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**The role of speciation in the uptake of Tl, As, and Se** (Soils + Plants)

### **Objectives being Investigated**

Trace elements such as thallium (Tl), selenium (Se), and arsenic (As) may be toxic to humans at high levels of exposure. An important route of exposure to humans is the ingestion of foods that have accumulated trace elements. Therefore, in order to estimate the risk of these trace elements to human health, it is important to determine how readily these elements are accumulated by plants. Our research goal is to determine the impact of speciation of Tl, Se and As on plant accumulation of these elements, so that models can be developed that enable predictions of the accumulation of trace elements.

### **Study/Sampling Design**

--- none provided ---

**Number of projects providing material for study:**

### **Location of Field Site(s)**

--- none provided ---

### **Human Studies**

#### ***Outcome or Process Studied***

--- none provided ---

#### ***Exposure Medium, and Metals/Substances Quantified***

--- none provided ---

#### ***Biological Endpoint(s) Monitored***

--- none provided ---

### **Biota Studied**

*Species*

--- none provided ---

*Metals, etc. Quantified*

--- none provided ---

*Biological Endpoint(s)*

--- none provided ---

**Physical Material(s) Studied**

*Medium/Media*

--- none provided ---

*Metals, etc. Quantified*

--- none provided ---

**Bibliographic References on-file with Secretariat: No**

**Data Available: No**

**Data Archived with MITHE-SN: No**

**Collaborators**

**Dr. William Hendershot** (Co-Inv.) – Natural Resource Science, McGill University

**Dr. Sheila Macfie** (Co-Inv.) – Department of Biology, University of Western Ontario

**Dr. Sébastien Sauvé** (Co-Inv.) – Department de Chimie, Université de Montreal

**Metals in the Human Environment Strategic Network**

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