

## **“Determination of Different Pyrethroids Pesticide around Suburban Areas of Lahore”**

### **Abstract**

Residues of Pyrethroids Pesticide namely Bifenthrin,  $\lambda$ -Cyhalothrin, Deltamethrin and Cypermethrin were determined in fruits (Guava) around Suburban areas of Lahore. Only higher MRL's (Maximum Residual Limits) of Cypermethrin and  $\lambda$ -Cyhalothrin were recorded. The  $\lambda$ -Cyhalothrin being the most frequently used insecticide against Guava's insects around Lahore. Second most frequently used insecticide is Cypermethrin. There is significant decrease in Pyrethroids ( $\lambda$ -Cyhalothrin and Cypermethrin) residue from first to third week of spray i.e. up to more than 50%. Seasonal changes also affect Pyrethroids ( $\lambda$ -Cyhalothrin and Cypermethrin) residue levels in fruits (guava) in semitropical region. As much lower residues in guava's samples were recorded for  $\lambda$ -Cyhalothrin and Cypermethrin in month of May (summer) than in the month of February due to adverse climatic conditions in semitropical regions in summer. These facts also suggest that higher MRL's can be compromised in field samples of fruits (not from market), if fruits are cultivated after 2-3 weeks after spray in summer and 4-5 weeks after spray in winter. These times lines reduce the Pyrethroids ( $\lambda$ -Cyhalothrin and Cypermethrin) residue to more than 50% of initial residue within 1<sup>st</sup> week of spray. So residues will reduce below the suggested MRL's, when fruits reach to local markets.