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## ORGANOPHOSPHATE RESIDUES IN BUFFALO MILK COLLECTED FROM LOCAL DAIRY FARMS

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In Pakistan, in the national agenda of economic development and milk production, the livestock contributes a significant share and occupies a distinct position. Pakistan is blessed with high yielding milch animals. Pakistan is enjoying fourth position among milk producing countries of the world behind India, China and USA. Regarding buffalo milk production Pakistan ranks second in the world. At small scale level, small farmers mainly contribute towards total milk production in the country. They do not have adequate conditions for the storage of feed/forage on their dairy farms due to economic backwardness. They are using different kind of pesticides on fodder as a protection against pests, ultimately these pesticides residues becomes part of animal body than milk. Pesticides residues presence in milk is alarming situation for all governing authorities and milk producing companies. Lactating cows and buffalos like other animals may be exposed to pesticides from feed with contamination; pesticide residues can be accumulated in various parts of body including milk. However, pesticide application to the animal's body or their use in the animal shed, or even in the milk processing locations can also be a path of their exposure to pesticides and contamination to milk. To calculate the pesticide residues in buffalo milk a study was planned. Milk samples were collected from local dairy farms extracted for pesticide residues using glass column and was screened by HPLC. Milk samples were found contaminated with acephate, chlorpyrifos, fenthion, monocrotophos, profenofos and dimethoate. Methamidophos residues were not found in any of milk samples. The contamination rate of profenofos residues was 100% in two zones of milk collection. All milk samples were found contaminated but were below their MRL (Maximum Residual Limit). This study provides database to the government to establish their own MRL.

### Biography

Muhammad Wasim Sajid has completed his PhD from University of Agriculture Faisalabad Pakistan and 6 months Pre-doctoral studies from Newcastle University, UK. He is working as an Assistant Professor in COMSATS IIT Pakistan. He has published more than 11 papers in reputed journals, two book chapters and recently writing book on Food Safety. He has been serving as Head of new scientific organization, "International Association of Researcher in Applied Sciences (IARASC)".

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