



# AIUB DSpace Publication Details

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## Abstract

People in Bangladesh are over scared for toxicity of vegetables & fruits because of the educational level of the farmers is not up to the mark, farmers apply pesticides randomly on agricultural fields without maintaining pre-harvest intervals and dose. The aim of this work was to study dissipation pattern of some pesticides in some vegetables kept at room temperature which represent market condition and to identify and quantify pesticides applied on some vegetables. By interviewing the farmers three commonly used pesticides; cypermethrin, chlorpyrifos and fenvalerate were sprayed in the farmer's fields of the western part of Bangladesh. Samples were extracted by QuEChERS method, cleaned-up by adsorption chromatography technique, and analyzed by GC-ECD. Recoveries were found to be between 87-107% with RSD lower than 10% at three spiking levels. Matrix matched calibration curves were linear for all the analytes with  $r^2 \geq 0.99$ . LODs were found to be 0.01 mg/kg for cypermethrin and 0.002 mg/kg for both of fenvalerate and chlorpyrifos. The samples of same cultivar's variety were purchased from the markets of Savar, Mymensingh and Cumilla. Our finding showed only the presence of cypermethrin in tomato but the values were below MRL and no pesticide residue was found in eggplant.

