Low Level Mercury Uptake by Plants from Natural Environments —Mercury Distribution in *Solidago altissima* L.—

Takashi Tomiyasu*, Tomonori Matsuo, Junko Miyamoto, Ryusuke Imura, Katsuro Anazawa and Hayao Sakamoto

Department of Earth and Environmental Sciences, Faculty of Science, Kagoshima University, Korimoto, Kagoshima 890-0065, Japan

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In order to elucidate the participation of plants in the biogeochemical cycling of mercury in natural environments, total mercury contents in leaves, stems and roots of tall goldenrod (*Solidago altissima* L.), Compositae, were determined. The mercury content in stems was considerably lower than that in leaves and roots. A positive correlation of mercury content was observed between soil and roots. The leaves at the lower part of the plant tended to have a higher concentration of mercury than the upper leaves. However, the mercury content of the leaves was independent of that in the soil. These observations suggested that the leaves of the plant can accumulate environmental mercury, but the mercury does not come from the soil via the root and stems. The mercury in leaves might originate predominantly from ambient air. The mercury in the leaves accumulated from the air can be delivered to the soil when the leaves fall. The roots also can adsorb the mercury from the soil; however, the mercury does not move from the roots and is not released into the air via the plant body.

*E-mail: tomy@sci.kagoshima-u.ac.jp*