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The Reduction of Selenate by Fulvic Acids in Soils of a High Gastric Cancer Risk Area in Sri Lanka*

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In order to elucidate the probable etiological factors for the incidence of gastric cancer, the interaction between selenate and fulvic acids was investigated under chemically controlled conditions. The reduction ability of selenate by fulvic acids was enhanced in acidic conditions. The fulvic acids may play an important role in the nitrosation process. Thus the investigations of the mechanism by which selenate interact with fulvic acids will provide a new insight into the chemical activation process by which selenium supplementation is supposed to act as an anticarcinogen.

KEY WORDS: Selenium, gastric cancer, redox potential, Sri Lanka.