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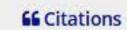
## Organochlorine pesticide residues in skin, flesh and whole carrots (Daucus carota) from markets around Lake Victoria basin, Uganda

Stella Nannyonga, Bernard T. Kiremire , Patrick Ogwok, Steven A. Nyanzi, Mohammed L. Sserunjogi & John Wasswa Pages 49-58 | Published online: 17 Dec 2012























## In this article

Introduction

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## **Abstract**

Residual concentrations of organochlorine pesticides in vegetables cause concern because of their adverse health effects. Pesticides have been applied in agricultural production and vector control in Uganda. Vegetables may absorb high residual levels of cyclodienes necessitating regular monitoring. Carrots are commonly consumed in Uganda as raw salads or components of different dishes. A gas chromatograph with electron capture detector was used to quantify organochlorine pesticides. Pesticide residues were confirmed by gas chromatography with a mass spectrometer. Trace amounts of 4,4'-dichlorodiphenyltrichloroethane (DDT), 2,4'-DDT, 2,4'-dichlorodiphenylchloroethane (DDE), αendosulphan,  $\beta$ -endosulphan,  $\alpha$ -lindane,  $\gamma$ -lindane and dieldrin were detected in carrots. Levels of organochlorine residues in carrots were below the maximum residue limits considered safe for human consumption by Codex Alimentarius and the European Union Commission.

Keywords: Organochlorine pesticides, Carrots, Lake Victoria basin

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