

## **CONSUMER AWARENESS FOR IDENTIFICATION OF PESTICIDE CONTAMINATION IN LEAFY VEGETABLES**

**P. Loganathan and S. Sharaniya\***

*Department of Biological Science, Faculty of Applied Science, Vavuniya Campus, University of Jaffna, Vavuniya, Sri Lanka.*

Consumer awareness is the best way to reduce pesticide related health effects. Many vegetables in the market are contaminated with agrochemicals. Therefore, the present study was designed to investigate the importance of consumer awareness for the identification of pesticide-contaminated leafy vegetables using appropriate methods. One hundred leafy vegetable samples were obtained from the market and the pesticide contamination was identified by smell. In addition, chop and smell method was used to identify the presence of pesticides in five kinds of leafy vegetables including *Brassica oleracea*, *Alternanthera sessilis*, *Centella asiatica*, *Allium cepa* and *Amaranthus blitum*. The leafy vegetable samples collected were chopped and kept in the closed containers for 15 min. Then the presence of pesticides was identified by smell with the help of expertise in the field. The data were analyzed using the descriptive statistics in SPSS Version 16. Around 79% of leafy vegetables contained pesticide residue. Pesticide contamination in *Brassica oleracea*, *Alternanthera sessilis*, *Centella asiatica*, *Allium cepa* and *Amaranthus blitum* were identified as 70%, 60%, 50%, 65% and 70%, respectively by the chop and smell method. Pesticide contamination in some leafy vegetables were difficult to identify by smell in the market, but chop and smell method is very useful for this kind of leafy vegetables. *Brassica oleracea*, *Alternanthera sessilis*, *Allium cepa* and *Amaranthus blitum* were contaminated with high amounts of pesticides. Therefore, we recommend carrying out awareness programs for consumers on how to identify pesticide contaminated leafy vegetables and their health impacts through government and other relevant institutions for better health.

**Keywords:** Awareness, consumers, leafy vegetables, pesticide contamination, smell

\**sarani300@gmail.com*