

## Determination of Pesticide Residues in Commonly Consumed Vegetables

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There is increased use of pesticides in farms in Myanmar. Vegetables applied with pesticides for protection against destructive pests often contain residues of these chemicals. Thus, the consumption of unsafe vegetables contaminated with pesticides can damage public health. In the present study, detection on residues of organophosphates (OP) and carbamate pesticides which are most extensively used pesticides was undertaken in some commonly consumed vegetables during host season. Analysis was performed using GT- pesticide residual test kit, a simplified method with fast and reliable result. Sixty – four kinds of vegetables were purchased from Ahaya Thuka Market, a wholesale market in Nay Pyi Taw . It was observed that pesticide were not detected in twenty-eight kinds of vegetables where twenty-five kinds of vegetables showed the presence of pesticide residues but safe for consumption (some toxic residues inhibited the cholinesterase enzyme at less than 50% , these amount can be washed out)and pesticide residues were also detection in eleven kinds of vegetables which were unsafe for consumption (some toxic residues inhibited the cholinesterase enzyme at 50% or more than , these amount can not be washed out) . Eleven kinds of vegetables were bitter melon , indian leek (gyu-myit), asiatic pennywort, chinese cabbage , mustard, shoots of pumpkin and bottle gourd, mint, morinda and spinach. There is therefore a need for more quantification and monitoring of pesticide residues in vegetables . The present results showed important information on the current pesticide contamination status of some commonly used vegetables. This finding could be applied for people in Nay Pyi Taw by consuming the safe vegetables . In other view, awareness of the farmers should be raised on safe and judicious use of pesticides.