

## **Risk of using crop residues and water that are contaminated with pesticides for feeding cattle's in Nuwara Eliya DS division**

*K.P.S.R. Pathirana ([samudrapathirana08@gmail.com](mailto:samudrapathirana08@gmail.com))*

*K.G.S. Chaminda ([shanakakatukurunda@gmail.com](mailto:shanakakatukurunda@gmail.com))*

*R.A.D.I. Dilhani,*

*R.A.U.J. Marapana*

*J.M.J.K. Jayasinghe*

*S.B. Navarathne*

*Department of Food Science and Technology, Faculty of Applied Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda*

### **Abstract**

Farmers who cultivate upcountry vegetables in Nuwara Eliya apply high amounts of pesticides, due to the intensive cultivation of hybrid crop varieties and highly favorable weather conditions. The extensive use of pesticides may lead to environmental and food contamination. Presently highest milk production was reported in Nuwara Eliya. Abundance of crop residues in substantial amounts lead farmers to feed them adequately for cattle.

The objectives of this study were to identify the types of pesticides used in the area, crop residues that are used as feed material and sources of contaminants which have an impact to the milk industry in Nuwara Eliya. Forty farmers in four villages of Nuwara Eliya DS division namely Bambarakelle, Shanthipura, Galpalama and Ambewela were interviewed. Present breeds were Friesian, Jersey and local crossbreds (69, 23 and 7% respectively) and major crops were carrot, leeks, cabbage and potato. Due to grasslands scarcity, 70% of



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farmers carry out intensive rearing. Farmers provide grasses (87%) and crop residues (13%) to cattle. Fresh grasses and crop residues were directly fed to cattle without any treatments. Farmers used tap water (53%) and well water (47%) as water sources. The majority (>90%) disposed the empty pesticide containers by throwing in the crop land itself. Farmers applied Maneb (31%), Fipronil (31%) and Propineb (20%) as pesticides for cultivation of vegetables nearby water sources while fungicides (Propineb 28% and Maneb 24%) applied nearby farm lands. Feeding with crop residues, grasses and water which were contaminated with pesticides encountered high risk to contain pesticide residues in milk.

**Key words:** Cattle Milk, Pesticides, Crop Residues, Water, Nuwara Eliya